TELEMEDICINE AT UPMC

Teledicine 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 has also been innovating and refining the technology, protocols, and applications for teledicine. UPMC has been named as one of the “100 Most Wired” health systems in the United States by Hospitals & Health Networks.

UPMC has partnered with leading vendors such as Alcatel-Lucent, Cerner, and IBM 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 face-to-face interactions.

BENEFITS OF TELEMEDICINE

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Secure, Direct Patient Access

Teledicine brings effective health care directly to the patient either at a medical facility, home, or any other location. This is a valuable service for many patients that are in a rural or medically underserved area who may not have access to the specialists needed to monitor and treat their health concerns. Teledicine can address an immediate need that may not otherwise be addressed. Physicians at another location can perform an exam via video conferencing or view the patient’s medical records, vitals, images, and other pertinent information electronically. Vital patient information is safely kept and made easily accessible to the appropriate health care team treating the patient. This information allows the team to make a complete assessment and derive an agreed upon treatment plan.

Improved Quality of Care

Increased access to health care through technology means that symptoms and complications can quickly be diagnosed. There are many treatments that are time-sensitive and teledicine allows patients the opportunity to be given those health care options. Specialists can quickly assess the patient from their remote location without having to wait for the patient to be transferred or sent to another location. In addition, early detection of potential health issues may lead to better overall health of the patient, reduced emergency room visits and hospitalizations, and earlier discharge from hospitalized care.

Cost Effective

Teledicine can reduce the cost of health care and increase efficiency through better management of chronic diseases, reduced travel time and transportation expenses, and fewer or shorter hospital stays. It also allows the remote hospitals to reduce their costs by eliminating the need for direct-hire specialty care, avoiding unnecessary on-call coverage costs, and shortening their patient length of stay.

Most of all, teledicine empowers physicians and patients to actively participate in the immediate needs of one’s own health, leading to more successful health care outcomes.

David P. Gibbons
President, UPMC Northwest

At UPMC Northwest, we are proud of the fact that our region’s residents have access to not only our own highly qualified medical staff, but world-renowned medical experts located at our larger UPMC sister hospitals in and around Pittsburgh. We are very fortunate to be able to provide our patients with a level of care found locally only at UPMC facilities. The physicians and other clinicians at UPMC Northwest see the addition of teledicine as an essential tool in the diagnosis and treatment of many illnesses and injuries seen in their patients. Much success has been documented with stroke telemedicine locally, as well as with trauma, diabetes management, dermatology, interventional neurovascular follow-up, movement disorders, and cardiology.

There are many examples of positive outcomes as a result of using teledicine technology, and they are growing by the day. My job, as well as those of my staff at a rural hospital, is made much easier by the teledicine technology provided by UPMC.
WHAT UPMC PROVIDES

UPMC physicians partner with hospitals and other medical facilities to provide telemedicine services. UPMC also can provide administrative support, business assistance, and information technology services to organizations interested in telemedicine services. UPMC has significant experience with the development and planning necessary to commence a telemedicine program. UPMC promotes the availability of telehealth services and encourages involvement in telemedicine by physicians, hospitals, and other medical professionals.

Telemedicine Services
- Telestroke
- Telerdocrinology
- Teletrauma
- Teleophthalmology
- TeleICU
- Telewound care
- Telepsychiatry
- Telepathology
- Teleradiology
- Telehematology
- Telecardiology
- TeleMFM (Maternal-Fetal Medicine)
- Teleendocrine (Diabetes)
- Teleurology
- Teledermatology
- Teleurology
- Teletrauma
- Teleophthalmology
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- Telehematology
- Telecardiology
- TeleMFM (Maternal-Fetal Medicine)
- Teleendocrine (Diabetes)

WHY UPMC?

UPMC has evolved over the last two decades into one of the nation’s leading integrated health enterprises advancing the quality and efficiency of health care. UPMC serves residents of western Pennsylvania as well as patients across the nation and around the world in need of UPMC’s highly specialized services.

UPMC has developed regionally, nationally, and internationally renowned programs, helping earn UPMC repeated recognition among “America’s Best Hospitals” by U.S. News & World Report. With more than 2,800 physicians, UPMC is recognized for its expertise in cancer care, ear, nose and throat care, gastroenterology, geriatrics, cardiology and cardiac surgery, nephrology, neurology and neurosurgery, orthopedics, psychiatry, pediatrics, women’s health, dermatology, rehabilitation services, pulmonology, and rheumatology.

By choosing UPMC for your telemedicine services, you receive localized focus, academic expertise, clinical and technology experience, and excellent quality. Depending upon your needs, the following services are available to you:

Additional Services
- 24/7 access to specialists
- documented electronic medical notes on the care provided
- educational and training opportunities including CME programs
- grand rounds presentations for medical and nursing staff
- IT support services
- Continuing medical education (CME)
- Teleconferencing and grand rounds

Additional IT Support Services
- connectivity assessment
- planning and assistance with execution of connectivity needs
- troubleshooting connectivity between UPMC and the telemedicine equipment
- maintaining “helpline” for technical questions and troubleshooting
- training of hospital’s IT staff
- installation and/or support of software updates required by UPMC

SPOTLIGHT ON TELESTROKE

More than 795,000 people experience a stroke each year. In fact, stroke is the fourth leading cause of death in the United States and the leading cause of adult disability. The UPMC Stroke Institute’s multidisciplinary team uses advanced therapies to treat stroke and help patients recover physical and cognitive function.

