



Senate Bill 780: Authorizing the regulation of telemedicine by professional licensing boards; and providing for insurance coverage of telemedicine.

Testimony Prepared By:

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Pennsylvania General Assembly  
House Professional Licensure Committee

North Office Building, Hearing Room 1, Harrisburg, PA 17101  
Wednesday, September 12, 2018, at 9:30AM

Good morning,

My name is Bimal Desai and I serve as the Assistant Vice-president and Chief Health Informatics Officer at the Children's Hospital of Philadelphia. I oversee our programs in Digital Health, Analytics, and Clinical Informatics. I am also a practicing pediatrician and care for hospitalized children on the General Pediatrics Inpatient service.

- First, on behalf of the Children's Hospital of Philadelphia, I want to thank Chairman Mustio, Minority Chairman Readshaw, and the members of this committee for having this hearing on this important issue and allowing me to represent CHOP and testify.
- I'd also like to thank Senator Vogel and Representative Quinn for their leadership on this legislation.

The bulk of my testimony will focus on how telemedicine and this legislation will help to expand and improve the delivery of health care in Pennsylvania, especially for the most underserved populations. I plan on providing you real-life examples of some of our different telemedicine programs.

One critical piece of this legislation is the notion of "Coverage Parity", which is the requirement of a payer to provide coverage for telemedicine services in every circumstance where the same service is also covered as a face-to-face encounter. Simply stated, this section of the legislation ensures that physicians and healthcare providers who offer telemedicine care as an adjunct or alternative to face-to-face care will be compensated for their clinical work.

Coverage parity also provides protections for consumers and assurances for healthcare providers, reducing denial of claims and out-of-pocket expenses for patients. Today, because insurers cover some types of visits in some circumstances but not others, it is challenging to create a comprehensive telemedicine program that benefits all patients. Both in our state and nationally, this lack of coverage parity has hindered adoption of telemedicine. Of note, this legislation does not mandate "Reimbursement Parity" for telemedicine. We recognize that reimbursement should be commensurate with the complexity and extent of care provided.

There are many ways that telemedicine can benefit Pennsylvanians:

First, **telemedicine is patient-centered**. We tend to overlook that the cost of an illness includes not just the medical expenses, but also the cost to society - the “indirect” costs. Consider pediatric ear infections, one of the most common outpatient conditions we see. In the United States, the annual burden of this disease is three to five billion dollars per year. Shockingly, nearly 90% of that is the indirect cost of care: specifically, the cost of a parent missing work and the cost of transportation to and from the healthcare site. (ref: Alsarraf *et al.* Arch Otolaryngol Head Neck Sur, 1999). A truly patient-centered healthcare delivery model would allow families to seek care in a way that does not jeopardize employment, minimizes school absenteeism, and reduces time spent in travel. Telemedicine can help to accomplish all of these goals.

From our own data, we know that telemedicine visits for patients who had knee surgery saved parents an average of 100 miles of driving. That could easily be the difference between having to miss a day of work or not. No Pennsylvanian should have to risk their employment, pull their child out of school for an entire day, and then spend the day fighting interstate traffic to receive care that could just as appropriately be provided via telemedicine. Where we can ensure that a telemedicine offering is clinically equivalent to face-to-face care, we should give patients the option to choose telemedicine.

Second, **telemedicine is more equitable**. We know that the distance patients must travel to receive specialized care is linked to health outcomes: the further you live from the site of care, the worse your outcomes are for a variety of conditions. But telemedicine offers a way around this inequality: a recent Pew Research Center survey on internet usage showed that 77% of Americans have smartphones, and between 80% and 98% of Americans have internet access, and those numbers are up-trending year after year. For the vast majority of Pennsylvanians, that means your mobile phone or home internet connection has the potential to improve your access to healthcare via telemedicine, regardless of where you live.

A number of clinical programs at CHOP could benefit from telemedicine, allowing us to offer patients who travel long distances the same standard of care as we offer patients who live nearby. Imagine a child with terminal cancer receiving palliative care from the skilled doctors and nurses at CHOP. Today, our palliative care team will drive to the child's home, but we are not able to drive more than an hour because it's simply not practical. So that travel time, by definition, means patients who live in the Poconos cannot benefit from the same standard of palliative care as patients who live in Paoli. It limits how families can interact with the palliative care providers at critical moments. I believe our families deserve better.

In another example, through a unique partnership with the City of Philadelphia, we provide evaluation for children who are victims of child abuse and neglect at a clinic in North Philadelphia. With one pediatric child abuse fellow on site using a high definition exam scope and one attending physician offering remote consultation via video, we can ensure that children receive the same high standard of care we offer on our own campus. Overnight, when the child abuse specialist may not be in the hospital, we use the same telemedicine technology to provide consultation to the CHOP emergency department, so that, regardless of the time of day, every child who is a suspected victim of child abuse receives the same, high-quality evaluation and documentation of their physical findings. We simply could not offer this service as consistently and at the scale we do without telemedicine.

