### Agenda

**May 16, 2017**  
9:00am – 4:00pm  

**Location:** AHCA Miami Medicaid Area Office  
8333 NW 53rd St  
Doral, FL 33166  

**Teleconference:** 877-309-2071  **Access Code** 271-107-280  

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<td>9:05 – 9:50</td>
<td>Pediatric Associates</td>
<td>Rocky Slonaker, MD</td>
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<td>Amy Verlsteffen, ARNP</td>
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<td>9:50 – 10:50</td>
<td>Panel Discussion: Speech Language Pathologists &amp; Audiologists</td>
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<td>Cyndee Bowen, SLPA</td>
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<td>Neurologist ALS Project</td>
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<td>Wrap Up &amp; Closing</td>
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Meeting Materials and Information will be available at: [www.AHCA.myflorida.com/Telehealth](http://www.AHCA.myflorida.com/Telehealth)  
Additional comments and information may also be sent to: [Telehealth@ahca.myflorida.com](mailto:Telehealth@ahca.myflorida.com)
Draft Minutes
April 21, 2017
Telehealth Advisory Council
Agency for Health Care Administration
GuideWell Innovation Center
6555 Sanger Road
Orlando, FL 32827

Members Present
Justin M. Senior, Chair,
Dr. Celeste Philip
Dr. Anne Burdick
Leslee Gross
Darren Hay (virtual)
Dr. Kim Landry
William Manzie
Elizabeth Miller
Dr. Steven Selznick
Mike Smith
Matthew Stanton (virtual)
Dr. Sarvam Terkonda

Members Absent
Dr. Ernest Bertha
Dr. Kevin O’Neil
Monica Stynchula

Staff Present
Nikole Helvey
Pam King
Dana Watson

Others Present
Interested Parties (Attachment A)

Call to Order
Chair Senior called the meeting to order at 12:05 p.m.

Roll Call
Chair Senior welcomed the group and directed Ms. Helvey to call the roll. A quorum was present.

Review and Approval of the Minutes
After review, Dr. Selznick moved to approve the minutes. The motion was seconded by Dr. Burdick and carried unanimously.

Welcome and Opening Remarks
Leslie Heileman welcomed the Council to the GuideWell Innovation Center. She shared the work they are doing in the area of health technology. She introduced Jennifer Pidcock, Director of Telehealth for Florida Blue. Ms. Pidcock reiterated the efforts they are making to increase the overall use of telehealth in Florida.

Panel Discussion on the Use of Telehealth in Public Facilities
Due to transportation issues and unavoidable cancellations, the Council heard from speakers individually.
Nassau County Department of Health

Dr. Eugenia Seidel gave an overview of Nassau County Health Department’s tele-dental program study. She noted the closest dentist to Hilliard, a city in Nassau County, was 40 miles away. The study focused on 47 patients from the rural community. They found in many instances the oral exam images superior to in-patient examinations. The on-going implementation barriers for this type of program are cost, training, and bandwidth issues. Dr. Seidel expressed a desire to see telehealth used more prevalently throughout the County Health Departments in Florida for various conditions and treatments.

Dr. Burdick asked about costs for the services offered. Dr. Seidel noted specific telehealth costs were difficult to extract, since reimbursement for these services is through a bundles payment model.

Dr. Selznick questioned whether dental exams had increased since the inception of the program. Dr. Seidel clarified that the dental hygienist initiates any tele-dental examination only if there is a concern.

Ms. Miller asked if the County Health Department was looking to expand telehealth services and if regional projects were in consideration. Dr. Seidel expressed interest in partnerships and noted work with Federally Qualified Health Centers in the Nassau County area.

Dr. Landry asked about the payment model for these services. Dr. Seidel noted the dental hygienist contacts the dentist as part of the cleaning and initial examination; therefore, both the dental hygienist and dentist can bill for their separate portions of the examination.

Break

Nicklaus Children’s School Program

Evelyn Terrell, Regional Director of Rehabilitation Services and Telehealth Operations at Nicklaus Children’s Hospital shared information about their partnership with their local school system. She explained that Nicklaus Children’s Hospital is a not-for-profit, 289-bed, freestanding, pediatric teaching hospital with a network of ten outpatient centers; a nonprofit physician specialty practice subsidiary; a management services organization; an ambulatory surgery center; and an e-commerce line of children's wellness and safety products.

Ms. Terrell shared that Nicklaus Children’s Hospital has been providing basic school health services in 12 Miami-Dade County public schools for over a decade. As a way to enhance services delivered in the school system, primary care services were added with the goal of improving access to health care, decreasing absenteeism rate, and increasing overall school performance.

Through the Hospital’s school health model, they have the ability to reach children with chronic conditions in their school environment. Furthermore, the Hospital can screen children for chronic conditions and provide the necessary education for those identified for follow up. Through MCH data, virtual school nurses work in collaboration with the onsite Certified Nursing Assistants (CNAs) to complete health appraisals, chronic disease management, medication management, screenings, health assessments, and health education in public schools. Doing so grants children access to necessary medical services from a convenient environment. This program aims to increase access to medical care, improve medication compliance, reduce unnecessary emergency
room and urgent care visits, reduce student absenteeism, and reduce utilization in higher cost service delivery models.

She noted school health program quality indicators include the following: Body Mass Index (BMI) screening and follow-up, documentation of height and weight, BMI plotted on growth chart, documentation of counseling for nutrition, and documentation of counseling for physical activity. The rationale for school telehealth services include: improved access to care for individuals living in underserved areas, the growing body of evidence showing effectiveness in providing equitable services, the critical national shortage of healthcare professionals and specialists; it also increases patient and parent satisfaction, cost savings and avoidance. School telehealth services also benefit the growing telemedicine market; encourages the move toward accountable care models, coordinated and integrated care, comprehensive care management, chronic disease management, and population health outcomes.

Ms. Terrell shared the program results for four Miami Dade County public schools, with 197 unique patients. She discussed the chief complaints of the patients seen, as well as the number of medications ordered. She added that without appropriate clearance by an ARNP or pediatrician, the school nurse would be required to send students home for medical clearance.

The following results were determined based on school district policies regarding communicable diseases. The telehealth consults resulted in a 67% return to class rate. Of the students seen, 39% went home, 2% resulted in a referral to a specialist, and 1% presumably went home due to parent preference. If not for the telehealth consultations, 67% of the patients seen were likely to have gone home that same day. Of those patients and their parents, 32% were likely to have missed two or more days of school and work.

Ms. Terrell went on to share more evidence of the clinical effectiveness, satisfaction, and cost of telehealth in schools. She stated that student health and educational performance are interdependent. A school-based telehealth clinic can bring resources and collaboration to schools located in rural, poor, and medically underserved areas. Telehealth is increasing access to acute and specialty care for children; helping children and families manage chronic conditions; facilitating health education for children, families and school personnel; and increasing the capacity of school nurses and school-based health centers to meet the healthcare needs of students.

Ms. Gross asked how they covered the cost of the service and how they obtained consent. Ms. Terrell advised the program was donor funded and consent was typically oral, by telephone.

Dr. Terkonda inquired about the implementation and per transaction costs. Ms. Terrell shared schools received a suitcase containing tools for telehealth visits costing about $20,000 each. The suitcases are portable and can be taken and used outside of the school nurses’ office.

Dr. Selznick asked if they had documentation of money saved through this project. Ms. Terrell responded that a study in Rochester, Texas shows both positive and negative findings.

Ms. Miller stated that there is a lot of discussion around rural healthcare, and asked if they ever bill insurance for the services. Ms. Terrell responded that Medicaid will provide coverage and some insurance will cover the service. She stated that Wellcare reimburses for treatment pays in four of the 12 schools and provides information to the child’s primary care provider or pediatrician. The suitcases use Cerner technology, which documents the encounter in an Electronic Health Records system (EHR).
Mr. Smith inquired whether a formal evaluation of the program has taken place. He suggested looking at the cost benefits. Dr. Landry asked if there has been an increase in the number of students coming to the school clinic for their health care. Ms. Terrell responded that they have not seen a measurable increase in the number of students seen.

Dr. Burdick shared the University of Miami works with a social worker when providing care to students through a telehealth system. This assists the family in getting any needed follow up care. Dr. Philip asked Ms. Terrell if the system she is describing has a mechanism to guide families to the proper resources, and if the nurse asked the students about their health insurance. Ms. Terrell answered that they do not ask the students, but reach out to the parents.

Dr. Selznick inquired about the use of school nurses. Ms. Terrell explained that many of the schools in Miami-Dade do not have full time school nurses. Mr. Manzie noted there are 67 schools in Miami-Dade that do not have medical services. Dr. Philip noted school telehealth provides a great opportunity to offer services where the patients reside.

Ms. Gross asked if Nicklaus provides mental health services, too. Ms. Terrell advised they were currently offering primary care only.

Mr. Smith asked Ms. Terrell where she sees the program in five (5) years. She responded the goal is to keep kids healthy and providing additional services in the most convenient place.

**Center for Connected Health Policy**

Mario Gutierrez, Executive Director with the Center for Connected Health Policy (a national telehealth policy resource center), spoke to the Council about telehealth policy trends in other states. He encouraged the Council to visit the Federal Office for the Advancement of Telehealth Grants website for more information on funding available for telehealth implementation.

Mr. Gutierrez advised the Council there are 12 regional Telehealth Resource Centers throughout the United States. These regions work together through the Telehealth Resource Centers National Consortium.

Mr. Gutierrez noted the Consortium believes the value proposition for telehealth is that “advances in telecommunication technologies can help redistribute health care expertise and resources to where and when it is needed, and create greater value among consumers, public and private payers, and health systems.” The Consortium suggests there are three areas in which telehealth technology can improve health care. The first is timely access to quality diagnosis and treatment care, using live video or asynchronous store and forward, with primary or specialty care providers for episodic, trauma, and chronic care. Second, the use of enhanced consultation and/or communication technologies for the patient/consumer to communicate with the health care team through a secure portal for email communication or live video using a smart phone, tablet or computer. He noted this also promotes care coordination between the primary care provider and the specialist. The third is the use of remote monitoring of patients, which allows for better management of chronic conditions, as well as allowing elderly patients to age in their home, and providing acute intensive care with tele-ICU.

Mr. Gutierrez reviewed telehealth policies, laws, and regulations in various states. He reported that 44 states have a definition for telemedicine, 33 states have a definition for telehealth and two states have no definition for either telemedicine or telehealth. Medicaid will reimburse live video
technology in 48 states and Washington D.C.; remote patient monitoring in 22 states; and store and forward technology in 13 states.

Mr. Gutierrez discussed parity in payment for telehealth services. He said that 34 states and Washington D.C. have telehealth private payer laws, which require coverage for telehealth services. He noted parity in covered services did not necessarily translate into parity of payment.

Mr. Gutierrez reviewed the laws of several other states, which could serve as templates for a Florida law. He recommended looking at California, Minnesota, and Hawaii’s laws on Telehealth. He reminded the Council that along with state laws, states need to consider regulatory and administrative actions needed to implement legislation.

Dr. Selznick inquired if under California law both the patient and provider had to be in the same state. Mr. Gutierrez responded that the Center for Medicare and Medicaid Services requires both to be in state. If the provider is away on vacation, they can, on a limited basis, use telehealth to see a patient. Chair Senior noted the difficulties state Medicaid offices face when trying to audit out of state encounters. He suggested that the Federal Medicaid Integrity Nationwide Center could perform audits for the out of state e-consults. As long as the primary provider is in the state, the specialist can be anywhere. This would keep the patient in their medical home, and reduce the state burden.

Dr. Terkonda asked about challenges regarding liability coverage for physicians when providing care in multiple states. He specifically asked whether there were any liability cases from using telehealth technology. Mr. Gutierrez indicated that his was not aware of any liability cases at this time.

Dr. Burdick commented that Mr. Gutierrez helped Hawaii with their telehealth laws, could he help Florida. Mr. Gutierrez offered to review proposed language. Mr. Manzie asked Mr. Gutierrez how California was able to pass its legislation. Mr. Gutierrez responded that there was a yearlong workgroup prior to the legislation.

Ms. Miller commented that 13 states use store and forward technology for dermatology and ophthalmology. She questioned why more states were not using this technology. Medicare is in opposition to store and forward, because of concern it will increase costs. Ms. Miller remarked that the opposite is true and the empirical proof is available from the studies undertaken.

Dr. Terkonda stated that the state should not start with a disorganized health care system, and simply add telehealth. He suggested that medical schools should require students to train in medical technology.

Dr. Philip asked if any of the states include the homebound population. Dr. Terkonda responded that Medicare does not recognize the home as an originating site. Mr. Gutierrez noted this as one reason there were limited studies on this type of care.
American Telehealth Association

Latoya S. Thomas, Director, State Policy Resource Center, American Telemedicine Association (ATA), advised the Council the ATA members work to fully integrate telemedicine into transformed healthcare systems to improve quality, equity, and affordability of healthcare throughout the world. She shared the ATA is the leading international resource and advocate promoting the use of advanced remote medical technologies.

Ms. Thomas noted there are currently 32 states and Washington D.C. with parity laws for private insurance coverage of telemedicine and eight states with proposed or pending legislation and ten states without parity laws. Ms. Thomas discussed parity policy reforms including insurance coverage and reimbursement. She suggested legislation typically includes the types of services covered, the patient setting, and the eligible provider location. She shared that newer legislation from states tends to include the use of approved technology and any additional requirements for informed consent.

Ms. Thomas discussed the parity laws in Hawaii, Oklahoma, Oregon, and New York. She also shared interstate licensure models for national reciprocity and licensure compacts. She shared a link to the ATA policy resources center where the February 2017 copies of the State Telemedicine Gaps Analysis, Standards and Licensures and State Telemedicine Gaps Analysis regarding Coverage and Reimbursement were available. Additionally, the State Telemedicine Gaps Analysis regarding Psychologist Clinical Practice and Standards and Licensure published in June 2016 is also available from this site.

Dr. Selznick asked if the ATA had a template or outline of the steps the Council could use in developing its report. Ms. Thomas noted the ATA did have a model guideline that might be helpful.

Dr. Burdick asked about informed consent, commenting that she has noticed some states have revoked additional consent requirement. Ms. Thomas responded it was the ATA’s opinion consent to treatment was sufficient for all medical care, no matter the modality.

Chair Senior stated that with telehealth, there has to be a clear starting point between the patient and the provider.

Ms. Miller stated Florida Blue is surveying primary care providers to determine what patients want. She said that the public policy needs to require value based care, and some payers support home telehealth parity. Parity works because it derails any discriminatory practices and it allows for payment and coverage. Ms. Miller asked who was opposed to the parity policies. Ms. Thomas responded that the primary opposition to parity laws are the payers in some states, typically where they have a fee for service payment model. Dr. Selznick noted telehealth was a more viable solution for value-based care. He suspects insurers in states with a strong fee for service model insurers would probably not participate without parity laws.

Dr. Burdick asked about the 2015 New York law. She was interested specifically one payer’s policy manual, which decreased coverage. She asked Ms. Thomas’ opinion on whether there should be a mandate for the use of telehealth. Ms. Thomas strongly advised against mandating telehealth use or pricing. She suggested providers and patients shape the policy, not the legislature.
Public Comment

No public comment given.

Member Discussion and Next Steps

After much discussion about the process for developing the legislative report, Mr. Smith and Dr. Burdick suggested the Council consider starting with defining the terms telehealth/telemedicine. After additional discussion, Chair Senior suggested the Council members send their thoughts on the definition to staff. Agency staff will compile the suggestions to share at the next Council meeting.

Chair Senior indicated the Council would use several hours at the May meeting establish the outline for their report.

Adjournment

There being no further discussion, the Telehealth Advisory Council adjourned at 5:30 p.m.
Interested Parties Present:

Anna Baznik, IMPOWER; Amanda Bolanos, Nicklaus Children’s Hospital; Christine Certain, Children’s Home Society of Florida; Stuart Clarry, UF Health; Sofia Debs, Nicklaus Children’s Hospital; Carolyn Grant, Cardinal Health; Kelly Greene, Adapt Behavioral Services; Joni Higgins, BayCare; Rebeca Hohnstock, Devereux Foundation; Jennifer Kammera, Devereux Foundation; Barbara R. Keene, Everyone’s Counseling Center; Aneel Irfan, Trapollo; Lauren Lashbrook, Mend; Lindsay Newton, Devereux Foundation; Carey Officer, Nemours; Jennifer Pidcock, Florida Blue, GuideWell; Prachi Rathi, Prism Health Services, LLC.; Kathy Reep, Florida Hospital Association; Victor Rosenbaum, Orlando Health; Eugenia Ngo-Seidel, Nassau County Florida Department of Health; Deb Stewart, Florida Blue; Evelyn Terrell, Nicklaus Children’s Hospital; Lynn Thames, Florida State Oriental Medical Association; Alejandro Toro, AKL Therapy, Inc.; Shayan Vyas, Nemours; Allison Wiman, Florida TaxWatch; Angela Zeringue, Trapollo and Natalina Zisa, Nemours Health System.
Pediatric Associates presentation to be provided at meeting

Additional Material:

- Children’s Health Fund white paper on technology and child health
15 MILLION KIDS IN HEALTH CARE DESERTS
Can Telehealth Make a Difference?

The Second in a Series of White Papers on Technology and Child Health
By the Samsung Innovation Center at Children’s Health Fund

APRIL 21, 2016
This report was prepared by Children’s Health Fund, under the auspices of the Samsung Innovation Center at Children’s Health Fund.

Children’s Health Fund would like thank the national experts represented in this white paper. Each of these thought leaders and practitioners generously contributed to this report, as well as took time to review its contents and provide feedback.

Children’s Health Fund is an organization committed to providing comprehensive health care to the nation’s most medically underserved children through the development and support of innovative primary care medical programs and the promotion of guaranteed access to appropriate health care for all children. To learn more, visit www.childrenshealthfund.org

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EXECUTIVE SUMMARY AND RECOMMENDATIONS

THE PROBLEM

While the Affordable Care Act (ACA) significantly expands health care coverage, insurance does not guarantee access. Particularly for vulnerable populations, including children, a limited and maldistributed supply of health providers keeps health care out of reach for many. Families may lack transportation resources to get to a health care site, especially in areas with too few health professionals—often federally-designated a Health Professional Shortage Area or HPSA—impeding timely access to services even for children with health insurance. Such gaps reduce access to preventive services, urgent care, and subspecialists. They can increase costs when non-emergency care is sought in a hospital emergency department, or when lack of medical attention later contributes to expensive and complex problems.

UNDERSTANDING TELEHEALTH’S POTENTIAL—FROM THE FRONTLINES

Telehealth can be part of the solution in overcoming access barriers. From rural desert primary care clinics to urban snow-ridden emergency departments, the diverse voices in this report provide firsthand perspectives of how telehealth tools are bringing critical health services to children. Each story’s examination of the strengths, challenges, and aspirations of telehealth is different. But collectively, they reveal a single theme: telehealth technologies present significant opportunities to transform pediatric care and reduce health disparities.

