



**Testimony of  
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**Senate Bill (SB) 298  
Health Insurance - Reimbursement for Covered Services Rendered by  
Telemedicine  
SB 744  
Health Insurance - Coverage for Telemedicine Services**

**Senate Finance Committee  
Maryland General Assembly**

**February 23, 2011**

Children's National Medical Center (Children's National) is pleased to support SB 298, "Health Insurance - Reimbursement for Covered Services Rendered by Telemedicine," and SB 744, "Health Insurance - Coverage for Telemedicine Services." Children's National commends Senators EJ Pipkin and Catherine Pugh for their leadership in introducing SB 298 and SB 744 respectively.

***About Children's National***

With 283 beds, more than 1,330 nurses, and 550 physicians, Children's National Medical Center is the only exclusive provider of pediatric care in the Greater Washington metropolitan region. With six outpatient centers, five primary care practices servicing eight Maryland locations, and specialty care services provided in eight Maryland locations, Children's National is proud to be one of the largest providers of high quality pediatric primary, specialty and emergency care to Maryland's children and families.

***Overview of Telemedicine***

According to the Health Resources and Services Administration, telehealth is defined 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.

Telemedicine has proven to be an outstanding technique for healthcare providers and patients/families to collaborate on clinical and educational information to improve the health of children. Telemedicine technologies support diagnoses, second opinions, and education throughout the world, connecting hospitals, clinics or physician and patient homes. Medical data is sent to our specialists for review via telecommunications (internet, videoconferencing, secure file transfers, virtual private networks, etc.). This information can be viewed by physicians asynchronous (not at the same time) or synchronous (at the same time).

Children's National uses telemedicine services to deliver high-quality, cost-effective care to underserved populations – improving their access, continuity of care and overall health. Children's National will support the use of digital technologies in the practice of medicine that is patient-centered, population-based and timely.

### ***Telemedicine at Children's National***

Although development of telemedicine began at Children's National in the early 1990's, our first highly successful program began in April 1998. Craig Sable, MD, Children's Director of Echocardiography and Medical Director of Telemedicine, established a telemedicine link between the nurseries at Holy Cross Hospital in Silver Spring and the echocardiography laboratory at Children's National. Echocardiography is an ultrasound of the heart.

Today, 13 years later, Children's National has close to 100 national and international telehealth connections and our clinicians have conducted more than 11,000 consultations in cardiology, neurology, radiology, neonatology, dentistry, genetics and other subspecialties. Children's National has regional telemedicine sites in Silver Spring, Cheverly, Hagerstown, Leonardtown, Annapolis, Prince Frederick, Clinton, Salisbury, Frederick, Rockville and La Plata. In addition to our regional partners, we have connections in 14 countries and 20 states in the US, including Maryland. Cardiology alone is growing rapidly at more than 1,000 consultations a year. Our existing telemedicine partnerships have successfully kept thousands of children in remote or transiently underserved areas safer and healthier. Our regional partners in Maryland include: the National Institutes of Health (National Cancer Institute and National Heart Lung and Blood Institute); Holy Cross Hospital; Prince George's Hospital; Anne Arundel Medical Center; Frederick Memorial Hospital; Washington County Hospital; Peninsula Regional Hospital; Southern Maryland Hospital; Shady Grove Adventist Hospital; St. Mary's Hospital; and Civista Medical Center.

The Children's National Telehealth Program is the only program in the region focused exclusively on pediatric health care. Moreover, while many telemedicine programs tend to focus on rural areas, our programs target underserved and at risk children in urban and suburban, as well as rural communities regionally, nationally, and in several developed and developing countries.

Each year at Children's National Medical Center over 300,000 children receive health care, including primary care and life-saving surgeries and treatment. Close to half of our annual 300,000 patients are insured by Medicaid and the other half has private insurance. During this same time period, our Telehealth Program provided timely, accurate diagnoses and treatments for more than 3,000 children regionally, nationally and internationally; educated 300 medical providers; and helped to reduce families' expenses and unnecessary travel time. In addition, our community-based health care initiatives significantly improve health outcomes for children with asthma, obesity and other illnesses.

