



CALIFORNIA TELEHEALTH NETWORK

November 7, 2012

Marlene H. Dortch, Secretary
Federal Communications Commission (FCC)
445 12th Street, SW, Room TW-B204
Washington, DC 20554

Re: Notice of Ex Parte Communication with the Wireline Competition Bureau Staff in Docket 02-60

Madam Secretary:

In accordance with Section 1.1206 of the Commission's rules, 47 C.F.R. 1.1206, we hereby provide notice of oral ex parte communication during the above captioned meeting. On Tuesday, November 6, 2012, CTN President & CEO Eric Brown and Jeff Mitchell, of Lukas Nace Gutierrez & Sachs, LLP, counsel for CTN, met with Carol Matthey, Michael Jacobs, Linda Oliver, and Chin Yoo of the Wireline Competition Bureau. Mr. Brown and Ms. Yoo attended the meeting telephonically. During the meeting Mr. Brown summarized CTN's deployment progress to date and reviewed CTN's comments filed on the Broadband Services Program (Docket No. 02-60).

The key topics of discussion were as follows:

- CTN provided an update on CTN deployment progress and the primary uses of the network which are 1.) Live HD video consultations over broadband, 2.) Continuing Medical Education (CME), training and distance education and 3.) Exchange of Patient Information/HIE which is currently growing as federally mandated HIE adoption increases.
- CTN emphasized the success of Rural Health Care Pilot Program (Pilot Program) policies in California and urged the FCC to leverage the learning from the Pilot Program in the Broadband Services Program.
- CTN reiterated its position that urban health care providers are critical to the long term economic sustainability of Pilot Program participants and pointed out examples of non-rural hospitals enrolled in CTN that provide health care services to underserved patient populations in rural areas. CTN confirmed that it currently connects academic medical centers in California through a CENIC¹ peering relationship which requires minimal use of Pilot Program funds. Similarly, it has been CTN's experience that large urban hospitals are more interested in a single

¹ The Corporation for Education Network Initiatives in California (CENIC) provides cost-effective, high-bandwidth networking to support education and research communities in California. See <http://www.cenic.org/>.

cross connection or peering arrangement that connects with their internal broadband networks (and perhaps a connection for redundancy) rather than multiple connections that would require significant RHC funding resources. In addition to the academic medical centers connected through CENIC, CTN also has 10 non-rural hospitals currently participating in the Pilot Program, all under 200 beds in size.

- CTN pointed out that the economics of postalized rate structures negotiated by many Pilot Program participants with broadband service providers is dependent upon the inclusion of urban sites which help moderate the cost to serve rural sites.
- CTN requested the FCC maintain subsidy levels at or near the current 85% Pilot Program levels pointing out that reducing the subsidy levels (thereby increasing the match funding requirement for HCP's to participate in the RHC) would be a significant barrier for many small rural HCPs. As support for this, CTN noted that many of the smaller HCP's in rural and underserved areas are struggling to remain cash flow positive. Most are also attempting to implement meaningful use to obtain the Federal incentives and avoid the Medicare/Medicaid penalties which begin in 2015. For many of these smaller HCP's the relatively low activity and patient populations they serve lead them to question if the investment in electronic health records, training and other expenses associated with meaningful use implementation are worth the incentive amounts. Often CTN's ability to achieve broadband adoption is delayed by each HCP organization's need to focus what little resources they have on meaningful use implementation. Similarly, realizing the financial benefits of telemedicine can take 12 to 24 months from the time they agree to implement broadband enabled delivery of healthcare. Even with CTN urging the sites to continue with implementation, providing training and telemedicine equipment grant funding, the current economic environment can make it very challenging for small HCP's to adopt telehealth. Increasing the Broadband Services Program match funding requirement in this environment will present a significant additional obstacle to health care provider participation.
- CTN shared skepticism that the Rural Health Care funding cap will be exceeded going forward pointing out the Pilot Program required two one year extensions to finally gain traction. CTN received its initial award in November of 2007 and was not able to recruit and activate sites until December 2010. To address concerns about exceeding the funding cap, CTN suggested the FCC consider funding consortia through a multi-year award process, similar to the Pilot Program. This would reduce the risk of exceeding the cap and provide the FCC and program participants with a higher degree of certainty with regards to available funding and planned spending.
- CTN believes increased competition made possible through the use of HCP consortia – which the Commission has acknowledged was a key advantage of the Pilot Program over the existing RHC program – will continue to drive down the cost-per-MB for bandwidth. This will provide a significant counterbalance to increased demand for RHC funding due to expanded participation and demand for greater bandwidths.
- CTN reported that it continues efforts to improve the ability to monitor, track and accurately document telehealth utilization. CTN's experience has been that the majority of HCP's in rural areas do not have the administrative resources to accurately track telemedicine consults or distance education utilization of CTN circuits. CTN is pursuing alternatives to automate these tasks but in the near term would welcome Broadband Services Program funding to provide administrative assistance to CTN sites to better document utilization metrics.