BENEFITS FOR CHILDREN

The cases in this report demonstrate substantial clinical care benefits from telehealth, particularly when used in the context of a medical home. However, full appreciation of the potential value of telehealth for economically-disadvantaged pediatric populations requires recognition of both its direct and indirect impact. Direct benefits include:

- Expansion of the matrix of health and mental health care services as part of enhanced safety net capacity;
- Improved ability to respond to the comprehensive health care needs of children with chronic and complex health conditions;
- Timely access to expertise in urgent/emergent cases where specialists are otherwise regionalized;
- Increased availability of resources gained and repurposed as a result of savings from telehealth driven efficiencies;
- Strengthened connectivity and cohesion between community-based providers and larger partner institutions; and
- Enhanced provider education and mitigation of professional isolation experienced by providers in rural locations.

Each of the aforementioned benefits broadens the reach and elevates the performance of the care network serving poor children.
**BENEFITS FOR FAMILIES AND COMMUNITIES**

We also learn from this compilation of experiences that the benefits yielded through telehealth integration can extend into the very fabric of communities and families served. At the micro-level, telehealth can enhance the quality of life of children and families in or near poverty, providing them access to a spectrum of health/mental health care professionals and specialists that may have previously been beyond reach.

Inasmuch as it reduces or eliminates burdensome travel and workforce shortages, telehealth access can help children miss fewer appointments, allowing chronic conditions like asthma to be better managed, resulting in fewer costly emergency room visits and fewer school days missed. Working parents can benefit when telehealth enables them to miss fewer workdays because of sick children. When implemented well, the cumulative value of these benefits is substantial, adding efficiency and increasing the reach of the current workforce. Leveraging advances in technology, telehealth can increase effective communication, increase quality and reduce the burden of barriers to care, such as lack of transportation.

**REDUCING HEALTH DISPARITIES VIA TECHNOLOGY: MAKING TELEHEALTH AVAILABLE EVERYWHERE**

As evidenced by this case collection, perhaps the most important consequence of telehealth’s steady rise into the mainstream of health care delivery is the potential to advance health equity. Telehealth offers a way to move toward the ideal of every child having access to a high quality, comprehensive medical home model of care, and integrated specialty and emergency care, when needed.

Like the children it serves, telehealth’s rapid development is not without growing pains. Implementation of telehealth faces a number of barriers including capital costs of equipment and training, which can disproportionately affect the less resourced practices that would most benefit from it. Similarly in some models, such as direct to consumer, payment/co-pays can be in the range of $40-$50 per telehealth visit, making them inaccessible for impoverished families from a financial perspective. Concerted effort must be made to avoid having telehealth become luxury care inaccessible to those most in need. In addition, telehealth is limited by a patchwork of inconsistent regulatory issues surrounding federal coordination, reimbursement, licensing, credentialing and broadband connectivity. There are also concerns around ensuring quality and avoiding fragmentation of care. These issues demand resolution to ensure telehealth is used appropriately but available widely.

While telehealth’s full impacts, implications, and impediments in pediatric care will take years to fully assess, these cases allow us to understand where we are and where we are going. Realizing the full potential of telehealth’s impact on access and quality of care will require the development of metrics to measure impact and innovative ways of expanding and applying new technologies.

Telehealth is a story of connection. Across states, settings, and specialties, telehealth is linking patients, providers, and institutions. This web of relationships has the potential to improve health care quality and access while reducing costs. Given current challenges in health care—including pediatric primary and sub-specialty care workforce inadequacy, the persistence of non-fiscal health access barriers such as transportation scarcity, and political imperatives driving cost control as a priority—now is the time to ensure that telehealth is responsibly interwoven into the safety net for young and vulnerable people.
RECOMMENDATIONS

1. Break down legal and licensing barriers to expand telehealth programs to cross state lines.

2. Encourage Medicaid and commercial health insurers to cover appropriate, high quality telehealth services for all children, especially those living in HPSAs and other underserved areas.

3. Advocate for experienced child health professional groups to create quality guidelines and standards for telehealth services.

4. Create a national campaign for parents and the public to understand telehealth resources that are available and how access to specialists can be organized for any child in the US.

5. Encourage federal grant support for the development and utilization of telehealth and other technologies to improve access to health care for children.
Telehealth is transforming the way people receive health care across the United States. With recent advances in broadband coverage and affordable equipment, it is rapidly becoming integrated into primary care, specialty services, and complex health systems. However, many people are still unsure what it is, what quality of care it can provide, and how it could apply to their own health or community.

The growth of telehealth comes at a time of persistent health care access challenges. The implementation of health reform expanded insurance coverage significantly, with over 16 million Americans newly insured. However, 29 million Americans still lack consistent coverage, and coverage does not always equal access. Financial and transportation barriers still keep many people from getting optimal primary, specialty, and even emergency care. Additionally, even for those insured, there are inadequate numbers of providers in many areas of the country.

By far, one of the most compelling applications of telehealth is the possibility of addressing access challenges in Health Professional Shortage Areas (HPSAs) where there is less than one health professional for every 3,500 individuals. In December 2015, more than 6,000 communities or counties had been declared to be a primary care HPSA. It is estimated, in fact, that 15-20 million children live in officially designated Health Professional Shortage Areas. In areas like these, technologically advanced approaches, like telehealth, can play an essential role in expanding access to otherwise underserved families, including children. It is important to note that many residents in HPSAs do have health insurance. Insurance coverage is necessary but insufficient for getting health care services to children and families who need it.

For no population is getting appropriate care more important than it is for children. Yet lack of access to pediatric-trained health care providers disproportionately affects children living in poverty (16 million) and children in rural areas (13.7 million). The need for trained pediatric providers spans all areas of the health care system, from mental health and outpatient services to lifesaving trauma care. Access to clinicians with pediatric-specific training and experience is well known to affect outcomes, including both survival and quality of life for the child. Telehealth is one way to expand access to the workforce that exists.

We are also entering a new era of patient-centeredness. Technologies can bring health care to the workplace, home, or even school—increasing flexibility in care models that reduce absences from work and school. However, a major concern is that the new opportunities for access and quality may not be available for families with the greatest needs, widening disparities. Low-income families may not have consistent access to the internet, smart phones, or even uninterrupted phone service. Many are not as aware of their rights, or of potential avenues for improved access and quality of services. Often clinical systems serving poor and marginalized populations are underfunded, which presents cost barriers to the newest technologies. As advancing technology facilitates new access, deliberate efforts are needed to ensure inclusion of those most in need.

As with the introduction of any new service, delivery system, or technology, there is always some degree of disruption to existing systems. With telehealth, there are issues of payment, licensing, quality assurance, regulation, and concerns about care fragmentation. All will need to be addressed for optimal adoption of telehealth across the country. But, as summarized in the American Academy of Pediatrics 2015 Policy
Statement on Telemedicine and Workforce Shortages, integrated implementation of telehealth with a child’s primary and collaborating providers has the potential to dramatically improve care, resulting in “more efficient, higher quality, and less expensive care.” Additionally, it can increase the ability for more families to receive quality care in their own communities, reducing the burden of travel.12

The focus of this white paper is telehealth in the care of children, particularly those in underserved communities. The goal is to present a variety of case studies to illustrate the scope of use and the potential to create positive change. We have asked a diverse array of health care teams to share their telehealth stories, offering a firsthand account of this technology’s opportunities, needs, applications, and challenges. We hope that readers will gain a deeper sense of the ways telehealth is already being used, and the potential it holds to not only improve care for children across the country, but—if implemented strategically—to decrease health disparities.

TELEMEDICINE AND TELEHEALTH

The terms “telemedicine” and “telehealth” are sometimes used as if interchangeable; however, each has a somewhat different meaning. The US Health Resources Services Administration (HRSA) defines telehealth as “the use of electronic information and telecommunications technologies to support long-distance clinical health care, patient and professional health-related education, public health and health administration. Technologies include videoconferencing, the internet, store-and-forward imaging, streaming media, and terrestrial and wireless communications.” 1

The Office of the National Coordinator of Health Information Technology adds, “Telehealth is different from telemedicine because it refers to a broader scope of remote healthcare services than telemedicine. While telemedicine refers specifically to remote clinical services, telehealth can refer to remote non-clinical services, such as provider training, administrative meetings, and continuing medical education, in addition to clinical services.”2

Telemedicine is the more limited term, referring specifically to clinical services, generally in a distance communication that has a physician or other health care provider at both ends. Telehealth is the broader term, encompassing additional uses, e.g., patient health education and remote service delivery from allied health professionals (psychology, rehabilitation, nutrition counseling, case management, etc.).

Telehealth is becoming the more commonly used term, including in federal policy. We will primarily use the term “telehealth” throughout this document with the understanding that it includes the services referred to as “telemedicine” as well as other health-related services. However, in the case examples, we have retained the terminology used by the authors.

In practice, telehealth can encompass clinical encounter types ranging from a video-assisted remote visit for counseling to very sophisticated remote monitoring of vital signs, ventilator settings, radiologic scans, cardiac work-ups and assessments of certain kinds of physical manifestations of illness and disease.
We begin in rural Arizona, home to over 150 of America’s 6,000 federally-designated primary care Health Professional Shortage Areas. Dr. Darlene Melk’s account takes us from statistics to the desert realities, presenting a stark portrait of what subspecialty care shortages look like for patients and providers: long drives; lost work; and limited follow-up. Reading her piece, one begins to comprehend the stubborn access challenges post-health reform, and the “what if?” possibilities of using telehealth tools to bring care directly to patients.

CASE 1: THE NEED FOR TELEHEALTH

Darlene Melk, MD, FAAP
Chiricahua Community Health Centers, Inc., Douglas, AZ

In remote southeastern Arizona, where I am a pediatrician, one of the greatest challenges we face is accessibility to subspecialty care. According to a recent workforce study by the Arizona chapter of the American Academy of Pediatrics, “Depending on the specialty, Arizona has one specialist for every 200,000 to 288,000 children.” What does this look like in reality? A visit to the specialist for our families translates to a 125 mile drive each way, an entire day off of work and school, and potentially months on a waiting list. When faced with these costs, all for a 15 minute visit, subspecialist care often does not happen.

Transportation barriers became very real for one of our young patients shortly after her birth. Through a newborn screening, she was diagnosed with congenital hypothyroidism. This very treatable condition requires periodic blood tests to determine the correct dose of medication that is needed in order to avoid long term brain damage. Her grandmother, who was her primary caretaker, was diagnosed with cancer just a few months after the child’s birth, and was not able to make the frequent, long trips needed to see the specialist. Doing the best we could, we worked with the baby’s 18-year-old brother, who would bring the baby to our local primary care clinic for the blood tests.

Knowing these barriers to subspecialty care, often our only choice is to make phone calls to the specialists to attempt to provide updates and advance their plan of care. These phone calls are made in the midst of a busy day of patient care and often not with the particular specialist who has seen the child, if one exists. This is not the optimal model of care, but at this point in time it is the best that we can offer.

Depending on the specialty, a face-to-face encounter is generally ideal. It allows the patient and family to develop a relationship of trust with the specialist, and to work as a team to make a more customized plan of care. Perhaps someday we can build a workforce of subspecialists who are willing to directly provide care in rural areas such as ours. But until this day comes, telehealth presents an opportunity to bridge this gap in subspecialty care.

Telehealth would eliminate the transportation barriers that many of our families face. It would save a tremendous amount of time for our families and offer the visit in the convenience and comfort of their medical home setting and in their own community. In addition, the specialist could also communicate directly with the pediatrician whenever a more complicated case, needing more hands-on follow-up, arises.
With grant funding, we are currently in the process of setting up our first telehealth pilot program. It is challenging. Some of the barriers for establishing a sustainable program include lack of a reimbursement scheme that pays not only for the specialist’s time, but also for the primary care team who is going to be responsible for scheduling, coordinating and performing the intake for the patients on the day of their visits. In addition, some families perceive that the care they receive “through a television” is inadequate, so it is important to educate them and present care options, when possible.

Overall, we feel that the positive benefits of telehealth will outweigh the negatives and will allow our patients to receive care that is currently out of reach. I am hopeful that we will be able to demonstrate the value of this model of care through our establishment of a pediatric telehealth endocrinology clinic over the coming months.

Melk’s contribution provides a compelling case for telehealth in pediatric primary care. Working in the rural southwestern US involves supporting patients and families experiencing economic disparities, transportation barriers, and a host of medical and psycho-social challenges. While Melk describes her aspirations for telehealth, we are faced with a series of questions that confront implementers of these promising technologies. Matters of cost and value, acceptance and adoption, and quality of care no doubt come to the mind of those considering the practical and policy implications of telehealth systems.

As we leave Arizona and head northeast into more population- and provider-dense areas, we see how even in resource-rich environments, telehealth offers value—particularly in an emergency context. Waltzman, Wang, and Farrell present a case in which telehealth systems address crisis needs, while also enhancing relationships among institutions. Such institutional collaboration provides a size and scope of distributed services that would be difficult to establish at a community-based provider level alone.

CASE 2: SPECIALIZED COLLABORATION IN UNEXPECTED AND SPECIAL CIRCUMSTANCES

Mark Waltzman, MD
Boston Children’s Hospital, Boston, MA

Judy Wang, MS
City of Boston

Shawn Farrell, MBA
Boston Children’s Hospital

As the largest pediatric specialty-care provider and the only freestanding pediatric hospital in Massachusetts, Boston Children’s Hospital (BCH) plays an essential role in caring for sick children throughout the Northeastern US. BCH is committed to improving access to world-class care for children, while at the same time reducing the overall cost of health care. A growing portfolio of telehealth programs at BCH links hospitals, physicians, and patients together, making the practice of medicine more efficient, expediting timely access to care, reducing overall costs, and increasing patient and family satisfaction.
The BCH Departments of Medicine and Anesthesia/Critical Care have partnered with the Telehealth Program and community hospitals to address the important issue of timely access to pediatric specialty care. Through the TeleConnect Program, BCH provides real-time, interactive, high-definition videoconferencing for on-demand clinical support to community hospital emergency department (ED) clinicians on the stabilization and treatment of critically ill children. In addition to enabling collaboration during acute situations, the platform informs decisions such as the optimal mode of transfer and appropriate disposition at BCH.

South Shore Hospital (SSH), located in southeastern Massachusetts, provides acute, outpatient, home health and hospice care to its local residents. In collaboration with BCH clinicians, SSH’s Pediatric ED provides 24/7 pediatric emergency care and receives approximately 20,000 visits per year.

In December 2013, a two-and-a-half-year-old boy was transported to the SSH ED after choking on a pretzel. The boy was in severe respiratory distress when he arrived and the on-staff pediatric emergency physicians determined that his airway needed to be secured prior to definitive care. Local adult medicine specialists from otorhinolaryngology, thoracic surgery and pulmonology were contacted; however, the necessary sized equipment to treat a pediatric patient was unavailable at this community hospital. It became clear that the child needed immediate transport to a tertiary care center for specialty care; the BCH Critical Care Transport team was called. On a typical day, the team can make that journey in approximately 30 minutes. However, the child’s arrival at the SSH ED coincided with a major blizzard that had crippled transportation across much of the state. The transport team would not arrive for at least two to three hours, leaving the pediatric emergency physicians at SSH to manage this critically ill boy until the transport team arrived. Fortunately, the pediatric emergency physicians at SSH had access to the TeleConnect telemedicine service for pediatric critical care support.

Through the telemedicine connection, the BCH intensive care specialists were able to see the patient, his cardiac monitor, and ventilator settings. Collaboration between the remote specialists at BCH and the pediatric emergency physicians and respiratory therapists at SSH allowed for minute-by-minute assessments of the boy’s respiratory status. The ability to see his respiratory pattern as well as the readings from the monitors and ventilators allowed the remote team to recommend changes to body position, ventilator settings and medications. This level of real-time collaboration would be impossible to achieve over the telephone. When the transport team arrived at SSH three hours after they were called, the patient was stable enough to be transported to Boston.

By the time the child reached BCH, his condition had once again destabilized; he could not be taken to the operating room (OR). His left lung had collapsed, causing his right lung to over-expand. The boy was emergently placed on a machine that directly adds oxygen to the blood (ECMO) and was then taken to the OR, where specialists painstakingly removed the tiny pretzel particles embedded in four out of the five segments of his main airways. After 24 hours in the ICU, the boy was taken off ECMO. His breathing tube was removed within 36 hours, and he was discharged from the hospital five days later—in time to celebrate Christmas with his family. In follow up, the boy experienced no cardiovascular or neurologic deficits from the event.

Although South Shore Hospital has a dedicated pediatric emergency department supported by Boston Children’s Hospital physicians, it is limited—like most community hospitals—in the availability of pediatric
specialists, equipment and resources. Local adult medicine specialists often acknowledge that their scope of practice typically does not include procedures intended for children. In this particular case, telehealth enabled South Shore Hospital to access the expertise of pediatric critical care specialists, allowing for a child to be properly stabilized in the community hospital setting over the course of several hours until definitive care could be performed by a qualified pediatric specialist using proper equipment.

With the help of telehealth technology, Boston Children’s Hospital is providing timely access to high quality care in the community hospital setting, with the goal of improving both health outcomes and the patient and family experience. The TeleConnect Program exemplifies how telehealth can expedite access to high quality pediatric specialty care in the community hospital setting and support collaborative clinical decision making in critical situations, leading to improved health outcomes and better patient and family experiences. Telehealth is helping Boston Children’s Hospital deliver the right care, in the right place, and at the right time.

Waltzman and colleagues offer a dramatic and compelling example of telehealth’s life-saving value. Far from a remote environment, the story they tell takes place in an urban/suburban setting that has been a national model for progressive health care programs. Even in this well-resourced environment, telehealth closes gaps, allowing high-quality care to be provided in the midst of a high-intensity weather and health emergency.

Rheuban, like Waltzman, provides us with a case study that highlights the life-saving potential telehealth holds for a complex case in a tertiary care setting. But the author also introduces us to an additional complexity, well beyond technology: rules and regulations.

CASE 3: SOLVING COMPLEX PROBLEMS WHILE MANAGING COMPLEX REGULATORY BARRIERS

Karen S. Rheuban, MD
University of Virginia, Charlottesville, VA

A two-day-old male infant was referred to the University of Virginia (UVA) Medical Center’s Neonatal Intensive Care Unit for evaluation and treatment of congenital heart disease and respiratory distress. He had been born via caesarian delivery for fetal distress in a rural hospital in West Virginia. Early on the second day of life, he was noted to have difficulty breathing and was transferred to a community hospital with a newborn intensive care unit across the state border for evaluation and management.

