

Broadband USA Applications Database

Applicant Name: UPMC

Project Title: Connected Medicine Telehealth Network

Project Type: Sustainable Adoption

Executive Summary

7. Executive Summary of Overall Proposal

The UPMC (University of Pittsburgh Medical Center) is pleased to submit a proposal for the Recovery Act Broadband Technology Opportunities (BTOP) Sustainable Broadband Adoption grant, establishing the Connected Medicine Telehealth Network (CMTN).

UPMC is a nationally recognized healthcare delivery and financing enterprise and a leading nonprofit health system serving the needs of more than 4 million people each year. UPMC is the largest employer in western Pennsylvania and the second largest in Pennsylvania. UPMC operates a large managed care organization providing health insurance services for employer groups and governmental purchasers.

By integrating 20 hospitals, 400 doctors' offices and outpatient sites, long-term care facilities, and a major health insurance services division, UPMC provides a seamless continuum of care. In collaboration with its academic partner, the University of Pittsburgh Schools of the Health Sciences, UPMC has advanced the quality and efficiency of health care and developed internationally renowned programs in transplantation, cancer, neurosurgery, psychiatry, orthopedics, and sports medicine, among others.

Through redefined models of health care delivery, including population management, technological innovation, and patient-centered initiatives, UPMC is improving lives in western Pennsylvania and beyond. UPMC has invested significantly in information technology to link and integrate electronic medical records across multiple hospitals and care settings and has expanded clinical services and state-of-the-art medical expertise into international markets.

UPMC aims to provide timely and cost effective quality care to patients served by UPMC and its partner organizations. This proposal expands this model to provide equitable health care access to rural and underserved areas and vulnerable populations.

The CMTN will connect 86 hospitals, clinics, and other providers, enabling connectivity to provide patients in rural areas with access to state-of-the-art, cost effective, critically needed medical care, without leaving their communities.

According to Trends in Rural Pennsylvania, a 2003 report by The Center for Rural Pennsylvania, health care delivery is a critical factor in the overall economic viability of rural Pennsylvania. Rural counties face growing personnel shortages, rising insurance costs, unemployment and more than 10% poverty. Also, harsh weather, limited public transportation and mountainous terrain can make accessing health care a challenge for rural Pennsylvanians.

CMTN has the expertise to create an adaptable model to overcome unique geographical challenges. The ability to address these challenges will make this model cost-effective and replicable for future demands beyond Pennsylvania.

While the primary focus of the project is Pennsylvania, we are proposing to include Governor Juan F. Luis Hospital and Medical Center in the grant as a pilot to demonstrate solutions to geographic and regulatory barriers, driving utilization of available broadband for telemedicine services. Governor Juan F. Luis Hospital and Medical Center on the island of St. Croix (a rural and medically underserved area) in the Virgin Islands requested inclusion in the CMTN network to obtain specialty services not otherwise available to Island residents.

The CMTN project proposes to:

- Provide specialty and primary health care solutions that connect patients, physicians, caregivers, and supporting health care service providers through telehealth and remote monitoring services.
- Deliver specialty and primary care services Pennsylvania Mountains Healthcare Alliance (PMHA) hospitals (13), additional community hospitals (7), up to 46 Federally Qualified Health Centers, and across the 20 UPMC owned hospitals.
- Leverage strategic partnerships, existing processes and protocols, and proven and emerging technology to create a scalable platform to support the development of a telehealth network. CMTN will use real-time videoconferencing, store and forward, and remote monitoring solutions combined with the expanded use of electronic visits and integrated electronic health records to provide medical intervention, prevention, care management, education, and health advocacy.

- Prove the viability and scalability of remote monitoring program and technology through an initial pilot to 1,500 chronically ill patients. The solution value and cost-effectiveness will be rigorously measured and, if effective, the model will be optimized to scale to large chronically ill populations
- Pursue complementary strategies to leverage other Pennsylvania-submitted grants and specifically maximize opportunities related to the Pennsylvania Broadband Middle Mile Rural Consortium being submitted by STING Communications.

Historically, telehealth and remote monitoring platforms have focused on limited applications to small populations. The CMTN intends to create a scalable technology and operational model to meet the acute and episodic needs of a wide spectrum of patients, leveraging a collection of strong participating community hospitals and clinics.

This CMTN project will potentially create or save 90 jobs across communities in Western Pennsylvania. Healthcare facilities represent major employers in rural counties; keeping facilities viable, promoting the economic strength of these communities.

UPMC has extensive experience designing and implementing large scale system and program implementations. The project team will augment UPMC expertise with collaboration from strategic vendor partners and clinical partners. The overall cost of the CMTN project approximates \$48 million, \$9.8 million of which will be cost shared by UPMC.