If you have questions or need additional information, please contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "Eric P. Brown".

Eric P. Brown
President & CEO, California Telehealth Network

California Telehealth Network
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Enclosure

cc: Carol Matthey
Michael Jacobs
Linda Oliver
Chin Yoo



CALIFORNIA TELEHEALTH NETWORK

October 2012

FCC Update

Eric Brown

President & CEO

www.caltelehealth.org



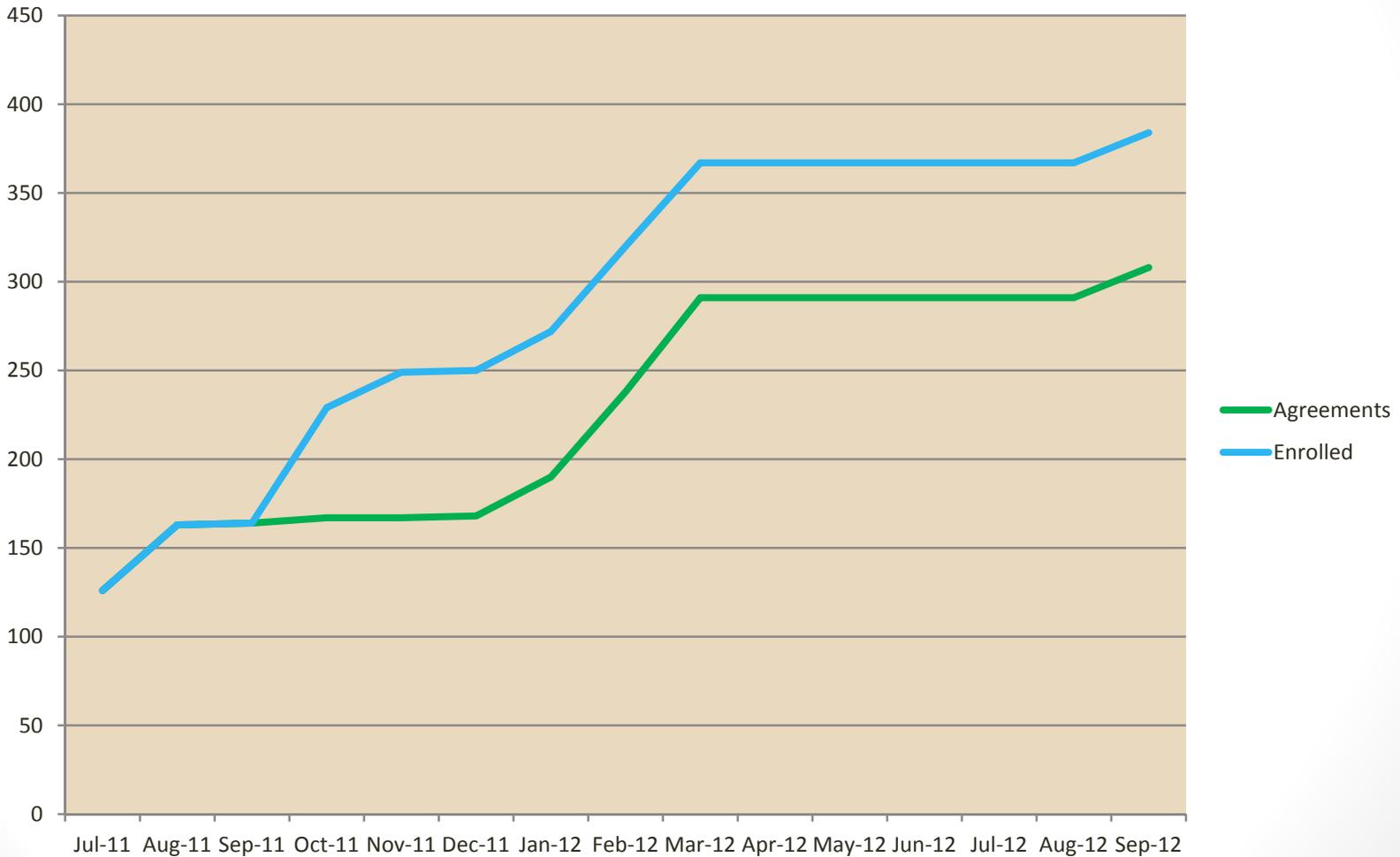
CALIFORNIA TELEHEALTH NETWORK

CTN's Mission

CTN's mission is to promote advanced information technologies and services to improve access to high quality health care focusing on medically underserved and rural Californians