Upon arrival, on physical examination, he was breathing rapidly with an elevated heart rate, heart murmur, and low blood oxygen levels. An echocardiogram (heart ultrasound) was urgently performed by an on-site adult cardiologist who identified the presence of an abnormal hole in the middle of the baby’s heart. That echocardiogram was sent via a telemedicine system and reviewed immediately at the University of Virginia, at which time the diagnosis of several other critical heart defects was made. Under guidance of the telemedicine doctor at UVA, the infant was rapidly started on stabilizing intravenous medications and transferred 125 miles to the University of Virginia via our Neonatal Emergency Transport Service. He arrived
in no distress, and with improved blood labs that showed he was circulating oxygen well on the medication. On the fourth day of his life, he underwent a successful surgical repair of his heart and has done well since.

This case demonstrates a number of issues related to the value of telehealth in the acute evaluation and management of newborn infants. Telehealth connectivity facilitated an accurate diagnosis of a complex, life-threatening problem and enabled immediate intervention. This occurred in a community hospital setting in which on-site neonatology services were available but not those of pediatric cardiology. The patient-originating site had a contractual relationship to engage in telehealth with the University of Virginia, allowing services to be provided in accordance with all state and federal statutes and regulations. However, had that same request for pediatric cardiology services been made from the patient’s birth hospital in West Virginia, more complex regulatory issues would have been a concern. Licensure, credentialing and privileging, malpractice, technology infrastructure, broadband connectivity and reimbursement all would have presented challenges to the delivery of telehealth facilitated care for that infant in his birth hospital. UVA providers are not licensed to practice medicine across state borders, the infrastructure was not in place to support such an encounter at the birth hospital, there was no agreement that conforms to Joint Commission or Medicare Conditions of Participation standards between the two hospitals, there was no payment for telehealth services by the patient’s private insurer, and there was an untested malpractice cap in place.

Nationwide, programs to rapidly identify babies with suspected heart disease through a simple, noninvasive test of blood oxygen have been implemented in rural and urban community hospitals in an effort to advance the timeline for diagnosis and intervention for infants with critical congenital heart disease. With a distribution of pediatric cardiology providers primarily in urban settings, the use of telehealth is a critical adjunct to any such screening program and improved outcomes for infants and children with critical cardiovascular disease. Equally important is the role of telehealth in appropriate triage to avoid unnecessary transfer where applicable, and in facilitating communications between specialists, referring physicians, and patients and their families.

The extraordinary story and positive outcome for the newborn described by Rheuban again underscores telehealth’s value as a tool in tertiary settings and crises. But as she points out, undergirding this success were a set of contracts and formal relationships. Had the child been located across a state border, the story and the outcome could have been radically different. The issues Rheuban outlines: technology, knowledge, and awareness contrasted against border policies and regulatory limitations at state and local levels have a chilling and limiting effect on a nascent life-saving system.

Re-affirming the potential for telehealth as a tertiary care tool, as well as a primary care tool, is the contribution by Sapien and Alverson. The authors, describing an integrated health care system serving a single state, show the unifying power of well-organized telehealth.
CASE 4: A REGIONAL SYSTEM SUPPORTING A RURAL AREA WHILE MITIGATING HEALTH DISPARITIES

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Denise M. Dion, PhD
Dale Alverson, MD

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New Mexico is a majority-minority state with a sparse population, and consistently ranks 49-50th in social determinants of health and child well-being\(^1\). The State has the largest percentage of Hispanics (46.3\%) of any state and the second highest percentage of Native Americans (9.4\%). The poverty rate for children in New Mexico is 30\% (compared to 22\% nationally), ranking third highest in child poverty in the US. This, along with uninsured and underinsured rates, racial and ethnic disparities, and paucity of health care providers hinders access to health care. Furthermore, the State’s Level 1 Trauma Center and Pediatric Tertiary Care facility is in close proximity to only 48\% of the population.

Approximately 22\% of children visit an emergency department annually, but children living in poverty are more likely to utilize this setting for services; 33\% of children living in poverty visit an emergency department annually.\(^2\)

The Child Ready-Virtual Pediatric Emergency Department (CR-VPedED), established in 2013, is an offshoot of the Child Ready EMS for Children State Partnership Regionalization of Care. Our approach to regionalization of care is through a community engagement process, facilitating community stakeholder meetings. The community members, all rural or frontier, self-assess how “Child Ready” they are to care for the acutely ill or injured child, from scene to hospital and ultimately transfer to tertiary care should that be necessary. We implemented the CR-VPedED with the communities having an interest in pursuing telehealth consultation in pediatric emergency care for their local facilities. Our goal is to reduce pediatric morbidity and mortality by partnering with patients, communities, health care providers, and facilities to regionalize pediatric emergency care through the CR-VPedED Network.

Often telehealth case presentations revolve around using telehealth to avoid unnecessary transfers. While important, the following case presentation is different. It is about how telehealth facilitated an appropriate transfer, assuring patient safety and promoting family-centered care to a patient and family facing significant challenges with social determinants of health.

R.M. is a three-month-old Hispanic male infant who stopped breathing at home. The mother ran to the neighbors to call 911. The responding police officer immediately began cardiopulmonary resuscitation upon arrival and when the ambulance arrived the baby was breathing, his color returning to normal. The ambulance transported the baby and mother to the nearest emergency department and the police officer transported the mother’s four other sons to meet them at the hospital. The emergency department is in a small community hospital with no pediatric services. The emergency physician on duty is board-certified in general emergency medicine. He found the baby having stable vital signs, alert, good tone and pink perfusion. Because of the seriousness of the event the physician decided the baby needed to be transported to the pediatric tertiary care center. The father arrived at the emergency department from
work. Both parents refused transport. The emergency physician started a telehealth consultation with the pediatric emergency department physician to discuss the case and evaluate the baby.

The CR-VPedED physician introduced himself to the parents via telehealth and realized they spoke limited English. Because Spanish was their primary language, he spoke to the parents in Spanish, obtaining the same concerning history. He evaluated the baby via telehealth, remotely examining the baby’s skin perfusion, mental status and muscle tone. He told the parents that he agreed the baby needed to be transported. The stress of their baby being transferred became apparent. They had questions about their other four sons, logistics of the ambulance ride and cost. The CR-VPedED physician described details of the transport in Spanish, told them that he would be in the pediatric emergency department to receive the baby and assume care, and they agreed to the transfer. One of the nurses came to the telehealth unit to introduce herself, as she would also be waiting to receive the baby.

When the baby and mother arrived safely in the pediatric emergency department, the CR-VPedED physician greeted them and the mother recognized him from the telehealth consultation. The baby was admitted to the hospital for observation. The father arrived two hours later with clothes for the mom and the diaper bag full of supplies for the baby; he had arranged for a neighbor to care for the other four sons.

This case highlights how telehealth facilitated an appropriate transfer with increased patient and family comfort, and decreased stress for a family facing challenges related to poverty and the social determinants of health.

We have many such success stories, yet still face many challenges as we continue to develop this regional system. Many rural hospitals are undergoing tremendous financial stress, leading to changes in leadership. Therefore, we have had to re-establish contact multiple times with hospitals and new administrators. As our providers have direct patient contact, they must complete the credentialing and clinical privileging process at each originating site; each site has a unique process. Recently, a rural physician expressed strong opposition to telehealth. Due to the difficulty in recruiting and maintaining providers in rural communities, this particular provider wields great influence with hospital leadership and all telehealth activity there has halted despite our efforts to address the concerns.

We began pediatric emergency nursing consultation via the CR-VPedED network and will be conducting weekly check-in rounds with our originating sites. The vision is to change the culture and perception from telehealth in the emergency setting as only for the most critical patients to the reality that it can and should be used for any child the originating health care team has questions about. We continue to strive to use telehealth to regionalize pediatric emergency care.

Sapien et al provide an ideal view of how telehealth may be used to create a regional support system that addresses issues of income disparity, overcoming complexities in the distribution of health providers, resources, and services, and economic challenges. But the authors also draw our attention to an important point: overcoming a lack of knowledge, comfort, and consistent regulations around telehealth. Opposition
to these systems can come in many forms, often based in a lack of understanding and direct experience. Any health organization seeking to establish a well-integrated and well-used telehealth operation will need to take care to sensitively assess perceptions and address concerns.

Marcin, the author of the next case, is a leader in the pediatric telehealth field. As a practitioner of telehealth for more than 15 years, he has seen the best and worst of what these technologies and systems can bring to health care. Most importantly, he brings an awareness of the data that not only supports the value of telehealth, but the information that can be used to help less knowledgeable participants in the telehealth environment appreciate the benefit and changes that accompany any new tool set.

**CASE 5: CONNECTING PATIENTS WITH CARE WHILE CONNECTING THE DOTS OF QUALITY, ACCESS, COST *1**

**James P Marcin, MD, MPH**  
*UC Davis Children’s Hospital, Davis, CA*

The UC Davis Pediatric Tele-Emergency Network provides pediatric and neonatal critical care consultations to outside emergency departments and newborn nurseries. There are 26 hospital emergency departments and eight nurseries and neonatal intensive care units connected to the Pediatric Tele-Emergency Network, which allows mostly rural hospitals to connect to pediatric subspecialists at UC Davis Children’s Hospital. Data show that the use of telehealth results in higher quality of care, lower medication error rates, and reduced cost of care when compared with telephone consultations, and rural hospitals in particular can benefit from the increased access to care. The UC Davis Pediatric Tele-Emergency Network provides an answer for rural hospitals faced with access and transportation challenges. The UC Davis Pediatric Critical Care team has conducted more than 400 telehealth consultations, and satisfaction with telehealth is high among both family members and referring pediatricians and Emergency Medicine physicians.

In July 2015, the UC Davis Pediatric Tele-Emergency Network was instrumental in saving a baby’s life. At a rural regional medical center, a one-week-old baby was brought into the emergency room after becoming cold to the touch and struggling to breathe. The Emergency Medicine physician connected with a neonatologist at UC Davis Children’s Hospital, and the neonatologist was able to see and hear the patient and communicate over video with the referring physician. He deduced that the baby was suffering from a cardiac disease common to that age group and was able to recommend medical interventions and lifesaving medications while the transport team was on its way to transfer the patient to UC Davis. Due to distance, the transport team would not arrive for two hours, and the emergency department physician, the local pediatrician, and UC Davis neonatologist stayed connected for more than two hours using telehealth. Because of the interventions, the baby was stabilized while awaiting transfer. By initiating the therapy, the physicians were able to collectively manage the patient in real-time during the two hours awaiting transfer. The local pediatrician, emergency department physician, the neonatologist and the family were quick to say that the telehealth connection helped to save the patient’s life.

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Without the telehealth connection, the Emergency Medicine physician at the rural regional medical center would not have had immediate access to a neonatologist while awaiting transfer. The telehealth equipment is easy to use, and it provides a very important opportunity to an underserved population in northern California. UC Davis Children’s Hospital is the region’s only comprehensive hospital for children and has the Central Valley’s only Level I pediatric trauma center and emergency department. The catchment area of the hospital is vast, spanning 65,000 square miles, and many families in the region must travel a distance of many hours to receive subspecialty care.

Tele-emergency care has proven to be effective and, in some cases, critically necessary in saving a patient’s life. As the father of the patient described above said, “If telemedicine saves one life, it’s worth the investment.”

Marcin offers us a glimpse of the value of telehealth in neonatology and rural practice. During the sensitive period of discharge from a specialty care unit to a child’s home or community, telehealth could also provide a crucial bridge. In reading Marcin’s concluding philosophical ideal, we are left with a sense not only that the myriad benefits of telehealth make it something our health systems and country can afford to implement—but also, fundamentally, we can’t afford not to.

This ideal is well-described in Gwynn’s examples from her own pediatric primary care practice, which serves some of the most high-need and disenfranchised children and families in Florida. Overcoming transportation barriers from a time-sensitive care perspective has been one common theme in the previous cases. Here Gwynn helps us to see the oft-common challenge of transportation even in non-critical circumstances, as well as the value of innovative partnerships.

**CASE 6: BUILDING A ONE-STOP, FOUR-WHEELED SHOP FOR SPECIALIZED HEALTH SERVICES**

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Millions of US children do not have access to the health care they need. Florida has the nation’s second highest rate of uninsured residents younger than 65 and Miami-Dade County has the second-highest rate of uninsured for the same group. While cost is one of the most publicized barriers to care, it is not always the most pervasive. Getting to the doctor, making appointments, overcoming language and health literacy barriers, and identifying providers are also major hindrances to timely services. For children, these barriers often conspire to turn childhood challenges into lifelong burdens. This is especially the case when a child needs to see a specialty physician.

In 2013, 233 referrals to specialists were made for patients at our pediatric mobile clinic, which provides free primary care to underserved children in the community who struggle with access barriers such as cost and transportation. However, only 35% of these specialty appointments were kept. This was the impetus
for developing a telehealth program designed to connect patients directly to specialists through information technology—with the ultimate goal to reduce health disparities.

Since it’s inception in 2013, our telehealth program has provided hundreds of children with live pediatric specialist consultations, free-of-charge. Specialties now available include dermatology, cardiology, endocrinology, nutrition, and hematology. By using telehealth to bring these services to the primary care mobile clinic, which parks regularly at familiar settings in the neighborhoods where patients live, the program has made a tremendous difference in the appointment adherence rates, thus improving access.

In the dermatology clinic, highlights of our work include the diagnosis and management of chronic skin conditions, as well as diagnosing unusual rashes and moles seen by the primary care medical team. This is accomplished through both live teleconsultation utilizing video conferencing and a high-resolution video camera which transmits images to the dermatologist in real-time. The diagnosis can be made on the spot and treatment is initiated immediately. In addition, we utilize store-and-forward technology in which photos of skin lesions taken in clinic along with patient medical information are uploaded to an app on a mobile device. The dermatologist responds to the request for consult, reviewing the information and generating a report within 48 hours. This eliminates the need for patients to be scheduled for an appointment with the specialist, whose office is often several hours away from the patient’s home, and allows for consultation to assist the primary care medical provider with difficult dermatologic cases.

The telehealth cardiology services now offered from our primary care mobile clinic allows the cardiologist to remotely listen to heart sounds in real-time, read EKG tracings live and to simultaneously talk to the patient, parent, and primary care provider using video conferencing. In addition, echocardiograms are performed utilizing a portable machine that stores the information that is then forwarded to the cardiologist. The most common clinical conditions that have been evaluated include heart murmurs, chest pain, and hypertension. This clinic has been especially rewarding, as there have many instances where we have been able to provide reassurance to a worried parent of a child with a heart murmur that they are going to be ok.

Another telehealth specialty service that we offer is consultation with a registered dietician. Nutrition counseling is provided to children who are obese, underweight or have special dietary needs. The patients are referred during medical visits on the mobile clinic. After initial teleconsultation, the nutritionist follows up with the patients and families and provides ongoing care to those that need additional therapy.

Our newest addition to our telehealth specialty service line is hematology. Referred children are screened for a variety of blood disorders, including anemia, Von Willebrand’s disease, and hemophilia. The goal is to expand outreach efforts to improve the diagnosis of hematologic disorders.

In addition to our specialty services, we are also utilizing different modalities of telehealth to deliver an innovative obesity intervention program. This is an active research study in which we are offering teenagers the opportunity to enroll in a six-month program, which provides a variety of services via telehealth, such as nutrition and endocrinology. The patients are given a cell phone and fitness bracelet and receive weekly text messages promoting healthy living. They are also encouraged to utilize the fitness bracelet phone app which tracks food intake, exercise and sleep patterns. The participants are assigned a health coach who
checks in with them by video conferencing each month through their mobile devices. The patients receive live consultations with mental health medical teams to review goals and monitor progress. The aim of the program is to determine if disease interventions delivered via technology can improve patient outcomes in obese children.

Our telehealth program has allowed us to provide world-class specialty care to children who otherwise would lack access. Feedback from our families has been very favorable and appointment compliance rates have soared to 90%. Our parents are thankful that their child is able to receive services right in the neighborhoods in which they live at the mobile clinic that they call their “medical home.” It doesn’t get much better than that!

Gwynn writes about a wide-ranging mobile-based primary care program leveraging established sub-specialists to overcome social, economic, and transportation disparities for the children her innovative practice serves. The result is an engaged and healthier community of patients.

Where Gwynn’s drive has created a well-integrated mobile pediatric primary care practice addressing the need for necessary sub-specialists, North breaks new ground by bringing the clinic to the school using tele-health systems. In addition, he introduces non-physician participants into the care delivery process.

**CASE 7: SCHOOL-BASED TELEHEALTH PROGRAMMING**

**Steve North, MD, MPH**

*Mission Center for Telehealth and Center for Rural Health and Innovation, Spruce Pine, NC*

When Robert was 11 years old he developed a urinary tract infection. As it worsened, his mother took him to the emergency department at the critical access hospital in their small town. His initial blood pressure was very high, and he was immediately transferred to a children’s hospital 60 miles away. He was seen by pediatric cardiology and nephrology, had a normal echocardiogram and was begun on medication for his elevated blood pressure and elevated cholesterol. Over the next six months, he and his mother traveled up to 60 miles each month for follow-up appointments with pediatric specialists. His blood pressure remained stable and his family decided that routine follow-up visits were not worth the expense in time away from work and money for travel. Over the next year, although his blood pressure remained well controlled, his weight slowly increased into the highest obesity category for children and he stopped the cholesterol medication when he ran out of refills.

Approximately 12 months after Robert stopped his follow-up appointments, the preventive cardiology team began offering services through the school-based telehealth program at his middle school. One of the steps taken by the team was identifying patients who had “been lost to follow-up” in the school districts where they were offering services. The team was able to re-establish Robert as a patient and after three months of seeing the providers on a monthly basis he proudly announced to his family that he had lost seven pounds.
Additionally, his stepmother noted that he was choosing grilled chicken sandwiches over double cheeseburgers and was excited that “my doctor sees me at school.”

Robert lives in the rural mountains of western North Carolina and his school, along with 28 others in four school districts, is part of the Health-e-Schools school-based telemedicine program. In addition to seeing his pediatric cardiologist for scheduled follow up visits he, along with his three siblings, are able to be seen for primary care medical visits by an experienced family nurse practitioner. Visits through the school-based telemedicine program allows Robert and his siblings to receive medical care in the most appropriate setting, while allowing his mother to stay at work.

While providing only urgent care services via telehealth in the school setting may reduce costs and decrease the strain on parents, it will not achieve the true potential of a school-based program. This potential is seen when the clinical program is integrated into the school environment and collaborates with the school to help manage complex biopsychosocial issues and improve population health issues through screening and health education.

Sustainability of a school-based telehealth program is challenging in the current fee for service environment. Unless a program is integrated into a large health system, savings for preventing a non-emergent visit to the emergency department or keeping a parent on the job do not directly generate financial support for the telehealth program. For the long-term financial success of both traditional and telehealth school-based health centers, it is necessary to identify how these programs can support the work of accountable care organizations without excluding students due to the source of their insurance.