### ***The Need: A Vision of Equal Access to Care for All Children***

The availability of pediatric clinical services varies markedly throughout the United States. Subspecialist shortages, socioeconomic status and location can potentially affect access to timely care, whether a child lives in a thriving urban area or a remote rural town far from a hospital or pediatric practice. Children's National knows from its 15 years of experience in the field that telehealth technologies can make a significant difference for these children and their families. Our vision for telehealth is to apply existing and emerging technologies to pediatric health care, erasing distance and other barriers in order to bring the promise of better health within reach of all underserved and at-risk children wherever they may live, and regardless of their personal circumstances.

Access to pediatric specialty care is critical to children with chronic and life threatening conditions. Because children are generally healthy, however, pediatric specialty care such as cardiology, neurology and oncology is regionalized and concentrated in children's hospitals. As a result, families with sick children often must travel outside their communities to access necessary care. Children's telemedicine services bridge this gap by conveniently and efficiently facilitating consultations between Maryland hospital medical teams and Children's specialists.

### ***The Solution: Benefits of Telemedicine***

Telemedicine gives medical teams at Maryland hospitals access to real-time consultation with Children's pediatricians and pediatric specialists. Children's telemedicine services also offer a number of advantages to Maryland families:

- Families can access pediatric specialty care near home, avoiding the expense and inconvenience associated with traveling to Children's National in Washington.
- Children can be discharged in a timely fashion and avoid unnecessary and lengthy hospital stays.
- Telemedicine reduces healthcare costs by cutting down on unnecessary tests and procedures.

Telehealth technologies augment conventional healthcare delivery by reducing geographic and time barriers to access to care. Telehealth can connect community and tertiary care hospitals, patient homes and practitioners, providing continuity of care; it can bring timely attention from providers with appropriate expertise in acute cases before transfer to tertiary care facilities; and it can mitigate the extent and severity of the impact of disasters, whether natural or man-made, on the health of a population. Telehealth also promotes leading-edge academic endeavors such as research and data collection, supporting innovation where it is needed most.

Increased support of telehealth services impacts several areas of focus at Children's National:

- Innovative clinical and educational programming that supports treatment for children with life-threatening and chronic illnesses;
- New regional, national and international partnerships and research collaborations that strengthen the health care that children throughout the world will receive;

- Public policy and advocacy efforts for the use of new healthcare technologies to advance medical practice; and
- Disaster response planning for the nation's capital.

### ***Challenges for Telemedicine***

Despite having made significant partnerships and investments, our telehealth program currently lacks consistent financial mechanisms to support demand for new partnerships and expanded services. Reimbursement for telemedicine services will support immediate growth in many program areas including clinical care, research, and caregiver education. Expanding access to subspecialty health care services for vulnerable patients; increasing health screening and education for underserved/at risk children; and caregiver training and support are necessary components to equal access to high quality care across the state. Current areas of need include:

#### Subspecialty Health Services for Patients

- Expansion of live cardiology and cardiovascular surgery consultations with partnering community hospitals to support early diagnosis and treatment of congenital heart disease
- Live clinical evaluation services and collaboration with maternal-fetal medicine specialists
- Live and interpretive clinical evaluation services by our psychiatrists, neuropsychologists, and neurologists for children suffering from autism, demyelinating diseases, brain tumors, and attention deficit/hyperactivity disorder
- Live and interpretive genetics test evaluations for children with hard-to-diagnose neurological diseases such as pediatric multiple sclerosis and other rare pediatric illnesses
- Life-saving services for children with chronic diseases, such as home- and school-based glucose-level monitoring for diabetic children
- Live and interpreted pulmonary and radiology clinical studies/evaluations

#### Screening and Education for Underserved/At-Risk Children

- Tele-dentistry, connecting children to oral surgeons in the main hospital to identify those who will benefit from preventive services such as dental sealants, and those who require advanced oral health care
- Dissemination of educational guidelines for prevention and diagnosis of mild traumatic brain injury sustained during recreational youth sports

#### Medical Caregiver Training and Support

- Multi-institutional brain tumor treatment-planning boards, meeting bi-weekly in support of both clinical and research efforts at the National Cancer Institute and throughout the region
- Surgery case management conferences that share multiple forms of digital data such as X-Rays, angiograms, and videos simultaneously between the hospital, our satellite clinics, and regional partners