CTN RHCPP Site Enrollment Growth



Implementation Update

- CTN has enrolled 307 RHCPP membership agreements serving 367 health care sites
 - 55% of enrolled sites in urban areas
 - 45% of enrolled sites are FQHC's
 - 30% of enrolled sites are RHC's
 - 68% of California's Critical Access Hospitals
- At the close of September, CTN had installed 210 locations including 62 sites with logical connections
- Average installation lead times are being reduced from over 120 days to 90 days in the most recent quarter
- CTN plans to complete all RHCPP site installations by close of March 2013
- CTN completed the first Fair Share site installation in September, 2012 with the installation of two Suddenlink sites in Humboldt County

CTN Site Benefits

- Affordable, reliable broadband connections
- Enables patients to be seen in their communities by clinicians from outside the community without transportation logistics or expense
- Medical grade network with Guaranteed Quality of Service reliability
- Secure, encrypted connections to all California academic medical centers, community of online health care providers
- Broadband equipment and network monitoring provided by AT&T working with last mile providers
- Ideal network solution to support HIE and multiple meaningful use applications

Services and Applications

- **Specialty care consultations**
 - UC Health Centers
 - Regional Health Care Centers
 - Independent specialty care providers
- **Telehealth training and support partners**
 - California Telehealth Resource Center (CTRC)
 - UC Davis Health System – Center for Health and Technology
 - Center for Connected Health Policy (CCHP)
 - Regional Extension Centers – LA Care/HITECH LA, CalHIPSO, CORE, CRIHB
- **Advanced health care applications**
 - Telemedicine video consultations
 - Medical education, training, CME activities
 - Exchange patient information, records, X-rays, MRI's, etc



CTN Poised for Growth



Completing interconnection with California Rural Indian Health Board and Indian Health Services by Dec

Expanding CTN broadband providers beyond AT&T to accelerate pace of deployment drive down cost of service

Plans to assist enrolling eligible HCP's in the FCC Primary Program and the California Teleconnect Fund

Testing secure gateway and managed endpoint solutions to enable health care providers that have broadband to access the network

Conducting due diligence on health IT applications and services to meet CTN member needs, reduce health care delivery cost, improve outcomes

15 Model eHealth Communities

78 CTN Sites



Lead Agencies and Project Locations

1. Access El Dorado (ACCEL)
2. Alameda County Health Care Services Agency
3. California Rural Indian Health Board
4. College of the Siskiyous
5. Community Hospital of San Bernardino,
6. Connecting to Care: Modoc County
7. Connecting to Care: Sierra Nevada Cancer eHealth Community
8. Front Porch Center for Technology Innovation & Wellbeing
9. LA Care Health Plan
10. North Coast Clinics Network
11. Plumas District Hospital
12. Redwood MedNet
13. Southern Sierra Telehealth Network
14. UCSF
15. Venice Family Clinic

Model eHealth Communities

Application Examples

- Telemedicine video consultations
- Health Information Exchange
- Remote patient monitoring
- Consumer health education – laptops, kiosks
- eConsult - electronic physician consultations
- Language interpretation services
- Continuing Health Education/CME





CALIFORNIA TELEHEALTH NETWORK

Comments on Proposed
Broadband Services Program

Eric Brown
President & CEO

www.caltelehealth.org



CALIFORNIA TELEHEALTH NETWORK

Broadband Services Program

- CTN filed comments in August advocating:
 1. Continued support for non-rural HCP's
 2. Maintain subsidy level at 85%
- Other RHCPP participants filed similar comments
- Consider impact of postalized pricing on statewide networks
 - Participation of large urban hospitals supports postalized rates for rural HCPs
 - Broadband vendor bids more attractive for rural sites when packaged with non-rural sites
 - Postalized pricing is “glue” that holds many statewide Pilot Program networks together
 - Significant changes in Pilot Program urban eligibility rules could work substantial harm on Statewide networks such as CTN

Children's Hospital of Oakland



- Urban Regional hospital in downtown Oakland
- 191 licensed beds
- Focus on underserved populations
- Enrolled in CTN to provide pediatric care resources to other CTN sites
- Innovative care models including clinic locations in schools and correctional facilities
- Broad range of inpatient, outpatient, and community-based services, with experts in 30 distinct pediatric subspecialties

San Joaquin General Hospital

- Regional Hospital serving the central valley region of California
- 196 licensed beds
- Located in Happy Camp outside of Stockton, CA
- Patient populations include rural agricultural worker populations from the San Joaquin Valley area
- Enrolled in CTN to gain access to academic medical center specialists and grant funding not generally available in the Central Valley area
- Heavy emphasis on behavioral health, dermatology, diabetes treatment