Third, **telemedicine is more timely**. Many studies have shown that for clinical conditions where minutes matter, like adult stroke care, a remote assessment by a specialist can be effective. As part of a teleconsultation program between our CHOP-based neonatologists and the CHOP transport team, just this past Sunday night we were able to help the team at a referring hospital stabilize a very sick infant, to allow for safe transportation to CHOP.

As another example, we are taking steps to address the high demand for pediatric dermatologists in our region. As it turns out, a number of common pediatric dermatology conditions can be effectively triaged or diagnosed using a high-definition image, the kind that your typical smartphone can easily capture. That's why we are developing a

tele dermatology mobile app at CHOP, whereby parents can securely capture and transmit pictures of a child's rash, and get a diagnosis and treatment recommendations within a day - not a week, not a month.

Fourth, **telemedicine is cost effective**. Research has shown that care coordination and care management strategies that use telemedicine offer high value. As a basic principle, if a standard of care can safely be provided at home, that approach is always better for the patient than care provided in the hospital. In a landmark study, researchers in Europe showed that a program of home weight and caloric monitoring using a simple iPad application and twice-weekly telemedicine visits shortened NICU length of stay by a staggering 22 days.

Our own Neonatology Telemedicine Program was started in 2016. Our Neonatologists observed that 50% of NICU graduates come back to the Emergency Department within three months, and 30% were readmitted to the hospital, with the first 2 weeks at home being a particularly risky time period. For the parents of a sick infant who has just "graduated" from the NICU to home, going from the near-constant surveillance of the NICU to suddenly being "on your own" is a terrifying prospect. In response to this, we started the CATCH program, which uses telemedicine to help transition complex NICU patients to home.

The early outcomes of the CATCH program are promising: nearly half the time, the video visits provided information that would have been missed by phone call alone. Nearly half the time, parents reported that the telemedicine visits prevented additional calls or visits to a medical provider. Finally, in four of these visits, the CATCH team were able to identify that the infants needed to return to the hospital sooner, allowing for controlled admissions instead of emergency visits after the patient was already decompensating.

CHOP is actively developing population health and care management strategies to facilitate earlier discharge from the hospital and to keep patients healthier at home, and we envision telemedicine will be part of this approach. As the technology matures, we also think there's a role for remote monitoring of our sickest patients. We need a robust telemedicine infrastructure to support these programs, so that we can

be better stewards of healthcare resources and provide the highest value care to our patients.

Fifth, **telemedicine is safe and effective**. In 2016, the Agency for Healthcare Research and Quality looked at nearly 1,500 published studies of telemedicine. Their conclusion was that telehealth interventions work for patient monitoring, chronic disease management, and psychotherapy. Through better communication and care coordination, telehealth was associated with reduced mortality, improved quality of life, and reduced hospital admissions.

Of course, not every visit is appropriate for telemedicine, and that is not the goal of this bill. Health systems already successfully deal with the limitations offered by different care modalities – our systems already acknowledge that the Emergency Room is not the place to go for routine care, the primary care office is not the place to go for surgery, and the surgical clinic isn't the best place to show up when you have the flu. In the same way, you can't fix a fracture via telemedicine, but you can assess a recent surgical incision for infection, you can assess if a patient with asthma is in respiratory distress, and you can coordinate the care of a medically complex child. This bill is about how we can use telemedicine to support high quality, lower cost care for all Pennsylvanians.

Finally, I wish to leave you with the story of our partnership with the Norristown Area School District, a program that was featured in a recent op-ed in the Philadelphia Inquirer, and which has also garnered attention from the Children's Hospital Association and American Academy of Pediatrics.

The program allows School Nurses to receive live consultation from a CHOP pediatrician through a novel telemedicine platform. Our goals are to:

- Increase access to care for sick children in order to potentially reduce the severity of an illness by catching it early;
- Reduce the utilization of urgent care centers and emergency departments for low acuity care

Regarding the last goal, this is a quote from the parent of a child seen via the school telehealth program:

*"[The telemedicine visit] was a big help. I was really busy at work—it would have been hard for me to leave. It was late on a Friday afternoon, so getting a doctor's appointment would have been difficult. Maybe we would have been heading to an urgent care over the weekend. But this was perfect!"*

Currently deployed at two schools in the district, we hope to expand the program to twelve schools this year. Members of my team, in fact, are attending the districts' parent open house events tonight to answer questions parents may have and to demonstrate how the video visits work.