Comprehensive school-based health care provides students with access to physical and behavioral health care in the setting where they spend the majority of their time. Traditional school-based health care has strong evidence supporting its efficacy at improving academic and health outcomes. Students who use school-based health centers are more likely to graduate from high school, have fewer absences and feel more connected to their schools.1,2 Additionally, students using school-based health centers have decreased emergency room utilization, decreased overall health care costs due to improved outcomes for specific health conditions such as asthma and better access to behavioral health care.3,4 This level of research does not yet exist for school-based telehealth programs and for their continued growth and success it is critical. For school-based telehealth programs to attain sustainability, research must be conducted to support what we see—that the services available to Robert and his siblings make a meaningful impact on their health and academic well-being.

North’s discussion of a telehealth system that centers on schools—a natural environment for engaging with children and people who know them well—is something of an “aha! moment” for a technology-based system extending health care. Partnering with appropriate people, in this case school nurses, can also directly help to bridge gaps in health professional shortage areas. Like Gwynn, North’s view begins to outline a path that extends telehealth from its traditional emergency and hospital-based settings into a different sort of environment. Driving this theme even further, McConnochie draws out the value of telehealth in broader settings as he describes the challenges and decisions facing the mother of an ill 14-month-old boy. Telehealth’s place in the medical home is well illustrated in this pragmatic solution.
The Health-e-Access Connected Care Model (HeA) is an internet-based, community-wide, network approach to delivering care within the primary-care-medical home. Its mission is to enable health care when and where you need it by providers you know and trust.

To fully comprehend HeA’s value, consider the dilemma confronting Lakeisha, a 26-year-old single mother with a welfare-to-work, assembly-line job, when she receives the dreaded call from child care to pick up her 14-month-old son, Roberto. He’s been coughing for two weeks now. His child care teacher has brought the cough to Lakeisha’s attention before, but this afternoon he’s been fussy too, and his temperature is 100.4°F. She tells Lakeisha she must pick him up, and that he can’t return without documentation of a physician’s approval. Mom has already missed five days of work this winter because of illness in Roberto. Each hour off the assembly line means an hour’s less pay. Even worse, after her last lost workday, Lakeisha’s boss told her he couldn’t keep her if she missed another, regardless of the reason. The only way to have Roberto seen today is an Emergency Department (ED) visit, which requires two buses in both directions and at least six hours altogether. She knows it’s not an emergency, that to ED staff she’ll just be “the overanxious young mom with the cute baby,” and that her other two children need her at home this evening. But the ED is her only choice if she is to keep the job she desperately needs to improve her family’s circumstances.

HeA is designed to enable diagnosis and management of acute and chronic problems among preschool and school-aged children in childcare, schools, and other convenient neighborhood settings, and during workday and after-hours periods. A health concern, identified by a parent or by staff in school or childcare, is first brought to the attention of an individual—for example, a telephone triage nurse, who is authorized to request a telehealth visit by contacting the HeA coordinator. The coordinator then contacts a telemedicine assistant, who brings portable equipment to the child site, and a clinician, generally from the child’s medical home, who will conduct the visit. Some large child sites have their own equipment, and a site staff-member has served as the telehealth assistant.

The telehealth assistant then elicits history from parents and staff following templates in an electronic medical record and captures clinical observations guided by complaint-specific algorithms. Clinical observations may include images (e.g., tympanic membranes, skin, throat), video clips (e.g., respiratory pattern, infant behavior), lung sounds (via electronic stethoscope) and simple laboratory tests (e.g., rapid Streptococcal antigen). Communication with patient, parents and site staff—essential both for evaluation and management—occurs by phone or, preferably, by videoconference. The clinician assesses the situation, first determining whether diagnostic and management decisions can be made and implemented based on available information. If so, diagnosis and management is discussed with the family and site staff and medications (which can be delivered to child sites) are prescribed, as appropriate. If available information or treatment resources are not sufficient to complete the visit, the clinician facilitates higher level care in the ED or the clinician’s office, for example.
Based on evaluation encompassing over 14 years of experience with over 14,000 telemedicine visits, feasibility, acceptability, effectiveness and efficiency of this model for care of children with acute illness are well established.\textsuperscript{1,2} Acceptance of HeA by parents, providers and insurance organizations is confirmed by high levels of parent satisfaction with telemedicine in school, child care and neighborhood access sites,\textsuperscript{3,4} participation in HeA telemedicine by over 70 different providers from 10 primary care practices,\textsuperscript{5} telemedicine access in all Rochester City Schools since September 2010, and reimbursement (at office visit rates) for telemedicine visits by all local payers, including Medicaid Managed Care. For visits by children with a participating primary care practice, continuity of care within the medical home has averaged 83%. Over 97% of telemedicine visits are completed, i.e., less than 3% are referred to a higher level of care for diagnostic procedures or treatment.\textsuperscript{3}

Among inner city child care centers with telemedicine, absence due to illness dropped 63%.\textsuperscript{6} Children with telemedicine access from child care or elementary school make 22% fewer ED visits than closely matched counterparts.\textsuperscript{7} ED visits avoided, per parent estimates, would have taken 4.5 hours on average.\textsuperscript{1} For children with severe disabilities attending a child development center, ED visits dropped 50% with HeA availability.\textsuperscript{8}

Evidence also suggests that HeA extends equity in access to impoverished, urban families.\textsuperscript{9} Prior to HeA availability in child care or school for an urban intervention group, suburban controls made 80% more acute illness visits overall. With HeA availability, this difference subsequently disappeared. For an urban control group, however, the urban – suburban disparity in access remained.

Potential for HeA to replace illness visits at less convenient and more costly access sites is substantial. A study of illness visits in primary care pediatric practice, indicated that 85% of these could be completed using the HeA telemedicine model.\textsuperscript{10} Based on analysis of ED visits in multiple upstate New York counties, almost 40% of children’s ED visits appear appropriate for care through HeA, and payments for HeA visits (at office visit rates) were one-eighth of payments when these same problems were managed in the ED, reflecting the great potential of this model for cost savings.\textsuperscript{11}

Now consider how the common situation confronting Lakeisha would play out if Roberto’s child care were participating in a telehealth network that enabled him to be evaluated while in child care by his own primary care physician. The telehealth assistant at child care doesn’t hesitate to call Lakeisha about her concerns, knowing the telehealth link to Roberto’s doctor allows both quick access to care for Roberto and peace of mind to Lakeisha and herself. As this family’s pediatrician, telehealth allows you in your office to see Roberto in childcare, as an alert, vigorous toddler, coughing frequently but in no distress, with no evidence of ear infection, asthma or pneumonia. You reassure his caretakers that his low-grade fever is due to a respiratory virus that poses no more threat to child care staff and other children than any cold virus, and that they can check back in with you if his condition changes. Lakeisha (still at work), the telehealth assistant (at childcare) and you (in your office) are gratified in sharing the happy resolution of this situation via multi-way video-audio connection.

Core characteristics of HeA extend well beyond convenience. Integration within the medical home promotes trust among patients and caretakers and enhances effectiveness and efficiency. Trust is all the
more salient when introducing parents to an unfamiliar approach to care of their children. Continuity leverages established relationships with providers and staff, ensures availability of a complete medical record, creates opportunities for using acute visits to deliver health maintenance services, reduces unnecessary testing, promotes efficient follow-up, and increases patient and provider satisfaction.

HeA addresses incentives for all stakeholders in the care of children. For patients and families, HeA equals or exceeds the convenience and quality of urgent care centers or the ED. HeA enables medical home providers on call to deliver office-equivalent care at any time using low-cost infrastructure while avoiding revenue loss to facilities (e.g., urgent care) outside the medical home. As health care financing shifts to various forms of capitation, providers will be increasingly incentivized to adopt effective, low-cost acute care alternatives such as HeA.

Maintaining the integrity of the medical home, overcoming staffing and technology challenges, and ensuring the patient and family remain central to the care model are hallmarks of McConnochie's case study. Drawing lines from tertiary care, issues of disparities, economic and geographic barriers, and health crises on through innovative primary care delivery, and extending the care model into schools and daycare are part of what telehealth can afford the nation's health care system.

The next contribution gives us a glimpse into the future. The program described by Hall-Barrow establishes the question, what happens when we extend the care environment directly into the patient’s home. Children’s Health℠, the leading pediatric health care system in North Texas, presents an environment for this next step.

CASE 9: VIRTUALLY EXTENDING PRIMARY CARE INTO THE PATIENT’S HOME

Julie Hall-Barrow, EdD
Children’s Health℠, Dallas, TX

The last decade has become the tidal wave for what those in the telehealth field have always envisioned. The American Academy of Pediatrics’ recent technical report lauds the use of telehealth as an effective tool improving the health of children around the world and suggests that it can extend the medical home.¹ The former norm for our telehealth program was trying to convince local providers to try telehealth. Today, we are finding it difficult to keep up with the demand to place technology in the hands of providers.

The rules and regulations surrounding telehealth reimbursement are still cumbersome in many states across the country, including Texas; however, some states are opening the gates to technology to meet the ever demanding need of patient access. The technology to provide telehealth from anywhere and any place continues to evolve on what feels like an hourly basis. However, many private practitioners have solo practices or have limited practitioners and often do not have the luxury to invest in such enterprise systems. Although Children’s Health has 20 primary care practices throughout the Dallas-Fort Worth region, our
pediatric partners are critical in our effort to provide telehealth to patients where they need us most: at home. With one out of every nine children in the United States residing in Texas, it is imperative that we address the pediatric need in our state.

During the last 12 months Children’s Health has begun to embark on a collaborative effort providing technology at the fingertips of those very physicians who believe that the medical home is essential to keeping kids healthy and well. Children’s Health is using telehealth in an effort to enhance virtual access points for our own patients—the same was essential for our community pediatric partners that are clinically integrated with our health system and similarly serve a large percentage of the Medicaid and CHIP population. Similar to centralized hosting of an electronic medical record, Children’s Health is hosting a Virtual Visit Platform that is available to over 300 physicians, allowing them to become telehealth providers directly to their patients. This experience will bring care full-circle to their patients and will enhance the relationship that already exists in the medical home. Further, many will now be able to bill for services that have been lost to ERs and urgent care centers for those low-acuity visits that occurred when access to providers was limited or unavailable.

Expanding our own medical home is important as well. Our Children’s Health Pediatric Group primary care practices will add the virtual visit program to two sites initially and will thereafter expand based upon need. This opportunity allows the two practices with more disparate geographic locations to connect with patients in a secure accessible modality.

In a related care model, the Children’s Health Virtual Visit Program is extending telehealth visits to our own employees. Through our web portal, employees can visit the on-site occupational health clinic where they will be able to have a virtual visit that includes video, audio and up to six peripheral devices to assist in the assessment. This visit occurs in an approved medical site, which enables our employees to utilize the service at their home if they choose to connect after the visit for any new conditions. If our staff is sick or missing work due to low-acuity conditions, we need to take care of them using the same technology that allows us to take care of our own patients.

Although the regulations in Texas are seen as some of the toughest in the country to engage telehealth, Children’s Health has collaborated with and engaged practitioners. The use of telehealth offers convenience and the potential for better care as we lead the efforts in delivering health care to our patient and employee populations. Our interoperability with our pediatric partners and clinically integrated networks will make the transition of data for virtual visits the same as our face-to-face interactions. We envision providing health care providers with the most robust telehealth platform, enabling them to connect seamlessly with their patients from home or in their office.
Development and deployment of telehealth offers considerable potential benefits for children who are economically disadvantaged and medically underserved. As previously discussed in this paper and clearly demonstrated in the case studies presented, the synthesis of innovative technology and strategic program development can establish and reinforce telehealth’s role in expanding the reach and capacity of the nation’s health care delivery infrastructure.

First and foremost, telehealth can help address the major problem of health care access barriers. For the 15 to 20 million children in Health Professional Shortage Areas, telehealth can bridge supply and demand, offering access through technology. Responding to the geospatial challenges associated with a predominantly fixed-site health infrastructure in rural areas, telehealth options can reduce the expense and need for Medicaid-funded non-emergency medical transportation, a growing concern due to the burgeoning need of those newly insured through the Affordable Care Act (ACA).

With access as the first leg on the classic health reform “three-legged stool,” the other two legs—quality and costs—are ones where telehealth also has promise. Rapidly emerging in the context of implementation of the ACA, telehealth has drawn attention regarding its potential implications for mitigating health costs, the so called “bending of the health care cost curve.” As highlighted in the case studies, through improved care coordination, telehealth programs can offer operational cost savings on the health care delivery side as well as the potential for reducing health expenditures system-wide. Through improved management of chronic care conditions such as asthma and diabetes, telehealth programs can have a significant, ameliorative impact on the rate of health spending growth.

Another noteworthy development is that telehealth programs are poised to step into an important new role as catalyst in the reconfiguration of the post-ACA health care landscape of Accountable Care Organizations (ACOs). Telehealth linkages throughout the networks of community health centers/providers will bind them in collaborative health structures with larger medical institutions (hospital, academic medical centers). These relationships can enhance both the stability of community-based provider networks and their capacity to provide the most comprehensive range of care to those who have traditionally experienced less access to care. Telehealth will also benefit from enhanced recognition and appreciation within the ACA-mandated Community Health Needs assessment process, wherein hospitals are required to demonstrate that community health care priorities are acknowledged and addressed.

Telehealth is advancing rapidly. The gathering momentum within the health sector to reinvent, restructure, and modernize is palpable and promising. However, considerable obstacles and challenges remain that have slowed adoption of telehealth and given way to an uncertain regulatory landscape and contentious professional and public policy debates about issues of federal coordination, quality, potential for fragmentation of care, reimbursement, licensing, credentialing, and broadband connectivity. An additional, significant obstacle is the start-up investment cost of equipment and telecommunications services. Moving forward, these challenges require ongoing analysis and policy action.

The future of telehealth is bright. By continuing to learn from the frontlines about how to maximize telehealth impacts; to push for greater funding and policy flexibility around its expansions; and to train and incentivize providers to incorporate telehealth into the medical home, we can help transform pediatric care while reducing health disparities.
RECOMMENDATIONS

Children’s Health Fund makes the following recommendations to accelerate the use of new technologies to improve access and quality of health care for all children, especially for the most vulnerable.

1. Break down legal and licensing barriers to expand telehealth programs to cross state lines.

2. Encourage Medicaid and commercial health insurers to cover appropriate, high quality telehealth services for all children, especially those living in HPSAs and other underserved areas.

3. Advocate for experienced child health professional groups to create quality guidelines and standards for telehealth services.

4. Create a national campaign for parents and the public to understand telehealth resources that are available and how access to specialists can be organized for any child in the US.

5. Encourage federal grant support for the development and utilization of telehealth and other technologies to improve access to health care for children.
REFERENCES

INTRODUCTION REFERENCES:


Telehealth vs. Telemedicine Sidebar References:


CASE 1 REFERENCES:
1 Price, Sandra. 2015 Medical Services Project-Telemedicine Program Case Statement. AAP Arizona Chapter.

CASE 4 REFERENCES:


CASE 6 REFERENCES:
1 Miami Herald, August 30, 2013

CASE 7 REFERENCES:


CASE 8 REFERENCES:


3 McConnochie KM, Wood N, Herendeen N, ten Hoopen CB, Roghmann KJ. Telemedicine in urban and suburban childcare and elementary schools lightens family burdens. Telemedicine and e-Health 2009; 16:533-542


CASE 9 REFERENCES:
1 Pediatrics Vol. 136 No. 1 July 1, 2015 pp. e293 -e308 (doi: 10.1542/peds.2015-1517)
Speech-Language Pathology & Audiology presentation to be provided at meeting

Additional Material:

- National Council of State Boards of Speech-Language Pathologist & Audiologist position statement on telepractice
NCSB Position Statement on Telepractice

State licensure boards have a legal, moral and ethical responsibility to protect consumers from unscrupulous and unqualified practitioners through regulation of standards of practice. It is incumbent upon regulatory boards to address the provision of services including those that transcend traditional service delivery models. Designed initially to deliver health care at a distance, the use of telepractice has evolved not only as an alternative method, but in many cases, as the primary mode of service delivery. Given that speech-language pathology and audiology regulatory boards have had a long-standing commitment to public protection, there is a renewed responsibility to ensure that enabling statutes and rules and regulations encompass the current practice of the professions, including the utilization of telepractice (telehealth) as an appropriate, contemporary service delivery model.

The U. S. Department of Health and Human Services Health Resources and Services Administration (HRSA) defines telehealth as the use of electronic information and telecommunications technologies to support long-distance clinical health care, patient and professional health-related education, public health and health administration (retrieved September 27, 2014 from http://www.hrsa.gov/ruralhealth/about/telehealth/). Each state agency or occupational licensing board that regulates the practice of speech-language pathology and/or audiology should develop policies necessary to provide for, promote, and regulate the use of telepractice in the delivery of services within the scope of practice regulated by the licensing entity.

It is the position of the National Council of State Boards of Examiners for Speech-Language Pathology and Audiology (NCSB) that telepractice constitutes the practice of speech-language pathology and audiology in both the patient site and the provider site. Further, state licensure boards should address protection of the consumer by requiring out-of-state practitioners to notify the board of their intent to engage in the practice of speech-language pathology and/or audiology in the state where the patient resides. The provision of services by telepractice shall encompass the following essential standards:

- The speech-language pathologist or audiologist must possess, at a minimum, an unrestricted and unencumbered license in good standing to practice in his/her state of residence.
- The qualifications for licensure in the state of residence, i.e., those upon which the license was granted, are comparable to or exceed the statutory and regulatory requirements of the patient site.
- The standard of care shall be the same as if the audiology or speech-language pathology service were delivered face-to-face, and licensees and staff involved in telepractice shall be trained in the use of telepractice equipment.
- All laws and regulations requiring the confidentiality of healthcare information and the patient’s rights to his/her healthcare information shall be upheld.
- The practitioner is subject to the statutory and regulatory requirements of both states, i.e. the state where the provider resides and the state where the service is delivered. Additionally, the consumer must be made aware of how to file a complaint in all applicable jurisdictions prior to the initiation of telepractice services.
• It shall be the responsibility of the provider to notify the licensing board(s) of the intent to engage in the practice of speech-language pathology and/or audiology. Further, this intention must be provided in writing at least 30 days prior to the commencement of the services so that the licensing entity can ensure that the state(s) involved have comparable licensing standards.

• The provider must agree to pay applicable processing fees as established by the licensing board.

Although there is not a uniform practice act, and standards do vary to some extent from state to state, licensure boards nevertheless share the responsibility to protect consumers regardless of the mode of service delivery. The establishment of a mechanism for telepractice services, whereby licensure boards can expand services to individuals with speech, language, or hearing problems, can remove barriers to care while also ensuring that protection of the public’s health, safety and welfare is maintained. It shall be the responsibility of each state licensing board to develop rules, policies, and procedures consistent with the laws of that state for the regulation and enforcement of services provided by telepractice.

