Applicant Name: STAMFORD HOSPITAL

Project Title: Broadband Adoption and Telehealth Monitoring for Older Adults

Project Type: Sustainable Broadband Adoption

Executive Summary

The project responds to escalating health and technology related jobs, and the explosion of the aging population and demonstrates the effectiveness of utilizing tested biomedical technology in health monitoring in order to: (1) allow seniors to better manage their health and chronic diseases so that they may 'age-in-place,' increasing their quality of life while reducing the need for visits to the emergency room and transfers to nursing homes. (Studies have shown that 95% of seniors would prefer to age in their own home and live independently) (2) Create new career ladders within the health field (i.e. certified nurse's assistant-technology), with training to prepare them to (a) assist seniors in their use of the technology and participation in the program, (b) provide a path for CNAs and community health workers to quality for a new specialty with better compensation than they currently receive; (c) make possible the extension of electronic medical records systems to this population because of broadband availability. The project will expand in Stamford, CT, where a successful 6-month pilot project is being completed. Stamford Hospital's strategic partnership with Charter Oak Communities (COC), formerly the Stamford Housing Authority, provides access to low-income seniors in nine COC-owned and operated facilities. COC is fully committed to developing a sustainable, replicable model. Pilot programs will be established in Pontiac, Michigan, with the support of Pontiac Osteopathic Hospital, and in Los Angeles, California led by AltaMed Health Services, a Federally Qualified Health Center (FQHC). The tele-monitoring equipment is a small machine that monitors heart rate, blood pressure, weight, peak flow and oxygen levels on a daily basis. The device asks symptom-related questions; participants’ daily health information is automatically and securely sent over broadband to a secure website. Nurses have prescribed algorithms to respond to alternations in patient data. CNA technicians assist with equipment set-up and visit the seniors on a regular basis to support the use of telehealth technology. Consistent with industry findings, a robust education and awareness campaign is necessary for seniors to gain understanding and acceptance of broadband and tele-health services. With diminished services to low income seniors due to the economy, access to broadband provides new opportunities to support disease management, coordination and self-management which contributes to lower health-care costs and improved potential to age-in-place for this population. Tele-monitoring can reduce readmissions, re-hospitalizations and emergency room visits among participants. Long-term sustainability is possible utilizing a fully integrated, preventive care patient centered medical home model. This project is building on a NTIA TOP funded innovative pilot in Washington, DC between Community Preservation Development Corporation (CPDC) and the Catholic University of America (CUA). Led by Dr. Binh Tran, Director of CUA's Biomedical Engineering Department, the CPDC/CUA project was a comprehensive telehealth program to provide medical and supportive services to senior residents of a low-income
multifamily housing complex (a former public housing property). The project focused on the most prevalent illnesses of senior residents: diabetes and hypertension — involved daily measurements of health indicators using assistive technology; virtual nurses' visits/consultations; education on self-monitoring, diet and nutrition; and an emphasis on fitness and exercise. The results indicated high participation rates in self-monitoring and improvement in health among the 55 participants. The CPDC/CUA project also intended to provide training for incumbent workers to upgrade their skills for job and income mobility, a component of the program that required a community college partner that was not available. A replication of the CPDC/CUA project currently exists as a pilot in Stamford, Connecticut, led by Stamford Hospital, successfully bringing together the consortium of healthcare providers and a community college with an education focus on training healthcare workers. The project is led by Arthur White, a successful businessman and social entrepreneur who was a founder of the pre-eminent market research firm Yankelovich, Skelly & White, Inc., as well as two national recognized nonprofit organizations: Reading is Fundamental and Jobs for the Future. Arthur White was on the Board of Community Preservation Development Corporation (CPDC), a non-profit developer of affordable housing properties in the District of Columbia, Virginia, and Maryland. During his board tenure, CPDC received a FY1999 NTIA Technology Opportunities Program (TOP) grant for EdgeNet, a project to wire Edgewood Terrace, a low-income housing apartment complex and former public housing property, to provide access to the Internet and the new technologies. Through interconnected computer learning centers, CPDC offered office technology and IT training to adults and youth to improve tenants' job prospects and income. Graduates of the skills training program, with average incomes of $9,400, are able to increase their earning potential to an average of $25,000. In 2004 CPDC and its partner, The Catholic University of America (CUA), received a $692,282 TOP grant to implement a comprehensive telehealth program to provide medical and supportive services to senior residents of Northwest DC multifamily housing complex while at the same time, providing training for incumbent workers to upgrade their skills for job and income mobility. A total of 350 seniors will participate in the telehealth program over the two-year program at the three sites, thereby receiving broadband as well. In addition, the housing sites in Stamford and Pontiac, and the sites where AltaMed will become internet-ready due to this project, and computers will be available for residents' use in each building, bringing the total number of potential users to 2000. This is a jobs-creation project that will initially add approximately 11 new full-time positions and 8 part-time positions. We also anticipate some indirect job creation (possibly 3 part-time jobs; in one each location) at local colleges, where technicians will receive training in how to teach seniors general Internet access/use. It is expected that jobs will continue to be created as the program expands and is replicated. Overall cost will be $3,931,788.