This is no ordinary video conference. We provide the Norristown school nurses with a state-of-the-art device that fits in the palm of the hand, complete with interchangeable exam instruments, like a stethoscope and tongue depressor. The device allows a remote provider to see the child's throat and ear drums, to hear amplified heart and breath sounds, at the same time as the nurse performing the exam. These interactions with our experienced CHOP providers can help to coach school nurses and keep them updated on the latest common pediatric treatments. In addition, this program creates an important longstanding partnership with schools districts, nurses and families.

The next frontier for this partnership is to expand the services we offer, to provide much-needed telebehavioral health care to children. We will use a validated screening tool, designed to identify students struggling with mental health issues so that they receive interventions earlier. Why is this intervention so important? Among adolescents age 13 to 18, one in two will have a diagnosable mental health condition at some point, and one in five will exhibit severe impairment according to the National Institutes of Health. When offered via telehealth, children are more likely to get the mental health assessments and care they need.

Consider what this represents: through this program children; at risk for depression, suicidality, anxiety, and behavioral outbursts; can

receive the mental health screening and counseling they deserve via telemedicine, before a mental health crisis manifests.

While this kind of telehealth program may be new to Pennsylvania, it's being used and reimbursed in many states, including New York, Florida and Texas. Children in Pennsylvania deserve the same robust access to mental health services. Furthermore, by being more aggressive with screening and preventive mental health care, we believe we can intervene before children present in crisis to the emergency room.

I believe that the passage of this legislation would represent a critical moment for Pennsylvania – whether your town has 2 thousand, 20 thousand, or 200 thousand residents, you deserve the same access to safe, effective, patient-centered, equitable, timely, and cost-effective telemedicine. The degree to which hospitals and health systems can offer and implement telemedicine hinges on the Coverage Parity outlined in this bill. As a physician, as a health technologist, as a cost-conscious patient, and – most importantly – as a parent, I hope you will support this bill.

I would like to thank you Chairman Mustio, Minority Chairman Readshaw, and members of the Committee for this opportunity to testify and share our vision of telemedicine at Children's Hospital of Philadelphia. I look forward to answering any questions you may have.

## **About UPMC Telehealth**

UPMC Telehealth is a recognized national and international leader in leveraging technology to expand access to high quality clinical care in a more efficient manner. Telehealth at UPMC offers an unprecedented opportunity to expand health care expertise to patients at any time in any geographic area. With more than \$1 billion invested in information technology over the past several years, UPMC continues to innovate and refining the technology, protocols, and applications for telemedicine. UPMC has been named as one of the “100 and “Most Wired Advanced” health systems in the United States by Hospitals & Health Networks. UPMC has partnered with leading vendors such as American Well, Curavi Health, Vivify and others to develop technology solutions that will benefit health care providers and patients worldwide. Significant progress has been made in advancing technology to connect patients, health care providers, and payers through modalities such as live two-way video, store-and-forward asynchronous communications, and secure information distribution. Using UPMC’s advanced technology infrastructure and these leading-edge methods, health care providers can deliver the same high-quality health care through remote and virtual means as they do through in person face-to-face interactions.

In FY 18, UPMC providers completed over 44,000 telemedicine visits through more than 40 clinical specialties. In addition, through UPMC AnywhereCare, patients have 24/7/365 days per year access to on-demand clinical care for low acuity, urgent care type visits. Since November 2013 over 24,000 UPMC AnywhereCare visits have been submitted. Further, UPMC Telehealth leadership continues to recognize the potential of remote patient monitoring and recently partnered with a leading remote monitoring platform to enhance care coordination across several chronic conditions and decrease unnecessary re-hospitalizations and ED visits.

It is estimated that as consumers become aware of virtual care services and experience the benefits and convenience, they will expect and demand these services from their provider network and payors. Through both existing and future telehealth services, UPMC continues to achieve its objective of enhancing high quality care coordination between members, patients and the provider community.

## **About UPMC**

A \$19 billion world-renowned health care provider and insurer, Pittsburgh-based UPMC is inventing new models of patient-centered, cost-effective, accountable care. UPMC provides more than \$900 million a year in benefits to its communities, including more care to the region’s most vulnerable citizens than any other health care institution. The largest nongovernmental employer in Pennsylvania, UPMC integrates 85,000 employees, 40 hospitals, 600 doctors’ offices and outpatient sites, and a 3.4 million-member Insurance Services Division, the largest medical insurer in western Pennsylvania. As UPMC works in close collaboration with the University of Pittsburgh Schools of the Health Sciences, *U.S. News & World Report* consistently ranks UPMC Presbyterian Shadyside on its annual Honor Roll of America’s Best Hospitals. UPMC Enterprises functions as the innovation and commercialization arm of UPMC, and UPMC International provides hands-on health care and management services with partners around the world. For more information, go to [UPMC.com](http://UPMC.com).