In 2006, the UPMC Stroke Institute implemented the first stroke telemedicine program in western Pennsylvania. The Telestroke program uses state-of-the-art video conferencing technology to link experts at the UPMC Stroke Institute to emergency department (ED) physicians, allowing more patients to be treated faster and closer to home. These special units feature a computer monitor and remote-controlled camera to allow for two-way audio/video communication with stroke experts, who are able to “see” and assess the patient. Neurologists based in Pittsburgh can ask questions of the patient, family members, and local physicians and view CT scans — all live and in real-time — to help assess the patient’s condition and help ED physicians determine if the patient is a candidate for acute stroke therapy, including intravenous TPA.

One day, I was sitting at home alone and suddenly my entire body began to get numb. Starting on my left side, I immediately called a friend of mine, but couldn’t talk so I mumbled something and her husband said that there was something wrong over there we better get going. When they arrived and looked in the door, she said, “Oh no, she’s had a stroke.”

During a stroke, the most important thing to do is get to an emergency room and be treated by a neurologist as fast as possible. But I lived in a rural area where there was no neurologist on staff at my local hospital. Fortunately, they have a new technology called Telestroke which allowed Dr. Lawrence Wechsler, Chairman of the Department of Neurology, to evaluate me from Pittsburgh over a hundred miles away.

When Dr. Wechsler began performing the neurological exam through the audio/video communication system, he had already reviewed my CT scan and evaluated the laboratory studies. Because of this, he was able to make the quick, life-saving decision that I was a good candidate for the clot-busting drug Tissue Plasminogen Activator (TPA) to minimize the damage of the stroke.

I arrived at UPMC within the three hours necessary to be given TPA. I was discharged in five days and left the hospital virtually without any symptoms of the stroke. I could walk, talk, and eat.
In addition to IV tPA, acute neurological intervention treatment is available that can also improve outcomes and decrease patient disability. The UPMC Telestroke program provides an opportunity for patients outside Pittsburgh to have access to world-class UPMC care in their local hospitals, increasing the patient’s opportunity to be treated with IV tPA and assessed for interventional therapies and research studies.

The UPMC TeleStroke program is available at UPMC hospitals as well as regional community hospitals.

TELEDERMATOLOGY AT UPMC

In response to a need for complicated inpatient medical dermatology care in the UPMC catchment area of southwestern Pennsylvania, Joseph English, MD, implemented a Teledermatology program at UPMC in the summer of 2008. This program allows a referring physician, resident or a mid-level provider at a hospital to gather the patient’s history and physical information, and use store and forward imaging to consult with a UPMC dermatologist on Dr. English’s team. In this way, patients at hospitals in outlying regions have access to world-class care that was previously only available in Pittsburgh. Teledermatology at UPMC has been used successfully at UPMC Mercy, UPMC Northwest, and UPMC Urgent Care Centers throughout the Pittsburgh area. Additionally, Teledermatology is being used to educate dermatology residents and facilitate faster care at our UPMC Presbyterian Shadyside campus. The UPMC Teledermatology program can offer inpatient, emergency, and outpatient consults for patients who are unable to see our dermatologists in the outpatient clinics in and around the Pittsburgh area.

TELEMFM AT UPMC

Currently, many patients living in rural areas with obstetrical complications, or medical conditions that put them at risk for obstetrical complications, travel to Pittsburgh for consultation with Maternal-Fetal Medicine (MFM). For many of these patients, a true face-to-face appointment is not necessary. Instead, a review of the patient records by the MFM physician, and a conversation via telemedicine will allow the MFM physician to make recommendations for patient management. These recommendations are then passed on to the referring physician, who continues to manage the patient’s care in the local community.

Telemedicine provides more convenient access to MFM specialists resulting in earlier utilization of MFM services. UPMC specialists work collaboratively with the patient’s obstetrician and primary care physician by providing consultations, co-management, and recommendations for at risk, high risk, or complicated patients both before and during pregnancy. This early intervention with a MFM specialist may prevent progression of obstetrical complications, thereby increasing the likelihood that the patient can remain a candidate for local delivery with her primary ob-gyn provider.

EMERGENCY CARE

Telemedicine is used in UPMC emergency departments to deliver emergency care to patients. Through the use of telemedicine technology, specialists and subspecialists have the ability to share expertise with other care staff without physically having to be on site. Specialist physicians can view patient information and images allowing them to provide expert care as quickly as possible. Relationships with outlying facilities also facilitate the distribution and sharing of this expertise.
CONTACT US

Contact us for more information about how UPMC can provide you and your patients with access to expert telemedicine care.

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