CTN Non-Rural Hospitals

1. Biggs-Gridley Memorial Hospital, Gridley, CA
2. Children's Hospital & Research Center at Oakland, Oakland, CA
3. Healdsburg District Hospital, Healdsburg, CA
4. Lodi Memorial Hospital, Lodi, CA
5. Marin General Hospital , Greenbrae, CA
6. Marin General Hospital-Braden Diabetes Hospital, Greenbrae,CA
7. San Joaquin County Health Care Services Agency, Stockton, CA
8. San Joaquin General Hospital, Happy Camp, CA
9. Sonoma Valley Health Care District, Sonoma Valley Hospital
10. St. Joseph Hospital, Eureka, CA

Recommendations

- Leverage lessons learned from RHCPP
 1. Competitive bidding process works
 2. Consortia participation works
 3. Leverage RHCPP participants that have performed well
- Don't compromise the Broadband Services Program impact out of speculative concerns of exceeding the cap
 1. RHC and Pilot Program combined remain well below cap
 2. Arbitrary constraints can have unintended consequences
 3. In the event cap exceeded, empower program participants to maximize benefit of available funding

Contact Information

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CALIFORNIA TELEHEALTH NETWORK

THANK YOU!



CALIFORNIA TELEHEALTH NETWORK

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TELEHEALTH SUPPORT | EDUCATION | BROADBAND

The California Telehealth Network is a nonprofit association that promotes advanced information technologies and services to improve access to high quality health care focusing on medically underserved and rural Californians.

We do this by:

- Providing high speed medical grade HIPAA compliant broadband at affordable prices
- Providing access to the most current provider and patient education programs
- Connecting patient sites with available telehealth providers
- Providing access to medical and behavioral health specialty services
- Bringing together rural and underserved communities to improve access to health care
- Providing member access to videoconferencing and webinar services
- Providing access to store and forward and other telehealth applications



CTN PRODUCTS AND SERVICES

NEW

Broadband Services: CTN now offers a clearing house of broadband services and providers to meet the needs of any health care provider. Let CTN perform an assessment of the best broadband solution to meet your needs. CTN can also complete the administrative filings on your behalf to obtain subsidies and grants to reduce your broadband costs.

Broadband Connectivity to Every Academic Medical Center in California: CTN member sites enjoy seamless HIPAA compliant high speed connections to all UC Medical Centers, Stanford and USC.

Free Online Training: CTN and UC Davis, as part of the BTOP grant, have created a series of online classes about eHealth. Learn more online: www.caltelehealth.org.

Webinars and Trainings: CTN provides free monthly webinars on a wide array of Telehealth, broadband and ehealth topics. Webinars are available to all. Register today, free of charge, online at: www.caltelehealth.org.

Telehealth Certification & Training: Through the California Telehealth Resource Center (CTRC), your organization can obtain education, program support, and training, including certification for your Clinical Presenters and Clinic Coordinators.

Telehealth Specialty Provider Matching Service: The California Telehealth Resource Center (CTRC) can assist your organization in finding the right providers and patient sites to meet your needs. Learn more online: www.caltrc.org.



Address: 2001 P Street, Suite 100
 Sacramento, CA 95811
 Tel: (855)385-5082

In 2007, over 25 health care organizations came together to submit a proposal to the Federal Communications Commission (FCC) for broadband funding. This effort led to the creation of the California Telehealth Network.

As the FCC's largest Rural Health Care Pilot Program, CTN has installed broadband connections across the State to over 350 member sites while also assisting with grant funding and identifying clinical specialty care resources to better serve CTN site patients - effectively changing the face of California's health care system.

We invite you to learn more about how CTN can support your organizations mission. Please contact us at: (855)385-5082.

When you connect to CTN, you connect to the future of health care.



CTN MEMBERS (partial list)

- Barton Memorial Hospital
- Canby Family Practice Clinic
- Catalina Island Medical Center
- Clinicas de Salud del Pueblo
- Children's Hospital & Research Center
- Children's Dental Health Clinic
- Clinicas del Camino Real
- Community Health Alliance of Pasadena
- Community Health Centers of the Central Coast
- Community Health Systems
- Colusa Indian Health Clinic
- Communicare Health Centers
- Consolidated Tribal Health Project
- Del Norte Clinics, Inc.
- East Valley Health Care
- Eastern Plumas Health Care
- Eisner Pediatric & Family Medical Center
- Family Health Centers of Greater Los Angeles
- Glenn Medical Center
- Healdsburg District Hospital
- Indian Health Center of Santa Clara
- Inland Behavioral Health
- John C. Fremont Healthcare District
- K'imaw Medical Center
- Kern Valley Healthcare District
- Livingston Medical Group
- Lodi Memorial Hospital
- Lyon-Martin Health Services
- Mayers Memorial Hospital
- McCloud Healthcare Clinic
- Mendocino Coast Clinics and Hospital District
- Modoc County Health Services/Medical Center
- Mountain Valleys Health Centers
- Mountains Community Hospital
- Northeastern Rural Health Clinics
- Open Door Community Health Centers
- Oroville Hospital
- Plumas District Hospital
- Redwood Memorial Hospital
- Redwoods Rural Health Center
- Ridgecrest Regional Hospital
- Riverside County Regional Medical Center
- Sacramento Native American Health Center
- Seneca Healthcare District
- Share Our Selves Free Medical Clinic
- Shasta Community Health Centers

