Broadband: The Right Prescription for Healthcare in California

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Our ability to connect through high-speed Internet access—referred to generically as "broadband"—is improving our lives in many ways—helping us share information and images, research and apply for jobs, stay in touch with loved ones, and access entertainment and news. Broadband saves consumers time and money, increases productivity in the economy, and reduces impacts on the environment. And, now, broadband will even help save lives and improve healthcare in California.

Clinics and hospitals in rural communities and underserved urban neighborhoods will be connected through the California Telehealth Network (CTN) to major medical centers, trauma facilities and specialty care and, thus, able to access health and medical expertise remotely. This will both expand access to critical services and improve quality of healthcare. And, it has the potential to help control costs.

CTN facilities will be able to better serve patients by providing access to specialists and other healthcare professionals in different locations, sharing X-rays and other diagnostic tests instantaneously, and even viewing treatments and procedures from afar in distant emergency rooms or surgical centers as they happen. They will have access in real time to the best and most-up-to-date information and practitioners in university teaching hospitals and other medical centers across California and the nation. Also, all the data about patient health and outcomes can be collected and shared simultaneously to assure appropriate and effective treatment regimes for the individual patient. Finally, with ubiquitous broadband use by all Californians, in the not-too-distant future patients will be able to be monitored at home or work for both acute episodes of illness and longer-term chronic diseases—which will save time and money for both consumers and providers by reducing unnecessary visits to medical facilities, keeping people out of hospitals, promoting efficiency in healthcare, and linking fragmented segments of the healthcare system.

For example, pediatricians in the Neonatal Intensive Care Unit at the UC Davis Medical Center in Sacramento will be able to consult via the California Telehealth Network to several rural hospitals to save lives of high-risk newborns. UCD neurosurgeons will be able to assist emergency room physicians in rural hospitals treat accident trauma victims without delay. And, Sutter Hospital specialists in internal medicine will be able to support rural clinics in caring for patients with advanced cardiovascular disease.

Another powerful example of the use of telemedicine is that UCLA and USC will be able to support and provide added expertise to the Los Angeles County Department of Health Services that annually serves more than 700,000 people and provides treatment to more than 300,000 emergency room patients and trauma victims. The most vulnerable residents who are county patients now will have access to the most advanced medical care provided by research universities. In addition, the Venice Family Clinic, the largest free clinic in the nation with 6 different locations accommodating more than 100,000 annual visits, also will be able to take advantage of the same expertise real-time using telemedicine.

The Children's Hospital of Orange County, the 18th busiest children's hospital in the country, will be able to provide additional expertise and consultation to the Hi-Desert Memorial Health Care District in Riverside County that operates a prenatal education center and family birthing center. Loma Linda University in San Bernardino County, a pioneer in telemedicine, will be forging new frontiers in using telemedicine to monitor patients at home.

In San Diego County, the American Indian Health Center, the 12 locations of the Family Health Centers, 7 locations of Neighborhood HealthCare, and 5 locations for Mountain Health and Community Services, along with the 7 locations of Clinicas de Salud del Pueblo in Imperial County, all will be connected to high-tech medical centers, including UC San Diego, UC Irvine, and UC Riverside.

The California Telehealth Network is being made possible by a \$22.1 million grant from the Federal Communications Commission with \$3.6 million match funding from the California Emerging Technology Fund, capitalized by both AT&T and Verizon through an agreement with the California Public Utilities Commission. The University of California is currently managing the first phase of development of CTN on behalf of a consortium of State agencies, provider and stakeholder organizations, and foundations. Initially, more than 860 facilities will be connected, including some of the most remote rural areas and tribal lands in the state.

CTN also is requesting the federal government to become an investment partner and is seeking funding from the American Recovery and Reinvestment Act to expand CTN to approximately 2000 sites—about 1/3 of the sites in medically-underserved communities, spotlighting the enormous need statewide. That is why the State of California and other funders, such as the California HealthCare Foundation, United Health Group/Pacific Care and the National Coalition for Health Integration, also have stepped forward to support CTN to harness technology to work for both patients and taxpayers.

The California Telehealth Network definitely is a bold, big idea that will transform the delivery of healthcare—extending resources and saving lives. It will be a signature component of healthcare reform in California to improve access and quality of medical care while helping control costs. Accelerating the building and operation of CTN will propel California as a national leader on telemedicine that integrates innovation, common sense and compassion to improve the quality of life in our Golden State.

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