*Adopted October 17, 2003*

*Revised March 2015*
Florida ALS Telehealth 2017

Björn Oskarsson, MD, FAAN
Co-Director ALS clinic
Mayo Clinic Florida
Outline

• ALS
• Treatment
• Tele application
What is ALS

- Described by Charcot 1869
- Upper and Lower Motor Neurons die
- Weakness - Paralysis
- Ventilatory death
“This is a disease of daily discovery…I wake up each morning and wonder, what can’t I do today that I was able to do yesterday?”

68-year-old ALS patient
Why do motor nerves die?

- Oxidative stress
- Exitotoxicity - glutamate
- Mitochondrial dysfunction
- Protein miss folding
- Impaired axonal transport
- Deficient Autophagy
- Environmental toxins
- Inflammation
- Viral infections
- RNA processing
- Surrounding cells

Figure 1. Cumulative survival for men and women in months (A) from symptom onset to death or (B) from diagnosis to death in 180 patients with ALS

del Aguila, M.A. et al. Neurology 2003;60:813-819
Florida State-based
Amyotrophic Lateral Sclerosis (ALS)
Surveillance Project Summary

Table: Demographic Characteristics of All Reported ALS Cases in Florida, n=1,451

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*May not add up to 100% due to rounding.
**Those with multiple races are listed here.

- CDC 2009-2011 (484/ year)
- Male 1 / 350 deaths$^2$
Causes of ALS

Male gender
US Military (RR 1.53?)
Not curable - treatable

1. Correct diagnosis
2. Disease modifying drugs (Riluzole®, Radicava®)
3. Cognitive / behavioral change
4. Speech generating devices
5. Swallowing strategies
6. Saliva control
7. Nutrition maintenance
8. Breathing – ventilatory support
9. Airway clearance
10. Exercise

11. Mobility devices
12. Energy conservation
13. Sleep support
14. Other assistive devices
15. Pain control
16. Bowel and bladder management
17. Resources for help
18. Emotional support
19. End of life care
20. Research
Multi-disciplinary care available

- ALS/Neuromuscular Neurologist
- Nurse coordinator
- Respiratory therapist
- Social worker
- Physical therapist*
- Occupational therapist*
- Speech therapist
- Dietitian

Bold = currently available by TH

* = has been available
Florida ALS Centers

• Certified Centers
  • U. of Miami
  • U. of South Florida
  • Mayo Clinic

• Recognized Centers
  • UF Jacksonville
  • Lee Ft. Meyers

• New Center
  • UF Gainesville

• TeleHealth Pensacola
Pensacola Patient Example 1

• 56 year old man with leg weakness diagnosed in clinic 1.5 years ago
• Renewed Riluzole script, ordered safety labs
• Ordered noninvasive ventilator, cough assist, pneumonia vaccination
• Prescribed baclofen for spasticity
• Ordered new wheelchair
• Ordered home therapies and safety evaluation
• Prescribed detrol for urinary urgency
Pensacola Patient Example 2

- 87 year old male Korean war veteran with two years of progressive weakness brought to clinic by two daughters
- Two hospitalizations in last 2 weeks and is barely awake
- Diagnosed with ALS at Mayo
- Started non invasive ventilation – woke up
- Did not want invasive ventilation knowing that he had ALS and was allowed to pass
Challenges

• There is no diagnostic test for ALS – late diagnosis

• Remains a deadly disease with very short life expectancy = few patients

• ~40 patients west of Tallahassee
  • 50% have not gone to Mayo
  • 15% still go (often participating in research)
  • 20% can not leave home
Adaptation

- Alternate between Panama City and Pensacola
- Increased advertisement
- Increased activity from the chapter (listing tele-site on website, having ALSA FL tele-present)
- New treatment approved 5/5/17
Acknowledgments

• Our patients
  • Their families
• My study volunteers
• State of Florida
• ALS Association
• MDA ALS Division
• CDC ATSDR
• Research Funders
Questions & Discussion
Tele
ALS vs. Stroke

- 5,000/yr US
- Chronic management
- Diagnosis clinical

- 795,000/yr US
- Acute care
- Diagnosis imaging
Behavioral Health presentation to be provided at meeting

Additional Material:

- Georgia Behavioral Health Rules submitted by Richard Long
Georgia Chapter 135-11
TELEMENTAL HEALTH

Rule 135-11-.01 TeleMental Health

Purpose: The purpose of this rule is to define TeleMental Health and to establish minimum standards for the delivery of services by a licensed Professional Counselor, Social Worker, or Marriage and Family Therapist using technology-assisted media.

(a) Definitions:
1. Asynchronous store and forward - means the transmission of a client's information from an originating site to a licensee at a distant site without the presence of the client.
2. Distant site - means a site or location from which services are delivered by a licensee via a technology-assisted media.
3. Licensee - means a person licensed in the state of Georgia as a Professional Counselor, Social Worker or Marriage and Family Therapist, including Associate licensees.
4. Originating site - means a site where a client is located at the time TeleMental Health services are provided via technology-assisted media or where the asynchronous store and forward services originates.
5. Synchronous interaction - means a real-time interaction between a client and a licensee located at a distant site.
6. TeleMental Health - means the mode of delivering services via technology-assisted media, such as but not limited to, a telephone, video, internet, a smartphone, tablet, PC desktop system or other electronic means using appropriate encryption technology for electronic health information. TeleMental Health facilitates client self-management and support for clients and includes synchronous interactions and asynchronous store and forward transfers.
7. TeleMental Health Supervision - means the delivery of supervision via technology-assisted media by a supervisor at one site while the supervisee is located at a distant site. Telemental health supervision may include, without being limited to, the review of case presentation, audio tapes, video tapes, and observation in order to promote the development of the practitioner's clinical skills.

(b) Provisions
1. Training for Licensee:
   (i) Prior to the delivery of clinical TeleMental Health, the licensee shall have obtained a minimum of six (6) continuing education hours. The continuing education hours may include but are not limited to the following, in the discretion of the Board:
   (I) Internet use dependency and psychological problems - an overview of how Internet users become dependent upon the Internet to such an extent that their Internet use is causing serious problems in their lives.
   (II) Research in Telemental Health - review of evidence base for mental health practice conducted using telemental health.
   (III) Intake and Assessment- initial intake and assessment necessary to determine a client's suitability for telemental health, including informed consent.
(IV) Delivery Methods - recognize appropriate use of telecounseling, asynchronous email/message posting, synchronous digital chat, video-assisted therapy and other electronically supported modes of delivery.

(V) Theory Integration - understand how to adapt counseling/therapy theory and effective in-person techniques to telemental health.

(VI) Termination - recognize similarities and differences between in-person and telemental health closure while providing technology-assisted strategies for reestablishing contact if and/or when necessary.

(VII) Risk Management - understanding privacy and security standards of applicable laws such as Health Insurance Portability and Accountability Act ensuring high quality practices and procedures that are legally sound and ethically protect clients and safeguard against litigation, including protection of electronic information.

(VIII) Business of Telemental Health - review of ethically sound ways to advertise and incorporate telemental health into an existing suite of therapeutic/clinical services.

(ii) If the licensee has taken the hours required in this section within the last 5 years, those hours do not need to be repeated in order to meet requirements in this section.

2. Supervision:
   (i) Training of the Telemental Health Supervisor: Prior to the delivery of supervision via telemental health, the supervisor shall have obtained a minimum of nine (9) hours of continuing education. The continuing education hours may include the same eight (8) categories identified under "Training for Licensee", rule section (b)(1)(i)(I-VIII) above, plus, must also include three (3) hours in the category of: Supervising Telemental Health Therapy - understanding the key components necessary to supervise effective, and efficient delivery of telemental health therapy.
   (ii) If the supervisor has taken the hours required in this section within the last 5 years, those hours do not need to be repeated in order to meet requirements in this section.
   (iii) Board rules 135-5 define the acceptable requirements for a Board recognized supervisor and supervision for the Counselor, Social Work and Marriage and Family Therapy professions. Supervisors and supervision must meet the requirements of the specialty found in the applicable section of Board rules 135-5 that define supervisor and supervision for the Counselor, Social Work and Marriage and Family Therapy professions.
   (iv) Informed Consent: Prior to the delivery of supervision via Telemental Health, the supervisor at the distant site shall inform the supervisee that Telemental Health will be used and obtain verbal and written consent from the supervisee for this use.

3. Informed Consent - Prior to the delivery of Telemental Health services by a licensee via technology-assisted media, the licensee at the distant site shall inform the client that Telemental Health services via technology-assisted media will be used, and the licensee shall obtain verbal and written consent from the client for this use. The verbal and written consent shall be documented in the client's record. Consent must include disclosure of the use of any third party vendor such as a record keeping, billing service or legal counsel.

4. Client Assessment - Careful assessment using assessment instruments referenced in Rule 135.-7-.05 as appropriate is required in order to determine whether an
individual may be properly assessed and/or treated via TeleMental Health services through technology-assisted media. Clients who cannot be treated properly via TeleMental Health services should be treated in person, or else they should not be accepted as clients or, if already accepted, properly terminated with appropriate referrals.

5. Code of Ethics - The failure of a licensee to comply with these requirements shall constitute unprofessional conduct under the Code of Ethics as described in Board rule 135-7. A licensee delivering health care services via TeleMental Health shall comply with all Code of Ethics requirements as described in Board rule 135-7.

6. Scope of Practice - This rule shall not be construed to alter the scope of practice of any licensee or authorize the delivery of services in a setting, or in a manner, not otherwise authorized by law.

7. Out-of-State Clients - Licensees who want to offer TeleMental Health services outside the state are advised to check with the state board in which the client resides for information about telemental health regulations outside of Georgia.
The Council’s Charge

Excerpt from Chapter 2016-240, Laws of Florida:

The council shall review the surveys and research findings required by this section and make recommendations to increase the use and accessibility of services provided via telehealth, including the identification of any barriers to implementing or accessing services provided via telehealth...
<table>
<thead>
<tr>
<th>Telehealth Definition points to include:</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Term</strong></td>
<td></td>
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<tr>
<td>telehealth</td>
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<tr>
<td>telemedicine</td>
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<tr>
<td>both - telehealth or telemedicine</td>
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<tr>
<td><strong>Includes synchronous and asynchronous language</strong></td>
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<tr>
<td>specific live-video conferencing, store and forward, remote monitoring</td>
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<tr>
<td>broader to include telephone and voice based telehealth solutions (POTS, cellular, smartphone, internet connect device, VOIP)</td>
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<tr>
<td>App based patient and caregiver support and care coordination solutions</td>
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<tr>
<td>general synchronous and asynchronous</td>
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<td></td>
</tr>
<tr>
<td><strong>List information on originating and receiving locations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Include why telehealth would be used (ex. for medical evaluation, and telemonitoring)</td>
<td></td>
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<tr>
<td>patient assessment</td>
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<tr>
<td>evaluation</td>
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<td>diagnosis</td>
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<td>consultation</td>
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<tr>
<td>treatment</td>
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<tr>
<td>monitoring</td>
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<tr>
<td>transfer of medical data</td>
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<tr>
<td>patient and professional health-related education</td>
<td></td>
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<tr>
<td>public health services</td>
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<tr>
<td>health administration</td>
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<tr>
<td>more generic language use not specified</td>
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<tr>
<td>Include what is not considered telehealth</td>
<td></td>
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<td>------------------------------------------</td>
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<tr>
<td>audio-only telephone calls</td>
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<tr>
<td>email messages</td>
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<tr>
<td>facsimile transmissions</td>
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<tr>
<td>chart reviews</td>
<td></td>
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<tr>
<td>text messaging</td>
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<tr>
<td>U.S. Mail</td>
<td></td>
<td></td>
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<tr>
<td>Parcel services</td>
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</tbody>
</table>

List provider” as the acceptable caregiver for telehealth
<table>
<thead>
<tr>
<th>Document</th>
<th>Definition</th>
</tr>
</thead>
</table>
| Medicaid (59G-1.057(2) &(5) FAC) | Definition. Telemedicine — The practice of health care delivery by a practitioner who is located at a site other than the site where a recipient is located for the purposes of evaluation, diagnosis, or treatment. Exclusion. Florida Medicaid does not reimburse for:  
- Telephone conversations, chart review(s), electronic mail messages, or facsimile transmissions.  
- Equipment required to provide telemedicine services.  
- Reimbursement. The following applies to practitioners rendering services in the fee-for-service delivery system:  
  - Florida Medicaid reimburses the practitioner who is providing the evaluation, diagnosis, or treatment recommendation located at a site other than where the recipient is located.  
  - Providers must include modifier GT on the CMS-1500 claim form, incorporated by reference in Rule 59G-4.001, F.A.C. |
| Florida Medical Boards (64B8-9.0141(1), FAC) (64B15-14.0081, (1), FAC) | “Telemedicine” means practice of medicine by a licensed Florida physician or physician assistant where patient care, treatment, or services are provided through the use of medical information exchanged from one site to another via electronic communications. Telemedicine shall not include the provision of health care services only through an audio only telephone, email messages, text messages, facsimile transmission, U.S. Mail or other parcel service, or any combination thereof. |
| American Telehealth Association Model Language | “Telemedicine” or “Telehealth” means health care services provided through telecommunications to a patient from a provider who is at a remote location. |
| Dept. of Health – Children Medical Services (64C-8.001 (5), FAC) & (64C-8.003 (3), FAC) | “Telemedicine” – the use of telecommunication and information technology to provide clinical care to individuals at a distance and to transmit the information needed to provide that care. Medical diagnosis and evaluation can be conducted in person or through the use of telemedicine technology. Use of telemedicine requires the presence of a CMS approved physician or Advanced Registered Nurse Practitioner at the hub site and a Registered Nurse at the remote site to facilitate the evaluation. |
| 2017 HB 7011 (Excerpt) | “Telehealth” means the use of synchronous or asynchronous telecommunications technology by a telehealth provider to provide health care services, including, but not limited to, patient assessment, diagnosis, consultation, treatment, and monitoring; transfer of medical data; patient and professional health-related education; public health services; and health administration. The term does not include audio-only telephone calls, e-mail messages, or facsimile transmissions. |
Materials Related to Outline Discussion:

- Rough Draft Report Outline
- Category Comparison Chart
- Florida Broadband Infographic
- Health Care Professions Licensure Compacts Chart
- Board of Medicine Statutory Provision for Establishing Telemedicine Standard of Care Rules
- Patient Authorization Information Sheet
- Board of Medicine Telemedicine Standard of Practice Rule
- Commercial Insurance Coverage of Telehealth Presentation
- Medicare Coverage of Telehealth Presentation
- American Telemedicine Association State Bill Components
Rough Draft Report Outline

(Combination of Dr. Landry and Mr. Gutierrez Recommended Categories)

Executive Summary

Background

Definition (separate discussion)

Technology

- Broadband Connectivity
- Equipment costs

Health Care Practitioner

- Cross state licensure (conditional practice and/or licensure compacts)
- Direct to Consumer models
- Out of state consultations

Patient/Consumer Protection

- Patient expectations vs. services offered
- Practitioner standard of care (PT, OT, Pharmacy, mental health)
- Consent
- On-line Prescribing
  - In person examination required first
  - Who is eligible
  - Types of drugs

Coverage & Reimbursement

- Reimbursement for certain modalities (live video, store and forward, remote patient monitoring)
- Payment Parity – parity of service payment, conditioned to terms of policies
- Public Payer – regulations – Medicare similar to Medicaid language, Add Modalities to Medicaid language
- Site Transmission – permitted or not
- Location of Services – originating site requirements

Summary
<table>
<thead>
<tr>
<th><strong>Technology Barriers</strong></th>
<th><strong>Telehealth Definition</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Definition</td>
<td>- Telemedicine or telehealth</td>
</tr>
<tr>
<td>o Store &amp; Forward</td>
<td></td>
</tr>
<tr>
<td>- Connectivity</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th><strong>Health Care Provider Barriers</strong></th>
<th><strong>On-line Prescribing</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Health Services available to patients via telehealth (PT, OT, Pharmacy, etc.)</td>
<td>- In person exam required, who is eligible, and what type of drugs</td>
</tr>
<tr>
<td>- Direct to Consumers</td>
<td></td>
</tr>
<tr>
<td>- Out of state Consultations</td>
<td></td>
</tr>
<tr>
<td>- Cross State Licensure</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Coverage &amp; Reimbursement Barriers</strong></th>
<th><strong>Private Payer Parity</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Limitations on reimbursement models (Spoke &amp; Hub)</td>
<td>- Parity of service payment, conditioned to terms of policies</td>
</tr>
<tr>
<td>- Payment Parity</td>
<td></td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th><strong>Patient/Consumer Barriers</strong></th>
<th><strong>Location of Service</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Patient expectations vs services offered</td>
<td>- Originating site requirements</td>
</tr>
<tr>
<td>o Qualifications of physician offering service</td>
<td></td>
</tr>
<tr>
<td>- Consumer protection</td>
<td></td>
</tr>
</tbody>
</table>

| **Consent** | |
|-------------||
| - Written, verbal, none        | |
BROADBAND IN FLORIDA

BROADBAND COVERAGE
92%

POPULATION UNDERSERVED
11%

MBPS AVERAGE STATE-WIDE SPEED
35.8

MOST CONNECTED STATE
14th

COVERAGE BY COUNTY

TOP 5 FASTEST CITIES IN FLORIDA

1. Riverview
2. Okeechobee
3. Wesley Chapel
4. Odessa
5. Land O' Lakes

LARGEST COMPETING PROVIDERS IN FLORIDA

1. AT&T U-verse vs XFINITY
2. CenturyLink vs XFINITY
3. Frontier vs WOW!
4. AT&T U-verse vs Cox
5. Frontier vs XFINITY

BROADBAND SPEEDS
93.0% of Floridians have access to wired broadband 25mbps or faster.
90.0% of Floridians have access to broadband 100mbps or faster.
1.9% of Floridians have access to 1 gigabit broadband.

WIRED COVERAGE
97.4% of Floridians have access to wireline service.
17.1% of Floridians have access to fiber-optic service.
90.8% of Floridians have access to cable service.
85.1% of Floridians have access to DSL service.