REDUCED RATE BROADBAND AVAILABLE

CTN can find reduced rate broadband services to meet the needs of any health care provider including non-profit and for-profit health care providers

- Let CTN work with you to identify the best source of broadband services to meet your unique health care needs
- CTN now provides broadband services for non-profit and for-profit health care providers
- CTN can assist your health care site apply for and receive broadband subsidies from the FCC Primary Program and California Teleconnect Fund, among others
- CTN staff can complete all administrative filings for you

Contact CTN today to learn how we can find you the best broadband solution to meet your needs

www.caltelehealth.org | (855)385-5082

www.caltelehealth.org

January 28, 2010

CTN Whitepaper – Project Technical Design and Strategy

Introduction

The California Telehealth Network (CTN) architecture has been designed based upon pre-established strategic, operational, performance and budgetary goals and constraints. Since the establishment of these foundation goals has fundamentally influenced the design, this Whitepaper will begin with a brief discussion of the primary design criteria. It will be followed by a technical description of the resulting network architecture and will conclude with an explanation of how the resulting design fulfills the pre-established foundation goals.

Foundation Design Criteria

Project scope - regional or statewide? During the early inception of the CTN project, it's founding organization, the CTN Advisory Committee considered the issues of project scope and scale. Understanding that the available funding obtained would be the ultimate constraint, two feasible alternatives were considered. The first: build a limited regional network in which the physical infrastructure was primarily purchased outright (fiber links, DWDM, routers, etc.), was operated by the CTN and dedicated to the CTN. Budgetary constraints would certainly limit such a solution to a specific region of the state and encompass perhaps 100 sites or less. The second alternative considered was to extend the network on a statewide basis and strive to encompass a broadly geographically dispersed cadre of Participant sites, with particular emphasis on rural sites. Since constructing a dedicated statewide network de novo would be prohibitively expensive, this alternative would necessarily require capitalizing upon existing telecommunications infrastructure to the maximum extent. After considerable deliberation, the Advisory Committee determined that a statewide project would best serve the clinical and outreach goals that are fundamentally important to its membership.

Operational constraints - limited availability of operational and administrative financial support. The primary source of funding for the project would derive from the FCC Rural Health Care Pilot Program (RHCPP). This program generously subsidizes 85% of telecommunication s costs, but provides no financial support for essential administrative and other operational support. Consequently, a strategy was adopted that endeavored to transfer as much of the administrative and operational responsibilities to vendors, who could legitimately include such costs in their aggregate pricing for the offered telecommunications services and for which they could receive reimbursement under the RHCPP.

In the industry parlance, such services are designated as “managed services.” Multiple tiers of managed services are generally available from most large, sophisticated telecommunications vendors. They range on the modest end from equipment installation assistance to very comprehensive “soup-to-nuts” support for the entire panoply of equipment, circuit, and operational support services, including network design, installation, maintenance and monitoring as well as security management services.

Dedicated, Medical Grade Network – the FCC Order for the RHCPP stipulates that funds must be used to construct a “dedicated health care network.” A Medical Grade network must comprise certain essential capabilities: 1) End-to-end Quality of Service. Given the rapidly increasing deployment of latency-sensitive telemedicine and telehealth applications such as remote real-time patient encounters and patient monitoring, as well as the growing need for higher bandwidth (e.g., 1080P HD video), it is essential that a medical grade network employ end-to-end explicit Quality of Service, particularly in rural locations where high-capacity circuits may be unavailable or prohibitively expensive. This permits explicit prioritization of clinical traffic, while simultaneously permitting access to lower priority administrative and other non-clinical traffic. 2) Security – HIPAA and other state and federal regulations require that the network meet certain security standards. If traffic transits any public networks (most particularly, the Public Internet), it must be encrypted to ensure the privacy and integrity of the data. Moreover, Virtual Private Network (VPN)-level security must be employed over all links, ideally without the administrative encumbrance of individually establishing individual point-to-point VPN tunnels (any-to-any VPN capability).

Flat Network – a fundamental goal of the CTN Advisory Committee was to establish a network in which each participant was a peer and received identical access and services. The ideal network would involve no obligatory transiting of regional hubs that are responsible for (and also control) access to external networks. The resulting “flat” network would permit entrepreneurial activities to develop without centralized intervention – essentially an “any-to-any” network.