- Medical education and training for fellows and residents serving at Children's National in various subspecialty clinical areas, including cardiology, neurology, orthopedics, surgery, and oncology
- Clinical conferences, grand rounds, treatment planning and other educational opportunities offered in conjunction with partnering sites, including hospitals, research facilities and universities

The impact of enacting SB 298 and SB 744 into law will be felt over many years as relationships and collaborations deepen across the region. The result will be quality support of our local physicians in their efforts to provide the best care possible for vulnerable children in their practices. Lack of reimbursement will continue to limit access to critical pediatric subspecialists and will force children and families to spend useless additional time and resources finding access to these providers, which can affect the health and well-being of these children.

### **Our Patient Stories**

The following stories represent compelling examples of what happens on a weekly basis in cardiologist Dr. Craig Sable's practice, and illustrates the positive impact that telehealth can have on a family's life and a child's care.

*Patient One: Four years ago, on the very day telemedicine was installed in his home, Dr. Sable received an urgent phone call from a physician on the United States Army Base in Landstuhl, Germany. There, a newborn's rapid breathing seemed to indicate a blocked blood vessel in the heart. As the echocardiogram was inconclusive, a three-way videoconference was established between Dr. Sable's home, the learning center at Children's National, and Landstuhl, Germany. As a result of their consultation, the team of military physicians decided to wait 48 hours and then repeat the diagnostic test. They hoped that the baby was just having a slow transition. Two days later, the new echocardiogram confirmed the baby's heart to be normal. The family, understandably devastated at the first diagnosis—not only because they thought their child may need heart surgery, but also because of the total disruption of their lives that transport to the United States would bring about—expressed their gratitude to Children's 24-hour on-call telehealth program, as did the military physicians. In the end, telemedicine spared the family significant anguish and saved well over \$50,000 in healthcare and transport costs.*

*Patient Two: A one-day old was breathing fast at Southern Maryland Hospital and the doctors were giving oxygen. Teleecho showed that half of the heart was missing and child needed urgent medical treatment (including less oxygen and a special medicine to preserve the bloodflow the way it is before birth; extra oxygen is very dangerous in this condition), transfer to Children's Hospital, and surgery. This child is now 10 and is thriving after 3 surgeries. He even did a telemed demo for President Bush in 2004. Without telemedicine he would have likely died or gotten much sicker, making later surgery much riskier (and much more expensive). In this condition, even a 12 hour delay in diagnosis can lead to the body's organs starting to break down.*

*Patient Three: At Peninsula Regional Hospital in Salisbury, MD a one day old baby was breathing fast and had low oxygen. They were all set to transfer the baby, thinking it was a heart problem. The teleecho ruled out a heart problem, the baby was*

*treated for a mild respiratory infection and went home with mom on day-of-life 3. Without telemedicine the baby would have been unnecessarily transported (at a cost of nearly \$10,000) and the parents would have had to drive to DC, taking time off of work. The baby would also have been given aggressive and risky treatment that was unnecessary.*

As exemplified in the patient stories above, telemedicine does work for patients, families and caregivers in Maryland and around the world. Utilizing telehealth systems of care significantly decreases healthcare costs and increases efficiency through timely diagnosis and treatment, responsive management of chronic diseases, shared health professional staffing, medical caregiver education, and fewer and shorter hospital stays for vulnerable children. Our collective strength will lie not only in the quality of our clinicians and our thriving partnerships, but also in our proven ability to design, develop and execute evidence-based programs that effectively use technology to improve access to care and outcomes for children.

Reimbursement for telehealth services will make it possible for providers in Maryland to formulate the best treatment plans for children with critical and chronic health conditions, diminishing differences in the quality of care due to a child's geographic location or socioeconomic status. The enactment of SB 298 and SB 744 will allow the expansion of services, bringing timely and critical medical care to infants, children and young adults who have limited access to subspecialty and preventive care. These laws will give Maryland an opportunity to have a major impact on the care that at-risk, critically ill and underserved children receive in our state, preserving the lives of our most precious resource—our children—by eliminating barriers to care and giving them their best chance for a healthy future.