WIRELESS COVERAGE
100.0% of Floridians have access to mobile broadband service.
36.3% of Floridians have access to fixed wireless service.
<table>
<thead>
<tr>
<th>Practitioner Type</th>
<th>Licensure Compact</th>
<th>Organization Governing</th>
<th>Number of states participating</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Doctors (MD &amp; DO) and Physician Assistants</td>
<td>Yes</td>
<td>Interstate Medical Licensure Compact Commission (IMLCC)</td>
<td>18 enacted 8 pending legislation</td>
<td>The initial licensure compact has 25 participants. Does not apply to APRNs.</td>
</tr>
<tr>
<td>Registered &amp; Licensed Practical Nurses</td>
<td>Yes</td>
<td>National Council of State Boards of Nursing (NCSBN)</td>
<td>25 enacted</td>
<td></td>
</tr>
<tr>
<td>(Enhanced Version) Registered &amp; Licensed Practical Nurses</td>
<td>Yes</td>
<td>National Council of State Boards of Nursing (NCSBN)</td>
<td>15 enacted (including Florida) 16 pending legislation</td>
<td>An enhanced version of the licensure compact was introduced 2015. Compact will come into effect once 26 states have enacted the legislation or December 31, 2018. Does not apply to APRNs.</td>
</tr>
<tr>
<td>Advanced Practice Registered Nurses</td>
<td>Yes</td>
<td>National Council of State Boards of Nursing (NCSBN)</td>
<td>2 enacted 3 pending legislation</td>
<td>Compact will come into effect once 10 states have enacted the legislation.</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>Yes</td>
<td>Interstate Medical Licensure Compact Commission</td>
<td>18 enacted 8 pending legislation</td>
<td></td>
</tr>
<tr>
<td>Psychologists</td>
<td>Yes</td>
<td>Psychology Interjurisdictional Compact (PSYPACT)</td>
<td>2 enacted 5 pending legislation</td>
<td>PSYPACT becomes operational when seven states enact PSYPACT.</td>
</tr>
<tr>
<td>Dentists</td>
<td>Yes</td>
<td>Interstate Medical Licensure compact Commission</td>
<td>99 enacted 20 pending legislation</td>
<td></td>
</tr>
<tr>
<td>Emergency Medical Services (EMT &amp; Paramedic)</td>
<td>Yes</td>
<td>National Registry of Emergency Medical Technicians</td>
<td>9 enacted</td>
<td>Compact will activate after the tenth state signs the REPLCIA legislation.</td>
</tr>
<tr>
<td>Physical Therapists</td>
<td>Yes</td>
<td>The Federation of State Boards of Physical Therapy</td>
<td>9 enacted 9 pending legislation</td>
<td>Compact will come into effect once 10 states have enacted the legislation.</td>
</tr>
<tr>
<td>Speech-Language Pathologist and Audiologists</td>
<td>No</td>
<td>State Governments – National Center for Interstate Compacts (CSG)</td>
<td>0</td>
<td>American Speech-Language-Hearing Association (ASHA), National Council of State Boards (NCSB), and stakeholders—are establishing an Advisory Committee to begin discussions about the development of the compact.</td>
</tr>
<tr>
<td>Occupational Therapists</td>
<td>No</td>
<td>The American Occupational Therapy Association, Inc.</td>
<td>0</td>
<td>Investigating the merits of establishing professional license portability for the occupational therapy profession possibly through the creation of a licensure compact.</td>
</tr>
<tr>
<td>Respiratory Therapists</td>
<td>No</td>
<td>American Association for Respiratory Care</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Mental Health Counselors/Social Workers</td>
<td>No</td>
<td>Association of Social Work Boards</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
Grounds for disciplinary action; action by the board and department.—

The following acts constitute grounds for denial of a license or disciplinary action, as specified in s. 456.072(2):

Practicing or offering to practice beyond the scope permitted by law or accepting and performing professional responsibilities which the licensee knows or has reason to know that he or she is not competent to perform. The board may establish by rule standards of practice and standards of care for particular practice settings, including, but not limited to, education and training, equipment and supplies, medications including anesthetics, assistance of and delegation to other personnel, transfer agreements, sterilization, records, performance of complex or multiple procedures, informed consent, and policy and procedure manuals.
Patient Authorization

Florida law requires patient authorization for disclosure of some sensitive health data with certain exceptions in medical emergencies. An authorization form can be used by a patient or his/her authorized legal representative to authorize a healthcare provider to obtain the patient’s records from another provider. It may be used by providers participating in health information exchanges as applicable.

Florida Electronic Health Records Exchange Act

Chapter 2009-172, Laws of Florida

The Florida Electronic Health Records Exchange Act (Chapter 2009-172, Laws of Florida) directed the Agency to develop universal patient authorization forms in both paper and electronic formats which may be used by a health care provider to document patient permission for the disclosure and use, in any form or medium, of an identifiable health record. The Agency adopted rules and forms which became effective on July 28, 2010.

Patient Authorization Rule

Rules 59B-16.001 and 59B-16.002 provide for the incorporation by reference of the Universal Patient Authorization Form for Full Disclosure of Health Information for Treatment and Quality of Care, the Universal Patient Authorization Form for Limited Disclosure of Health Information and accompanying instructions. The universal patient authorization forms, properly completed, must be accepted by a provider as valid authorization to release an identifiable health record. The forms provide instructions for completion that must be met to create the rebuttable presumption that the release of the identifiable health record was appropriate as provided in s. 408.051 (4) F. S.

Rule Title: Rule No:

Definitions 59B-16.001 (.pdf 114KB)

Universal Patient Authorizations Forms 59B-16.002 (.pdf 57KB)

Patient Authorization Forms

Universal Patient Authorization Form for Full Disclosure of Health Information for Treatment and Quality of Care (.pdf 468 KB)

Universal Patient Authorization Form for Full Disclosure of Health Information for Treatment and Quality of Care - Spanish (.pdf 279 KB)
Questions and Answers on Patient Authorization Forms

For Health Care Providers (.pdf 392 KB)
For Patients (.pdf 368 KB)
64B8-9.0141 Standards for Telemedicine Practice.

(1) “Telemedicine” means the practice of medicine by a licensed Florida physician or physician assistant where patient care, treatment, or services are provided through the use of medical information exchanged from one site to another via electronic communications. Telemedicine shall not include the provision of health care services only through an audio only telephone, email messages, text messages, facsimile transmission, U.S. Mail or other parcel service, or any combination thereof.

(2) The standard of care, as defined in Section 456.50(1)(e), F.S., shall remain the same regardless of whether a Florida licensed physician or physician assistant provides health care services in person or by telemedicine.

(3) Florida licensed physicians and physician assistants providing health care services by telemedicine are responsible for the quality of the equipment and technology employed and are responsible for their safe use. Telemedicine equipment and technology must be able to provide, at a minimum, the same information to the physician and physician assistant which will enable them to meet or exceed the prevailing standard of care for the practice of medicine.

(4) Controlled substances shall not be prescribed through the use of telemedicine except for the treatment of psychiatric disorders. This provision does not preclude physicians or physician assistants from ordering controlled substances through the use of telemedicine for patients hospitalized in a facility licensed pursuant to Chapter 395, F.S.

(5) Prescribing medications based solely on an electronic medical questionnaire constitutes the failure to practice medicine with that level of care, skill, and treatment which is recognized by reasonably prudent physicians as being acceptable under similar conditions and circumstances, as well as prescribing legend drugs other than in the course of a physician’s professional practice.

(6) Physicians and physician assistants shall not provide treatment recommendations, including issuing a prescription, via electronic or other means, unless the following elements have been met:
   (a) A documented patient evaluation, including history and physical examination to establish the diagnosis for which any legend drug is prescribed.
   (b) Discussion between the physician or the physician assistant and the patient regarding treatment options and the risks and benefits of treatment.
   (c) Maintenance of contemporaneous medical records meeting the requirements of Rule 64B8-9.003, F.A.C.

(7) The practice of medicine by telemedicine does not alter any obligation of the physician or the physician assistant regarding patient confidentiality or recordkeeping.

(8) A physician-patient relationship may be established through telemedicine.

(9) (a) Nothing contained in this rule shall prohibit consultations between physicians or the transmission and review of digital images, pathology specimens, test results, or other medical data by physicians or other qualified providers related to the care of Florida patients.

(b) This rule does not apply to emergency medical services provided by emergency physicians, emergency medical technicians (EMTs), paramedics, and emergency dispatchers. Emergency medical services are those activities or services to prevent or treat a sudden critical illness or injury and to provide emergency medical care and prehospital emergency medical transportation to sick, injured, or otherwise incapacitated persons in this state.

(c) The provisions of this rule shall not apply where a physician or physician assistant is treating a patient with an emergency medical condition that requires immediate medical care. An emergency medical condition is a medical condition manifesting itself by acute symptoms of sufficient severity that the absence of immediate medical attention will result in serious jeopardy to patient health, serious impairment to bodily functions, or serious dysfunction of a body organ or part.

(d) The provisions of this rule shall not be construed to prohibit patient care in consultation with another physician who has an ongoing relationship with the patient, and who has agreed to supervise the patient’s treatment, including the use of any prescribed medications, nor on-call or cross-coverage situations in which the physician has access to patient records.

Rulemaking Authority 458.331(1)(v) FS. Law Implemented 458.331(1)(v), 458.347(4)(g) FS. History—New 3-12-14, Amended 7-22-14, 10-26-14, 3-7-16.
458.331 Grounds for disciplinary action; action by the board and department.—
(1) The following acts constitute grounds for denial of a license or disciplinary action, as specified in s. 456.072(2):
(v) Practicing or offering to practice beyond the scope permitted by law or accepting and performing professional responsibilities which the licensee knows or has reason to know that he or she is not competent to perform. The board may establish by rule standards of practice and standards of care for particular practice settings, including, but not limited to, education and training, equipment and supplies, medications including anesthetics, assistance of and delegation to other personnel, transfer agreements, sterilization, records, performance of complex or multiple procedures, informed consent, and policy and procedure manuals.
Telehealth Commercial Insurance Laws

Florida Telehealth Advisory Council

February 21, 2017

Nathaniel Lacktman, Esq.
Foley & Lardner, LLP
Telehealth Coverage

- Why is telehealth coverage important?
- Nature of health care and role of insurance as intermediary vs. retail medicine
- Patient “choice”
- Mandate vs. consumer rights issue
- Coverage vs. payment parity
  - In-network vs. out-of-network
Commercial Insurance Coverage of Telehealth Services

- 2016 Health Care Cost Institute Study (2009-2013)
  - 6,506 telehealth claims by PCPs compared to 95.9M non-telehealth claims.
  - Non-telehealth service reimbursements increased every year, but avg telehealth reimbursements decreased after 2011.
  - Avg. decreased from $68 to $38: 40% lower than identical non-telehealth claims.
  - CA and NY had few claims compared to their populations.

Telehealth Commercial Insurance Laws

![Map showing states with broad coverage and payment for telehealth commercial insurance laws.](map.png)
Telehealth Commercial Insurance Laws

[Map of the United States showing states with broad coverage and payment in green, limited coverage in yellow, and broad coverage with no payment in blue.]
Texas

- A health benefit plan **may not exclude** a telemedicine medical service or a telehealth service from coverage under the plan **solely because** the service is not provided through a face-to-face consultation.

- A health benefit plan may require a deductible, a copayment, or coinsurance for a telemedicine medical service or a telehealth service. The amount of the deductible, copayment, or coinsurance may not exceed the amount of the deductible, copayment, or coinsurance required for a comparable medical service provided through a face-to-face consultation.

- Tex. Ins. Code tit. 8, subtit. F, ch. 1455
Georgia Telehealth Commercial Insurance Coverage Law

On and after July 1, 2005, every health benefit policy that is issued, amended, or renewed shall include payment for services that are covered under such health benefit policy and are *appropriately provided* through telemedicine in accordance with Code Section 43-34-31 and *generally accepted health care practices and standards* prevailing in the applicable professional community at the time the services were provided. The coverage required in this Code section may be *subject to all terms and conditions* of the applicable health benefit plan.

O.C.G.A. § 33-24-56.4(d)
Michigan

- A health insurance contract [...] shall not require face-to-face contact between a health care professional and a patient for services appropriately provided through telemedicine, as determined by the insurer or health maintenance organization.

Consider This

- All health insurance plans in this state must provide coverage for healthcare services delivered via telehealth to the same extent the services would be covered if they were delivered via an in-person encounter.

- A health insurance plan shall reimburse for healthcare services delivered via telehealth on the same basis and at least the same rate that the health insurance plan reimburses for comparable healthcare services delivered via in-person encounters.

- A health insurance plan may not impose any originating site restrictions, nor distinguish between patients in rural or urban locations when providing coverage under the policy or contract for healthcare services delivered via telehealth.
Consider This

- A health insurance plan may not limit coverage of telehealth services only to those health care providers who are members of the insurance plan’s provider network.

- A health insurance plan may charge a deductible, co-payment, or coinsurance for a health care service provided through telemedicine so long as it does not exceed the deductible, co-payment, or coinsurance applicable to an in-person consultation.

- A health insurance plan may impose any annual or lifetime dollar maximum on coverage for telemedicine services other than an annual or lifetime dollar maximum that applies in the aggregate to all items and services covered under the policy, or impose upon any person receiving benefits pursuant to this section any copayment, coinsurance, or deductible amounts, or any policy year, calendar year, lifetime, or other durational benefit limitation or maximum for benefits or services, that is not equally imposed upon all terms and services covered under the policy, contract, or plan.
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Medicare Coverage of Telehealth Services

Florida Telehealth Advisory Council

January 11, 2017

Nathaniel Lacktman, Esq.
Foley & Lardner, LLP
Five Conditions for Coverage

1. Patient in a qualifying rural area
2. Patient at one of eight qualifying facilities ("originating site")
3. Service provided by one of ten eligible professionals ("distant site practitioner")
4. Technology is real-time audio-video (interactive audio and video telecommunications system that permits real-time communication between the beneficiary and the distant site provider)
5. The service is among the list of CPT/HCPCS codes covered by Medicare
Telehealth Has Not Been a “Budget Buster”

1. In 2001, the Congressional Budget Office estimated it would cost the Medicare program $150 million ($30 million a year) to cover telehealth services from 2001 through 2005.

2. Reality, during those first five years, Medicare paid a total of $3,103,912 for telehealth services.

3. CY 2014: Medicare paid a total of $13,934,430 for telehealth services (214,346 claims).

4. CY 2015: Medicare paid a total of $17,601,996 for telehealth services (271,877 claims).

5. Total Medicare telehealth payments to date (2001-2015): $75,460,785

6. Medicare annual budget: $600 Billion
MEDICARE CLAIMS FOR TELEHEALTH SERVICES

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Continued Bipartisan Federal Efforts to Expand Telehealth Coverage

- Medicare Telehealth Parity Act
- Telehealth Enhancement Act
- Telehealth Modernization Act
- Telehealth Innovation and Improvement Act
- CONNECT for Health Act
- 21st Century Cures Act
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ATA MODEL STATE BILL COMPONENTS

Telemedicine for Quality Improvement and Healthcare Modernization Act
A bill to expand patient access to healthcare services, improve quality of care and reduce costs through the use of telemedicine

PREAMBLE:  Telemedicine can efficiently improve access and quality of care for underserved patients by providing consultations and specialty care. Remote monitoring and home telehealth can help the chronically ill stay at home and out of hospitals and emergency rooms, dramatically reducing costs. Today, more and more people are taking advantage of telemedicine and e-health opportunities. But such services are not available for everyone and action is needed in the states to assure that all Americans receive the benefits available through telemedicine.

DEFINITION: “Telemedicine” or “Telehealth” means health care services provided through telecommunications to a patient from a provider who is at a remote location.

PRIVATE COVERAGE: Health insurers, health care subscription plans, health maintenance organizations, disability insurance programs, workers’ compensation programs, and all state employee health plans shall provide coverage for the cost of telemedicine services when the services are appropriately provided through such means.

The requirements of the bill shall apply to all insurance policies, contracts, and plans delivered, issued for delivery, reissued, or at any time thereafter when any term of the policy, contract, or plan is changed or any premium adjustment is made.

UTILIZATION REVIEW: Decisions denying coverage of services provided via telemedicine shall be subject to utilization review procedures.

MEDICAID: The state’s Medicaid plan shall not deny coverage on the basis that coverage is provided through telemedicine if the health care service would be covered were it provided through in-person consultation between the recipient and a health care provider. Coverage for health care services provided through telemedicine must be determined in a manner consistent with coverage for health care services provided through in-person consultation. Specifically coverage must be statewide coverage and include services originating from a recipients home or wherever else they may be, all health professionals authorized to provide services by a telehealth method to the extent otherwise covered in the Medicaid State Plan, and timely asynchronous telehealth services.

REPORTING: The state’s Department of Health shall lead an interagency study and report to the Legislature within 12 months on comprehensive plans that include telehealth services and multi-payer coverage and reimbursement for stroke diagnosis, high-risk pregnancies and premature births, and emergency services.
PROFESSIONAL LICENSING: “Healthcare provider or professional” shall have the same meaning under current statute.

The state’s health professional licensing boards shall maintain consistent licensure and standards of care requirements between in-person and telemedicine-provided practices with the following exemptions:

(a) A health professional licensed, certified, or registered in another jurisdiction shall be able to consult with a licensed peer health professional in this state, such as a sub-specialist, without the need for an additional license issued by this State, and

(b) A health professional licensed, certified, or registered in another jurisdiction and temporarily located in this state shall be able to consult with established patients from his/her home jurisdiction using telecommunications without the need for an additional license issued by this State.

PROFESSIONAL STANDARDS OF PRACTICE: A healthcare provider who delivers services through the use of telehealth shall be held to the same standard of professional practice as a similar licensee of the same practice area or specialty that is providing the same healthcare services through in-person encounters, and nothing in this section is intended to create any new standards of care.

The board or licensing entity governing any healthcare provider covered by this section shall not establish a more restrictive standard of professional practice for the practice of telehealth than that specifically authorized by the provider's practice act or other specifically applicable statute, including prescribing and dispensing controlled substances.
Additional Reference Material:

- Article re: CONNECT Act submitted by Darren Hay
- American Association of Marriage and Family Therapy Online Best Practices Report submitted by Richard Long
- Email from Dr. Madhu Nair re: Cross State Practice
- Telehealth Recommendation Considerations submitted by Dr. Steven Selznick
- Telehealth Recommendation Considerations submitted by Darren Hay
Bipartisan bill seeks to remove roadblocks to telemedicine under Medicare

By Heather Mack

May 03, 2017

A group of US Senators introduced a new version of a bipartisan bill today seeking Medicare-covered expansion of telehealth and remote patient monitoring services nationwide. The bill was previously introduced by the six-Senator group, which is headed by Brian Schatz (D-HI), in February.

Called the Creating Opportunities Now for Necessary and Effective Care Technologies (CONNECT) for Health Act, the bill primarily works to waive restrictions around Medicare telehealth coverage that many consider outdated or arbitrary. Along with the Senators, it also has the support of the American Medical Association, the American Telemedicine Association, and the Alliance for Connected Care along with many industry groups, health systems and tech vendors.

“Telehealth is the future of health care. It expands access to care, lowers costs, and helps more people stay healthy,” Senator Brian Schatz said in a statement. “Our bipartisan bill will help change the way patients get the care they need, improving the health care system for both patients and health care providers.”