Extensible, Expandable Architecture – the Advisory Committee envisioned that the CTN could expand considerably as the potential for telehealth applications become more widely realized. Indeed, the originally established complement of 300 sites has increased to over 850 sites statewide in one year! Consequently, the network must be capable of efficiently and transparently expanding, both in geographic scope as well as number of participant sites. Moreover, it must also be inherently extensible, permitting convenient addition of new services and increasing of bandwidth at any individual segment without requiring extensive physical or logical restructuring of the network.

Technical Design

In order to effectuate the multiple pre-established foundation design goals, the CTN has adopted the following network architectural design. Key design points are itemized below:

1. The CTN will consist of an Contractor-provided, MPLS-routed, IP addressed, VPN, composed of approximately 850 individual sites interconnected over a high performance statewide backbone (see *Figure 1*). Multi-Protocol Label Switching (MPLS) is a state-of-the art network routing protocol that provides superior end-to-end routing performance.
2. The network will be procured as a Managed Service – CTN will not construct any “last mile”, “middle mile” or Core routing/transport infrastructure. Consequently, CTN will not directly purchase, lease, or install any of the following physical infrastructure components:
 - a. Conduit and Fiber spans.
 - b. Routers, switches or other network electronics.
 - c. Computers and software related to monitoring network activity

- d. Security systems, including Firewalls, Intrusion Detection or Prevention Systems hardware and software.
3. Comprehensive Support. All physical infrastructure, detailed architectural design, IP addressing scheme, all communication/routing equipment acquisition, and provisioning, installation, maintenance and repair, establishment of peering points with external networks, will be obtained as a comprehensive managed service.
4. Prime Contractor – since the project spans the entire state, the aggregate facilities and services from multiple regional telecommunications providers (ILEC's and CLEC's) will be required. In order to simplify the administrative oversight as well as to centralize performance responsibilities, the CTN is requiring that a single highly-qualified contractor serve as Prime Contractor, who will assume overall financial and operational responsibility for all subcontractors and services, including the multiple regional ILEC's and CLECS that will provide local/regional connectivity to the CTN core network (provided by the Prime Contractor) .
5. Customer Edge (CE) to Provider Edge (PE) connections. The minimum bandwidth CE-PE connection provided will be standard DS1 service at 1.5 megabit per second (1.5Mb/s). It is anticipated that approximately 100 critical access hospitals will receive available fractional DS3 service, initially at 10 Mb/sec. Additional high volume clinics may also receive 10 Mb/sec service, depending upon budgetary constraints. Where available the CE-PE circuits will be landline circuits provided by ILEC or CLEC in the local service area. Extensive surveys to date have confirmed that all of the current roster of 850+ Participant sites that have been approved by USAC for participation in the CTN have ILEC/CLEC landline DS1 service available. CE-PE circuit distance spans range from one to over 200 miles, with an average of approximately 15 miles.
6. Preferential Fixed-Rate Pricing. CTN has negotiated mileage-independent in-franchise and out-of-franchise rates for CE-PE circuits, so-called "postalized rates."
7. "Hard to Reach" Sites – CTN anticipates that a small number of future sites may not have the minimum DS1 landline service available. These sites will be provided with satellite service, or other alternative connection modality. The Contractor will provide direct interconnection between a satellite-connected site and the CTN VPN (no intervening Public Internet link), thus preserving the essential medical-grade security and privacy.
8. Provider Edge and Core routing and transport services will be provided by the Prime Contractor. The selected Prime Contractor supports statewide/national/international MPLS VPN managed services within California and has extensive statewide Core routing backbone and regional distribution infrastructure to support their voice and data communications services. The vendor's currently available fiber-based backbone infrastructure provides multi-gigabit capacity sufficient to support medical-grade communications from all CTN sites.
9. Expandable IP addressing – The CTN will be a 100% digital, IP-based network – no analog links will be employed. In an IP-based network, each "node" on the network (e.g., PC, telemedicine equipment, etc.) will be assigned an Internet Protocol (IP) address that will be used to transport and route communications to/from the device. CTN will implement a private address paradigm internally ("Class A", 10.x.x.x IPv4 address space), with suitable network address translation (NAT) services at interconnection points with external networks, such as CENIC. The NAT services convert the internal IP addresses used within the CTN into Internet-routable addresses,

thus permitting network devices within the CTN to freely communicate with external sites, including sites that are only accessible through the Public Internet. Use of Class A private addressing will permit vast expansion of the CTN without jeopardizing the availability of IP addresses.

10. No Internet Transit – CTN requires that no segment of CE-PE, PE-Core, or interconnection with external networks transit the Public Internet. This restriction will isolate CTN from performance variability due to Internet problems and eliminate the need to employ encryption technologies within the CTN to protect sensitive health care transactions.
11. Explicit Quality of Service – CTN will internally employ “End-to-end delineated Quality of Service” (QOS) capability. It is important to note that explicit, delineated QOS does not simply imply that the network will provide “quality” in the sense of reliability consistency and bandwidth performance, although these characteristic are certainly important requirements. Any network, no matter the bandwidth available can become congested – overwhelmed with the volume of traffic to the extent that sessions are interrupted and data lost. The Explicit QOS employed within the CTN provides the capability to “tag” high priority traffic (e.g., telemedicine or patient monitoring sessions) with a numerical priority flag. As the QOS-tagged packets traverse the network, each routing/switching device recognizes the priority tag and preferentially processes and forwards the packets. This capability is viewed as particularly important in providing reliable performance for latency-sensitive real-time telemedicine and remote patient monitoring activities. Initially one QOS level will be implemented, although a minimum of four levels are available from the Contractor for the requested MPLS-based VPN services. The Contractor will be required to appropriately process QOS tags at the interface with all external networks, so that explicit QOS tags are preserved across these interfaces. (NOTE: most external networks do not currently support the delineated QOS capability which is considered an “advanced” feature).
12. Any-to-any Private IP VPN - CTN will employ any-to-any VPN capability, providing VPN security over any site-to-site link internally within the network. This architecture will eliminate the need for establishment of labor-intensive point-to-point VPN tunnels. Where a high level of security is required for connections to sites external to CTN, some of which may transit the Public Internet, an additional level of encryption security (IPSec) can be implemented.
13. External Networks – CTN will provide access to Internet 2, National LambdaRail and the public Internet. Connection will occur via a direct connection to California’s Regional Optical Network, CENIC. This connection will also provide high-bandwidth connection to every major academic medical center within the state (UC’s, Stanford, USC, etc.), as well as access to a very large contingent of K-12 , community college and state university institutions that participate in CENIC. Initial design calls for a single 100 Mb/s connection. Depending upon budgetary constraints, a second 100Mb/s link may be installed for load-sharing and redundancy.
14. Project Management – Prime contractor will provide comprehensive project management services and will bear full responsibility for undertaking at least three independent implementation initiatives throughout the state (North, Central and South) and must complete the entire project within a maximum timeframe of three years. Based upon vendor representations, the actual implementation period may be as short as one year.

15. Detailed Project Specifications available – a detailed technical description of the proposed network is presented in a previously posted CTN RFP, available at the USAC RHCPP Web site: <http://www.ucdmc.ucdavis.edu/ctn/rfpmain.html>

Advantages of Network Architecture

1. Capitalizes on existing infrastructure and resources – leveraging existing physical network infrastructure available from telecommunications carriers, as well as maximizing the use of pre-existing design, implementation, management and support resources will: 1) make it feasible to construct a large, statewide network on a very accelerated schedule with a minimum of operational and administrative resources; 2) will leverage well-proven routing and transport technologies that are increasingly being adopted by top-tier financial, governmental and industrial organizations.
2. Provides an Expandable and Extensible Framework – the MPLS-routed IP VPN provides a flexible framework that can be rapidly expanded without construction of additional physical infrastructure (e.g., regional hubs). Bandwidth at individual facilities can be increased without extensive redesign and upgrade or construction of PE and Core routing facilities. Explicit QoS capabilities permit highly efficient use of existing bandwidth; a very significant advantage in certain rural areas where infrastructure is limited. Secure peer-to-peer, any-to-any intrinsic security will facilitate entrepreneurial activities on a local and regional basis and require no regional or centralized management (e.g., establishment of point-to-point VPN's). The Class A private addressing scheme will, as a practical matter, permit limitless expansion of the network without requiring labor-intensive IP address reorganization.
3. Capitalize on Beneficial Pricing – the CTN will exploit very beneficial pricing available, resulting from state government contracts. The State of California Department of Technology Services has established comprehensive contracts with multiple telecommunications carriers to provide a broad array of telecommunications services for state agencies, at very beneficial pricing (CalNet 2 program). These contracts include all circuits, equipment and managed services anticipated for the CTN. Some pricing benefits available include: 1) mileage-independent circuit charges; 2) statewide pricing for managed services (postalized rates). Since the CTN will include many very rural sites, availability of a postalized rate structure will tremendously advantage the ability to cost-effectively connect rural constituencies.
4. Provide Medical Grade Service – the MPLS IP VPN architecture equitably provides “out of the box”, ubiquitous availability of security, quality and reliability sufficient to support current and near-future real-time telemedicine and telehealth activities at every Participant Site. 1) any-to-any VPN, 2) explicit QoS, 3) minimum bandwidth (DS1) sufficient for current and emerging telemedicine functionalities (e.g., 1080P HD video).

Fibure 1 - Technical Summary Diagram

The following figure illustrates the high-level organization of the major components of the CTN.