The CONNECT Act has five main goals as a means to taking down barriers to Medicare-covered telemedicine. As it currently stands, there are several provisions of the Social Security Act that are holding back Medicare reimbursement for telehealth, including restrictions on originating sites, limitations in store and forward technology, and only allowing for telemedicine to be used in certain rural areas. The bill aims to take those roadblocks down by expanding remote patient monitoring programs for people with chronic conditions; defining reimbursable CMS telehealth codes; expanding remote monitoring programs at community health centers and rural clinics, giving HHS the authority to lift restrictions on telehealth; and establishing new allowances for global and bundled payment models.

“The CONNECT for Health Act provides a carefully-crafted approach to begin helping countless American Medicare recipients realize the benefits of connected health technology,” Morgan Reed, executive director of the App Association’s Connected Health Initiative, said in a statement. “By lifting arduous limitations on the use of telehealth and empowering Medicare physicians to utilize innovative remote monitoring technologies, responsible and secure connected health solutions may be introduced more broadly throughout the continuum of care to improve patient health outcomes.”

The bill also builds on the recently reintroduced CHRONIC Care act, which sought, among other things, expanded telemedicine coverage under Medicare Advantage Plan B in 2020 and more freedom for Accountable Care Organizations in their use of telemedicine.

“The AMA strongly supports the CONNECT for Health Act of 2017 and applauds Senators Schatz, Wicker, Cochran, Cardin, Thune, and Warner for their continued leadership on telemedicine issues,” AMA President Dr. Andrew Gurman said in a statement. “This legislation would advance patient-centered care through strategic and validated telemedicine and remote-patient monitoring tools and modalities. Increasing Medicare coverage for these telemedicine services will help transform the next generation of health care delivery in ways that promote value and improved patient outcomes.”
There have been an increasing number of legislative efforts to create federal guidelines and standards on telemedicine, and initial cost-effectiveness analyses of the CONNECT bill have shown the bill could save a considerable amount of money. When the first version was introduced, Third Way, a centrist Washington think tank, crunched the numbers on the first three provisions and predicted that they would save the government $1.8 billion. Although the waiver program would increase federal spending by $1.1 billion, the other two would offset those costs.

“Medicare beneficiaries deserve access to telehealth services already available within almost every other health program including Medicaid, Veterans Health, private insurance plans and most recently TRICARE. This bill may be their best hope for this Congress,” American Telemedicine Association CEO Jonathan Linkous said in a statement.
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Note: Throughout this document, we have interpreted the scope of our charge narrowly, to encompass the provision of therapy services online. As such, we have not addressed here the use of text messaging, email, online scheduling, or related technologies used as an adjunct to in-person treatment. We also have not addressed here the use of technology solely for marketing purposes by those MFTs who see clients in person. Each of these uses of online tools raises its own set of ethical considerations.
Summary of findings on knowledge-based questions

The Online Therapy Workgroup was tasked with developing best-practice guidelines for the online practice of marriage and family therapy, which is a form of what laws often refer to as telehealth. Our charge letter asked that these be developed as guidelines for MFTs “to consider” when providing such services, and not that they be proposed as binding standards.

Part of our charge included consideration of four Knowledge-based questions. Below are the findings that have emerged from our exploration of these questions. Following our responses to the questions, we address currently-unavailable additional data points that we believe would be useful to have for organizational decision-making.

Question 1. What do we know about our stakeholders’ needs, wants, and preferences that is relevant to this decision?

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<tr>
<th>NEED, WANT, OR PREFERENCE</th>
<th>STAKEHOLDER(S)</th>
<th>SOURCE</th>
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<tr>
<td>Legal and ethical compliance, including clarity on practice across state lines</td>
<td>MFTs, Licensing boards</td>
<td>AAMFT Code of Ethics DeAngelis, 2012 HIPAA and related state, provincial, and federal laws</td>
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<tr>
<td>Flexibility in scheduling</td>
<td>MFTs, Clients</td>
<td>Cook &amp; Doyle, 2002</td>
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<td>Low-cost, easy-to-use platforms</td>
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<td>Cook &amp; Doyle, 2002 Derrig-Palumbo &amp; Ziene, 2005</td>
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<td>Access to qualified and appropriate care</td>
<td>MFTs, Clients, Referral sources</td>
<td>Brazell, 2015</td>
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<td>Evidence that online therapy outcomes are comparable to in-person outcomes</td>
<td>MFTs, Clients, Third-party payers</td>
<td>Doss, Benson, Georgia, &amp; Christensen, 2013</td>
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<td>Confidential communications</td>
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<td>Insurance reimbursement for services</td>
<td>MFTs, Clients</td>
<td>eTherapi, 2014</td>
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<td>Network infrastructure (access, bandwidth, and security)</td>
<td>MFTs, Clients, Third-party payers</td>
<td>Morgan, 2012 Hertlein, Blumer, &amp; Mihaloliakos, 2015</td>
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<tr>
<td>Secure record-keeping and payment systems</td>
<td>MFTs, Clients, Third-party payers</td>
<td>Hecht, Shin, Matussek 2015 HIPAA and related state and federal laws</td>
</tr>
<tr>
<td>Clarity on the identity and location of the client at the time of service</td>
<td>MFTs, Licensing boards</td>
<td>Hertlein, Blumer, &amp; Mihaloliakos, 2015</td>
</tr>
</tbody>
</table>
Question 2. What do we know about the current realities and evolving dynamics of our environment that is relevant to this decision?

Key realities and evolving dynamics of the online psychotherapy environment include:

- **Online therapy is rapidly growing in utilization.** Clinicians and clients alike express a desire for online services to be more readily accessible. Online therapy is increasing consumers’ access to qualified care (US Department of Health and Human Services, 2013), potentially contributing to increased utilization of treatment among military veterans (Mott, Hundt, Sansgiry, Mignognia, & Cully, 2014). Online therapy also is reducing costs for payors through increased efficiency (Townley & Yalowich, 2015).

- **Research on the effectiveness of online therapy is promising.** Online services appear to produce client acceptance, satisfaction, and retention at similar rates to in-person therapy (Simpson & Reid, 2014). Outcome research has also produced positive results in a number of areas, including depression, anxiety, and panic disorder (Carlbring et al., 2006; Mohr, Vella, Hart, Heckman, & Simon, 2008; Spence et al., 2011). However, we caution that there appear to have been no studies to date examining the effectiveness of online therapy with couples and families. A content analysis of 18 family therapy journals in 2013 found just 10 articles related to online family therapy out of more than 13,000 total articles published over 15 years. All 10 were opinion articles and case studies (Livings, 2013). The closest parallel to online family therapy may be online groups, which participants have rated as being inferior to in-person groups on measures of cohesiveness, safety, and delivery (Holmes & Koslowski, 2015). However, online therapy for couples and families remains promising as technology improves, particularly for couples and families unable to attend therapy together in person. For example, online therapy has been used to assist military couples with conflict resolution during deployment (Farero, Springer, Holist, & Bischoff, 2015).

- **While the evidence is limited, many MFTs appear to lack basic knowledge of their obligations** when providing telehealth services. For example, many MFTs talk openly of using Skype and FaceTime in their provision of services, even though these platforms do not provide the Business Associate Agreements (BAAs) required under HIPAA in the United States (Huggins, 2016).

- **Legal recognition of online therapy, as with other telehealth services, is evolving rapidly.** Many states and provinces now recognize online therapy through regulatory language. Additionally, many states and provinces now require health insurers to cover services provided via telehealth, often with the additional requirement that these services be covered at the same reimbursement rates as when the service is provided in person (TeleMental Health Institute, no date). However, insurers may require additional documentation in order for payment to be made. Furthermore, regulations vary widely from location to location. State and provincial regulatory boards appear to be responding to the evolving landscape with new or clarified regulations. We cannot expect that the regulatory landscape of 2016, in regard to online therapy, will be the regulatory landscape in years to come.

- **State and provincial licensing boards are recognizing the challenges posed when clients move from one state to another. Several US states have considered, and at least five states (Arizona, Colorado, Florida, Kansas, New Jersey, Utah, and Wyoming) have implemented, “carve-outs” to their licensure laws** that allow a therapist licensed in another state to continue seeing a client who moves into their state, under a variety of specific conditions (CAMFT, 2016).
• At the same time, **those states that have implemented regulation specific to telehealth have typically placed additional requirements on the therapist providing telehealth services.** One state (Arkansas) requires a specialized license to practice telehealth (California Board of Behavioral Sciences, 2015). This places a higher standard of care, and thus a higher burden, on MFTs wanting to provide online services versus those providing in-person services. We believe that additional training is an appropriate requirement for those wishing to provide services online, though we do not believe a specialized license is a necessary or appropriate means of ensuring competence in online therapy.

• **Licensing boards generally recognize therapy as occurring where the client is physically located at the time of service.** (The CAMFT Code of Ethics, like some licensing boards, specifically uses the word “located” in its standards, reinforcing this framework.) Licensing boards in multiple health professions have enforced this framework. California has prosecuted a psychiatrist in Colorado for practicing in California without a license when the psychiatrist prescribed to a California teenager through an internet pharmacy (American Medical Association, 2009). Pennsylvania similarly took action against an Israeli psychologist who was marketing online services to Pennsylvania residents without being licensed there (Maheu, 2014). However, the perspective that therapy takes place where the client is located is not universally shared among licensing boards (CAMFT, 2016). Therapists should be cautious to ensure that they have the necessary credentials to work with a client online, based on the requirements of (1) the jurisdiction in which the client is physically located at the time of service; (2) the jurisdiction in which the therapist is physically located at the time of service; and (3) the jurisdiction of the therapist’s licensure or registration.

• **Therapists are using new technologies before regulations or professional standards have been developed regarding their use.** For example, it is only now that the US Department of Health and Human Services is developing HIPAA regulations around the use of text messaging, despite the fact that many therapists have been communicating with clients via text for years (Sude, 2013, provides a useful review of the literature on therapists and text messaging). This does not mean that being an early adopter of a technology is necessarily problematic (Greene, 2012); rather, it means that providers should be cautious to ensure that their use of new technologies is consistent with existing ethical principles, especially those related avoiding potential harm. It also means that professional associations and government regulators must exercise caution so that regulations and standards protect clients without standing in the way of opportunities for technological innovation that could increase the reach, effectiveness, and convenience of treatment for clients. Rules must be written broadly enough that they can apply to technologies that have not yet been developed.

• **The future is unknowable.** New regulations are introduced annually, professional associations are increasingly clarifying their stances and codes of ethics, the variety and accessibility of high quality telecommunications is continually increasing, and providers are continually looking to exploit these technologies to make services more accessible to clients and potential clients. It is possible that a future legal action could lead US courts to consider psychotherapy and other forms of health care, when conducted across state lines, to be *interstate commerce* and thus subject to federal, and not state, regulation (Dear, 2015). Negatively, this would create something of a “Wild West” situation with little regulatory oversight of online therapy until clear federal regulations could be established. Positively, such a finding could pave the way for national licensure standards, reducing or eliminating the patchwork of different standards across state and provincial borders that can make it difficult for therapists to move from one state to another (Caldwell, 2012).
Question 3. What do we know about the capacity and strategic position of our organization that is relevant to this decision?

We address these as separate but related questions, beginning with the strategic position of the AAMFT.

STRATEGIC POSITION

• The AAMFT Code of Ethics covers technology issues more thoroughly in its 2015 version than in prior versions. At the same time, it is less specific in addressing several technology issues than the 2014 ACA Code of Ethics, which addresses counselor Web Sites, Social Media usage, and related issues in greater detail.

• The standards related to technology in the 2015 AAMFT Code of Ethics frequently defer to applicable law rather than setting a particular professional standard. (See standards 6.1, 6.3, 6.4, and 6.5.) This stance recognizes that laws surrounding telehealth can vary widely and change quickly, and that MFTs must be aware of the current laws in their state or province. Federal law in the US is also likely to continue to evolve, either through legislation or rulemaking (specifically surrounding HIPAA). This deference to applicable regulatory language may leave practitioners confused about where to turn for clarity around compliant online practice, and believing that they cannot rely on the association for related guidance.

• MFTs are behind other mental health professions in pursuing interstate compacts, certifications for online practice across state and provincial lines, or other avenues to reduce or eliminate barriers to interstate practice. To date, four US states have signed on to the American Association of State Counseling Boards' interstate compact for licensure recognition (ACA, 2015), and one has adopted the Association of State and Provincial Psychology Boards' PSYPACT language designed specifically to facilitate online practice (ASPPB, 2016). The ASPPB also has a separate interstate compact, which currently has four US states and two Canadian provinces as signatories (ASPPB, no date). The AAMFT and Association of Marriage and Family Therapy Regulatory Boards (AMFTRB), to our knowledge, have not yet pursued such projects. Doing so would require coordination of effort among Central and Division advocacy leaders, Family TEAM volunteers, the AMFTRB, and its member boards. This would require a more significant investment of resources, but could have meaningful impact, particularly given the hesitance some MFTs show toward online practice due to jurisdictional concerns (Hertlein, Blumer, & Mihaloliakos, 2015). We note here that while these projects in other professions have been pushed forward by their licensing boards, the professional associations appear to have been instrumental in supporting and facilitating them.

• Through both its federal lobbying staff and state advocates participating in Family Team, the AAMFT has strategic resources that could be deployed toward key advocacy objectives related to online practice. This topic is further addressed below. We acknowledge that all advocacy resources have their limits, and that use of resources for advocacy objectives related to online practice may require shifting these resources away from other worthwhile goals.

1 ACA interstate compact member states include Kentucky, Tennessee, Virginia, and West Virginia. PSYPACT has been adopted by the state of Arizona. ASPPB’s interstate compact counts Arkansas, Missouri, Nebraska, Texas, Manitoba, and Ontario as signatories.
ORGANIZATIONAL CAPACITY

While the position of AAMFT is largely similar to that of other mental health professional organizations, the AAMFT is well-positioned with the capacity to do more if so desired:

- **AAMFT** can work with the COAMFTE to develop competencies and educational standards for online therapy to be embedded in COAMFTE accredited programs. Research has already been done to lay groundwork for development of specific competencies for online practice in MFT (Blumer, Hertlein, & VandenBosch, 2015). Given the growth in online mental health services, and the likelihood that a significant portion of new MFT graduates will be conducting at least some services online during their careers, standardizing the training around such services has significant potential benefit.

- Similarly, **AAMFT can actively partner with outside organizations advancing technology in mental health practice**, to further influence emerging standards and develop consensus across professions. Such organizations include but are not limited to the Coalition for Technology in Behavioral Science and the American Telemedicine Association.

- **AAMFT** is well positioned to inform and educate its members about best practice guidelines related to online therapy services. Efforts to this end can include:

  - The development of this best-practices document
  - Online continuing education in the area of online therapy
  - Webinars
  - A recurring column in *Family Therapy* Magazine about online practice
  - An online therapy track at the Annual Conference
  - Additional publications or events

Such efforts would not represent significant costs to the association, and in some instances may be revenue-generating.

- **AAMFT**, like its sister organizations, appears to lack the in-house expertise to become a direct provider of products such as a telehealth platform or EHR system. Such systems require significant initial investment and are complex and expensive to build and maintain. **Affinity agreements** can be negotiated with companies that provide these products. Such agreements generally do not require initial investment. They bring discounts to members, revenue to the association, and confidence to those members using the service that they are acting in accordance with ethical and professional standards. The AAMFT is currently involved in an affinity agreement with Valant, a provider of electronic medical record systems. Valant provides a discount on its products to AAMFT members and has implemented record-keeping protocols designed for those who work with couples and families. AAMFT could seek out affinity agreements with companies that offer secure, HIPAA-compliant platforms for therapy, and actively shape how such companies might coordinate couple- or family-based services.
• The existing Ethics Committee can provide clearer interpretation of existing standards around online practice, or ask the Board to appoint a task force to draft new, more detailed ethical standards surrounding online practice.

• Some MFTs are more comfortable with technology, and more likely to engage in online services, than others. The association can readily assist with connecting members who have an interest in online practice. The AAMFT can provide opportunities for these therapists to connect through the AAMFT Community platform. Considering the many public policy issues and questions raised by the growth of online practice, it is worth noting that the AAMFT Family Team already offers a forum for those interested in advocacy work related to distance therapy and supervision.

• While the AAMFT could develop the capacity to issue certificates for online practice (and has offered trainings in online practice in the past), if the association were to pursue a project like PSYPACT with the intention of recognition from licensing boards, this would be new territory for the association. It may be more effective to enlist AMFTRB as the certificate issuer. State governments may prefer using the AMFTRB structure over an AAMFT structure where they may have little influence over future changes. (The PSYPACT project will involve the Association of State and Provincial Psychology Boards [ASPPB] issuing certificates to those Psychologists wishing to engage in online practice across some state lines.)

• Also related to advocacy, AAMFT's Family Team can push for regulatory clarity surrounding online practice in each state and province. State and provincial laws currently vary widely, but this variance is actually less of a concern than some locations’ complete lack of regulation of online mental health care. This leaves practitioners unclear about the limits of who they can serve and what online treatment can look like.

• As we note under Question 4 below, research on the online delivery of couple and family therapy is in its infancy. The AAMFT Research & Education Foundation could support groundbreaking research into online couple and family therapy, either through direct research or through a grant process, raising the profile of the foundation.

**Question 4. What are the ethical implications?**

There are two ways of considering this question. One way is to consider the implications to the association when considering online practice. Another is to consider the implications for individual practitioners who are engaging in online practice. Here, we address both, beginning with the implications for the association.

**ETHICAL IMPLICATIONS FOR THE AAMFT**

• The AAMFT Code of Ethics appears to hold online therapy to a higher standard than traditional (i.e., face-to-face) treatment modalities. The term “best practices” appears only three times in the AAMFT Code of Ethics, all within Standard VI: Technology-Assisted Professional Services (see 6.3, 6.4, and 6.6). These standards require the use of best practices, which moves best practices from their more typical position as optimal standards to a position of being minimal standards. As online therapy becomes more mainstream, the AAMFT needs to be careful to ensure that technology-assisted treatments are not unnecessarily held to a higher standard than are non-technology assisted treatments. The AAMFT will need to clarify when a best-practice standard is the minimal standard, and where appropriate, apply that to all modalities of treatment. Otherwise, practitioners and licensing boards may experience confusion in attempting to interpret the standards.
• It may be premature to simply presume the success and continued growth of online therapy, particularly in couple and family-based treatment contexts where the effectiveness of online therapy has not yet been determined. The AAMFT Code of Ethics requires MFTs to practice in accordance with the best scientific knowledge currently available (Statement adopted by the AAMFT Board of Directors, March 25, 2009). MFTs are also ethically obligated to inform clients of the “potential risks and benefits of treatments for which generally recognized standards do not yet exist” (standard 1.2(c)). At the present time, it would seem prudent for therapists engaged in online couple or family therapy to inform clients of the lack of research surrounding such treatment. While research results for individual therapy online are certainly promising, we could locate no studies that have directly examined the effectiveness of couple or family interventions in an online context compared to in-person treatment. Further research on the online delivery of couple and family therapy is necessary to establish the effectiveness of online service delivery.

• When considering possible best practices for online therapy, as well as other strategic initiatives including those described above, the AAMFT must strike an effective balance between encouraging the development and use of innovative service delivery systems and promoting high professional standards for those services. If the standards for online practice are set in a manner that is too burdensome or too vague, practitioners may be more reluctant to venture into online practice. Some may even disregard the ethical standards, writing those standards off as irrelevant to their work. On the other hand, if standards are set in a manner that is clear, specific, adaptive (or, more likely, subject to regular updating), and achievable for the average practitioner, family therapists can remain on the cutting edge of effective service delivery.

ETHICAL IMPLICATIONS FOR INDIVIDUAL PRACTITIONERS

The ethical considerations for individual MFTs engaging in online practice are many. We encourage readers to carefully review the most current AAMFT Code of Ethics and ensure compliance with each standard.

• While many MFTs are not yet comfortable delivering online services, many MFTs are already utilizing technology in at least some elements of their practices. For example, many MFTs report using web sites and online directories to market their practices, and using email and text messaging to communicate with clients. At the same time, ethical concerns are commonly cited by MFTs as reasons not to further integrate online practice into their work (Hertlein, Blumer, & Mihaloliakos, 2015). We believe this speaks to a desire for further clarity on how MFTs can practice ethically in an online environment. Put more simply, the current AAMFT Code of Ethics may not provide sufficient guidance for most MFTs to feel confident that they are abiding by professional ethical standards when moving into online service delivery.

• Based on our anecdotal experience with colleagues, it appears that MFTs who provide therapy services online via email may not recognize the security and confidentiality risks inherent to such service. As with other technologies, the provision of therapy services by email triggers additional ethical responsibilities. In many locations, additional legal responsibilities are triggered as well. Most email accounts are not secure, and even when the therapist is using a secure account, the client may not be. In addition, client email (even when accessed via secure account) may be accessed by other family members.
• **MFTs who provide therapy online are subjecting themselves to an additional set of professional standards, not simply a different set.** All of the legal and ethical obligations typically attached to therapy apply, as well as those additional standards that specifically relate to online service provision. For example, when a client agrees to participate in online therapy, they are not waiving any of their existing protections for confidentiality, privacy, or other consumer protection. MFTs are still responsible to the full breadth of applicable state or provincial law and the AAMFT Code of Ethics.

• **MFTs who provide therapy online may not understand where to find appropriate best practice standards or how to use them.** Multiple organizations have produced or are producing best-practice documents for online mental health practice, including AMFTRB (in draft) and the American Telemedicine Association (2013). Practitioners are likely to have varying degrees of familiarity with these documents, and may not understand whether it is acceptable to adopt some, but not all, of the best practices any single document recommends. This can contribute to fears of ethical breaches based on a lack of clarity about what the existing ethical standards actually require.

**Additional data that would be useful**

In addition to the knowledge questions above, we were asked to describe what we wish we knew – data that may be useful to the association and its members in making decisions related to the online practice of family therapy. While some of these issues are addressed elsewhere in this document, these data points may be of service to the Board, policymakers, and individual practitioners.

• **Effectiveness of online couple and family treatment.** As noted above, current effectiveness research on online therapy has focused on individual clients receiving largely cognitive-behavioral services.

• **Current and planned use of various technologies in service delivery among MFTs.** Understanding the proportion of MFTs who are currently offering services online or who are planning to in the next few years may help the association determine the level of future resources to devote to this mode of service delivery.

• **Rates of technology failure, data breach, and confidentiality problems in online service delivery (and as compared with in-person service delivery).** While many MFTs considering online services express these as concerns, it is presently difficult to determine the degree to which these concerns are appropriate.

• **Licensing boards’ interpretations of where psychotherapy takes place.** While some boards have made clear that they believe therapy takes place where the client is located at the time of service, other boards have not yet offered an interpretation, contributing to the regulatory uncertainty many MFTs experience around online therapy.
Best practices for the online practice of couple and family therapy

The following best practices are guidelines for couple and family therapists to consider in the provision of online psychotherapy. They are non-binding practices designed to minimize risk to client and therapist alike, and to facilitate appropriate communication on technology issues.

For ease of reading and navigation, we have broken these guidelines into the following sections.

1. Compliance
2. Infrastructure
3. Advertising and marketing
4. Informed consent
5. Initial assessment
6. Ongoing services
7. Crisis management
8. Failures and breaches
9. Accountability and review

Of course, technologies change quickly. So too can the regulatory environment surrounding the use of technology in online service delivery. MFTs are fundamentally obligated to remain abreast of changes in both law and technology that may impact their ability to effectively practice online.

1. Compliance

Follow applicable standards. MFTs engaging in online practice maintain awareness of, and follow, current applicable law and all other relevant standards surrounding online provision of psychotherapy where the client is physically located at the time of service, as well as where the therapist is licensed. This includes federal law (such as HIPAA in the US), state and provincial law, applicable local law, ethical standards, the current standard of care for online services, and all other relevant rules. When a session involves multiple clients participating from multiple geographic locations, the therapist is bound to the laws of all client locations at the time of service.

Role clarity. MFTs engaging in online practice clarify with anyone participating in a service what the role and responsibility of that person is. Participants may include clients, family members, advocates, social service workers, probation officers, teachers, consultants, supervisors, and others. Documentation of therapy, including documentation to third-party payors, accurately reflects the services provided and the roles of each participant.

Verification of licensure. MFTs engaging in online practice provide clients information on the MFT’s licensure status, and with means to verify the MFT’s licensure status. Consistent with the AAMFT Code of Ethics, MFTs present information on their licensure in a manner that is truthful and not misleading.
2. Infrastructure

Bandwidth. MFTs engaging in online practice have adequate, secure, and reliable network bandwidth to provide the services being offered. They regularly evaluate the adequacy, security, and reliability of the available bandwidth, and keep bandwidth updated to current standards. Broadband service is a minimal standard for video-based services.

Local network. MFTs engaging in online practice ensure that their local network (such as a wireless home or office network) is secure and reliable. Passwords are always required to access a local network. Network passwords are regularly changed.

Hardware. MFTs engaging in online practice only use hardware that is functional and secure, and ensure that the MFT has adequate training and experience with the hardware to operate it comfortably. Computers, microphones, video cameras, and any related equipment are regularly tested to ensure continued functionality. The therapist has a backup plan in place in the event of a hardware failure. Hardware systems are password-protected.

Software. MFTs engaging in online practice regularly evaluate the adequacy, security, and reliability of the software used. They only use software that is functional, secure, and reliable, and for which they have adequate training and experience. Unless required by applicable law or policy, they do not require clients to purchase software to participate in online services.

Encryption. MFTs engaging in online practice use end-to-end encryption when providing services via technology. Such encryption is available for phone-based, text-based, and video-based communication. Clients are specifically made aware of when encryption is not being used (such as for unsecured email communication between sessions). Client data is stored in encrypted formats.

Therapist. MFTs engaging in online practice have current and adequate training and preparation for the provision of online service delivery. They seek regular consultation and retraining to maintain current knowledge and skills.

3. Advertising and marketing

Advertising. To the degree to which it can be controlled, MFTs engaging in online practice only advertise their services to consumers the MFT can legally engage in treatment. The MFT’s advertising either directly provides, or links to, a clear indication of the geographic locations in which the MFT is legally authorized to provide services.

Social media. MFTs engaging in online practice separate their personal social media profiles from professional profiles or pages. When professional social media profiles and pages are used, personal data is secured such that it is not publicly accessible. MFTs who utilize social media are cautious in their social media communications and inform clients about their policies surrounding social media communications.

Web sites. MFTs engaging in online practice clearly indicate on their web sites and other materials (1) the geographic locations in which they provide online services (2) the specific services that can be accessed online, (3) the hardware, software, and related requirements that clients must fulfill in order to be considered for online services; (4) alternatives to online treatment, and (5) their licensure or registration information in accordance with applicable law.

Content. MFTs engaging in online practice describe their online services and qualifications for providing those services in truthful and non-misleading language.
4. Informed consent

Risks and benefits. MFTs engaging in online practice inform clients in writing of the known risks and benefits of online therapy. Services and modes of service delivery that are experimental or innovative in nature are identified as such.

Technology failure. MFTs engaging in online practice inform clients in writing of the plan for technological failure. This plan is provided in writing to the client as part of the informed consent process. It establishes such guidelines as who should first attempt to re-establish a connection, how long to wait before presuming that a connection cannot be re-established, when to attempt alternate technologies (such as phone), how fees for services are impacted by technological failure, and other elements as deemed appropriate by the therapist.

Alternate treatment. MFTs engaging in online practice inform clients in writing of alternate treatment options, including in-person options. When in-person services are not accessible to the client, due to geographic, language, or other barriers, MFTs engaging in online practice document these barriers and inform clients of alternate treatment options that may be accessible via technology.

Privacy and security. MFTs engaging in online therapy recognize their responsibility for protecting client confidentiality and the security of data transfer and storage. MFTs engaging in online practice inform clients in writing of the steps they take to guard clients’ privacy and security. They inform clients of how client information is gathered and retained, how treatment records are stored, procedures for requesting treatment records, and related privacy practices. They inform clients of the use of third-party systems for treatment, record-keeping, billing, or related professional services, and of the limits to the MFT’s ability to ensure confidentiality and security.

Availability. MFTs engaging in online practice inform clients of their availability for additional communication between scheduled sessions, and for crisis intervention. They inform clients of the best means of between-session communications (phone, email, text messaging, etc.) and typical response time for such communications. MFTs inform clients of typical office days and hours, and of times when the therapist is not expected to be available. They inform clients of the best way to notify the MFT that the client is in a crisis situation. They further inform clients of the MFT’s ability to provide resources local to the client in the event of a crisis. MFTs using email or text messaging obtain specific written consent from clients to do so, and provide information on the risks and benefits of such communication technologies.

5. Initial assessment

Appropriateness for online services. MFTs recognize that in some cases, online therapy is not the most appropriate treatment option. Prior to committing to the ongoing provision of online services, MFTs engaging in online practice assess whether online services are appropriate to client needs. This assessment includes consideration of the type and severity of symptoms; the nature of the treatment being sought; client access to adequate, secure, and confidential means of online communication with the therapist; and client ability to effectively use the relevant technology. The MFT documents this assessment process and the criteria used to determine fit for online services.

Verification of identity and age for non-anonymous services. MFTs engaging in online practice take reasonable steps to verify the identity and age of each client. This does not prohibit anonymous service provision when such anonymity is appropriate (for example, services performed for an online crisis line). In such instances, MFTs should carefully consider their ability to meet all other legal and ethical requirements, and those best practices appropriate to the provision of anonymous services.
6. Ongoing services

Client identity. MFTs engaging in online practice establish and utilize a procedure to reconfirm the identity of the client at each session. This can be done through the use of a password or code word, visual recognition, or other means that would not be obvious to anyone other than the client.

Client location. MFTs engaging in online practice confirm and document the physical location of the client at each session.

Appropriateness for online services. MFTs engaging in online practice regularly reassess the client to determine appropriateness for online services. Such reassessment is documented. MFTs understand that clients may initially appear appropriate for online services and then, for a variety of reasons, become inappropriate for online care.

Monitoring progress. MFTs engaging in online practice regularly evaluate client progress. When the MFT determines that alternative treatments are more likely to be effective than the current treatment, the therapist assists the client in identifying appropriate alternative services, including in-person services.

Communication between sessions. MFTs engaging in online practice maintain clear professional boundaries when communicating with clients between sessions. They abide by stated policies regarding such communication.

Access to records. MFTs engaging in online practice have procedures in place to allow clients and others access to records in a manner consistent with applicable law. Third-party requests for records are fulfilled only after the MFT has taken reasonable steps to verify the identity of the party requesting records.

7. Crisis management

Advance planning. MFTs engaging in online practice prepare a crisis management plan with every client as soon as practicable in therapy. This plan includes resources local to the client, such as local crisis lines, hospitals, or other emergency services, as appropriate. Both the MFT and the client retain copies of the plan.

Coordination of care. MFTs engaging in online practice coordinate care with local crisis resources as appropriate when a client engages those resources. This ensures adequate continuity of care between providers.

Reassessment. MFTs engaging in online practice reassess the appropriateness of the client for online services as soon as practicable following a client crisis. This reassessment is appropriately documented.
8. Failures and breaches

Significant technology failure. In the event of a significant failure of technology that will impact the MFT’s ability to provide online services as scheduled, MFTs engaging in online practice contact clients to make alternate arrangements for continued care. Continued care may be in-person, via phone, online through reasonably equivalent alternative technology, or online through alternate providers, as appropriate to the needs of the client.

Data breach. MFTs engaging in online practice contact affected clients as soon as practicable upon becoming aware of a data loss or breach that could impact client data. MFTs engaging in online practice also contact regulatory and governmental bodies in accordance with applicable law to promptly report data breaches impacting client data.

Confidentiality breach. MFTs engaging in online practice are alert to possible breaches of security or confidentiality in their online communications with clients. Upon becoming aware of such a breach, the MFT promptly informs the client of the breach and any necessary steps to ensure improved confidentiality in the future. Depending on the nature of the breach, these steps may be on the client end or the MFT end.

9. Accountability and review

Annual review of technology and security protocols. MFTs engaging in online practice evaluate, at least once per calendar year, the adequacy and security of their technology infrastructure, updating hardware, software, and related equipment as appropriate. For password-protected hardware and software, passwords are updated at least once per calendar year.

Regular evaluation of competency and effectiveness in online practice. MFTs engaging in online practice regularly review their treatment outcomes. They seek out additional training and experience in the use of technology for online service delivery.
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Please, could you kindly consider this question regarding teleradiology consults in Florida by practitioners who are licensed to practice in other states?

The relevance of the question stems from the fact that dentists are increasingly using cone beam computed tomography (CBCT) in clinical practice and most of the scans are not being interpreted in full by a board-certified oral and maxillofacial radiologist (a dentist) who is specifically trained in the diagnosis of maxillofacial pathoses. As neuroradiologists (ref: Grossman and Youssem text book on neuroradiology) can confirm, oral and maxillofacial radiology is a subspecialty that specifically deals with oral and maxillofacial pathoses including odontogenic and non-odontogenic tumors, cysts, developmental anomalies including syndromes, oral and temporomandibular joint rehabilitation, orthognathic and oral surgical procedures, all of which require acquisition of cone beam CT studies. Most dental practices have access to this technology.

The American Academy of Oral and Maxillofacial Radiology advocates reading of all complex CBCT studies that capture image data beyond one or two teeth so that pathoses are not missed. Unfortunately, there are only less than 100 maxillofacial board certified radiologists in the US. Keeping patient welfare in mind, it is important that they receive adequate care from a complete and thorough interpretation of CBCT data already captured by the dentist. If oral and maxillofacial radiologists (who are dentists by training with specialty and board certification, following years of training in maxillofacial pathologic diagnosis) licensed to practice radiology in other states can read CBCT scans that are sent to them, it would be similar to the patient traveling to the state the radiologist is fully licensed to practice in. The report can then be sent back to the referring dentist in Florida so that an accurate diagnosis can be made, especially in light of the fact that there are very few oral and maxfac radiologists in the US to provide this service. In the interest of patient welfare, this seems to be the solution. Please, could the committee discuss this issue?

Thank you much for your time and attention.

Madhu K. Nair DMD MS PhD Dipl ABOMR
DEFINITION

1) I feel keeping things as simplified is better. Since we currently have “telemedicine” definition amongst all boards, we should keep that language and telehealth should be added as an “OR” not recreate definition. Example like the ATA model of “telemedicine” or “telehealth” means.....

2) Definitely list what telemedicine/telehealth IS NOT... audio only telephone, email message, text messaging, facsimile transmission, US mail or other parcel services or any combination thereof.

3) Telemedicine/telehealth should include....synchronous and / or asynchronous via HIPPA compliant methodology.

   Allow live video, store and forward, remote patient monitoring

REIMBURSMENT

1) I definitely feel payer parity for all commercial and Medicaid carriers. Also payment parity should be same as other services with appropriate CPT coding based upon definition of code (i.e.: for existing patients, need to meet 2 of 3 criteria with medical decision making the most valuable).

2) Place of service code needs to be defined as this is NOT an in-office visit nor is it a home visit. The billing codes can be “office visit” not “home visit” codes as home visit are very costly. (office visit for provider are 99211-5 and different for various specialties - dental, psychiatry, therapy, etc).

3) Allow “new patient” first visit examination but billing codes MUST meet CPT definition (3 of 3 criteria)

CONSENT

1) Need some type of consent whether in existing provider chart or when completing intake forms for first time users. Same type of consent utilized / required in any visit / care

Cross - State lines (location of service)

1) All providers MUST be licensed to practice their specialty in Florida and carry malpractice insurance based upon their license.

2) Allow telemedicine / telehealth to be done across state lines by either party (example: patient traveling and provider in Florida OR provider traveling and patient in Florida)
Telehealth is a powerful tool for redefining how we engage patients, delivery positive health outcomes and drive system efficiency and sustainability in the State of Florida.

In order to succeed however, clarity around the definition and depth and breadth of telehealth is essential. While many definitions of telehealth focus exclusively on the use of video communication technologies to connect patients and providers either synchronously through point to point technology (eg. Physician video visit, specialist consults) or asynchronously (eg. Teledermatology), the real opportunity lies in the ability of the State to embrace a multimodal approach to telehealth.

The best (and most direct) definition comes from the American Telemedicine Association. The ATA states that Telehealth (and its synonym telemedicine) is the remote delivery of health care services and clinical information using telecommunications technology. **This includes a wide array of clinical services using internet, wireless, satellite and telephone media.**

This last point is essential for the crafting of the definition for Florida. A definition of telehealth that focuses on simply establishing a video link between an originating site and a receiving site is not sufficient. Innovation in the telehealth space is moving faster than ever and the use of the full range of telecommunications technologies to support the delivery of care is an enormous opportunity for the State of Florida. The legislative definition must therefore be broad enough to include both traditional and emerging innovations in the telehealth space and fully leverage internet, wireless, satellite and telephony modes of communication now and in the future. Our definition of Telehealth should therefore include:

- Video based telehealth solutions (both synchronous and asynchronous)
- Telephone and voice based telehealth solutions (POTS, cellular, smart phone, internet connected device, VOIP)
- Artificial Intelligence based telehealth solutions (virtual nurse, doctor, care manager)
- Remote Patient Monitoring Solutions (biometric and sensor based solutions)
- App based patient and caregiver support and care coordination solutions

Defining an inclusive, yet thoughtful, definition of telehealth will allow Florida mitigate many of the challenges faced by other states and prepare Florida to encourage the adoption and utilization of innovative telehealth solutions across the health care continuum.