Core Backbone – the core backbone will be provided by the Prime Contractor. It is composed of multiple routing centers located throughout the state, interconnected by a very high-speed, fiber-based backbone infrastructure. Each node in the core is interconnected to at least two other nodes. Each node is equipped with fully redundant “Carrier Class” high performance routers and other electronics. The Core is represented as a cloud, since it functions in such a fashion that failure of a circuit or hardware at any node will result in traffic being automatically rerouted around to an alternative device, or two an adjacent core routing facility.

Provider Edge – The Provider Edge nodes are regional locations where circuits from CTN sites are terminated. They may be separate Regional Hub facilities, or may also serve as a node in the Core Backbone. Each CTN Site will be connection to the closest PE facility.

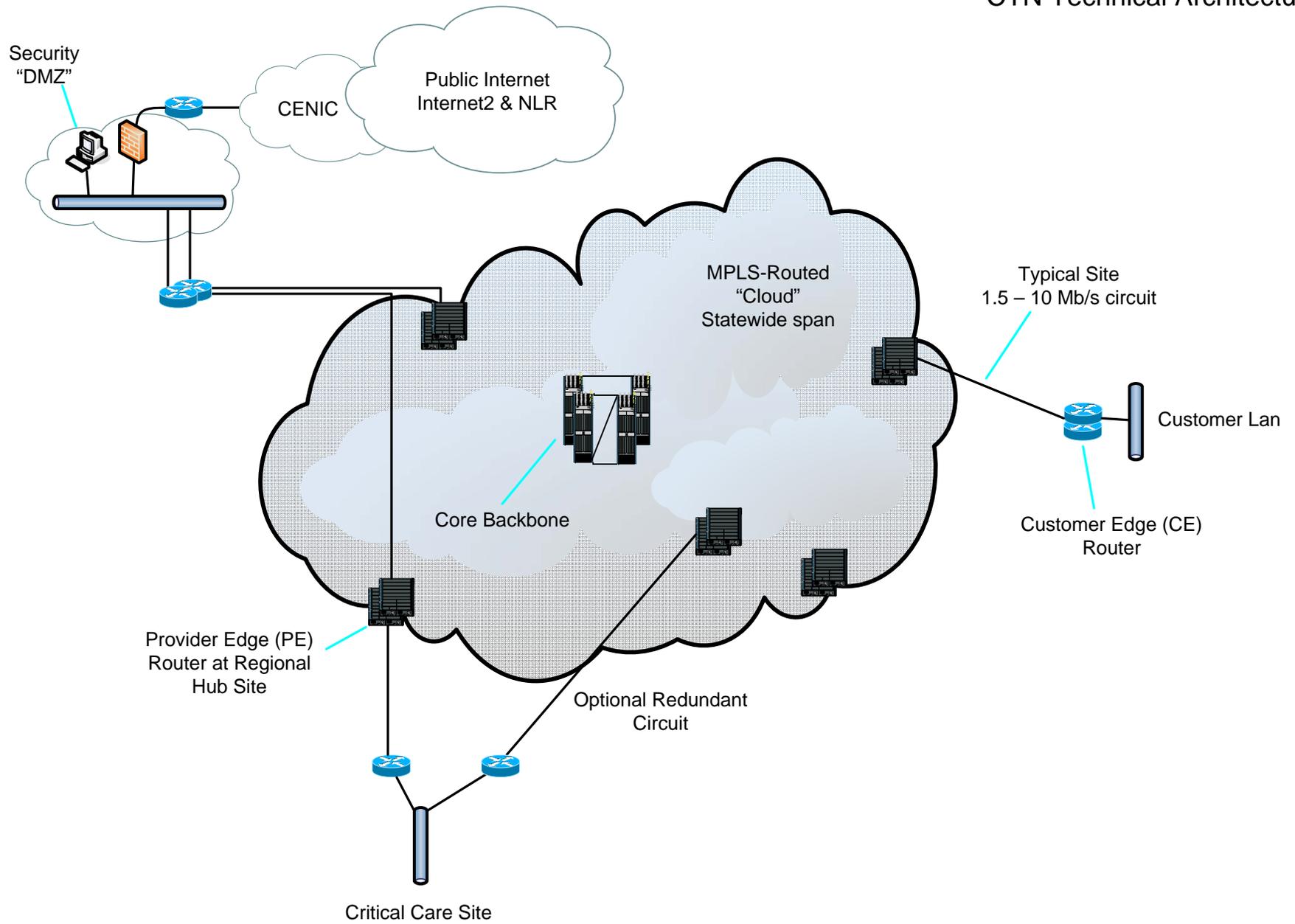
PE-CE Circuits – Provider Edge to Customer Edge circuits will be provided by a regional telecommunications provider (phone company). In many cases, the Prime Contractor will also provide these circuits, since they also provide phone service in the region. Alternatively, other ILEC’s and CLECS who have “Intercarrier Exchange Agreements” with the Prime Contractor will provision these circuits. Circuit speeds will vary between 1.5 and 10 megabits per second (Mb/s).

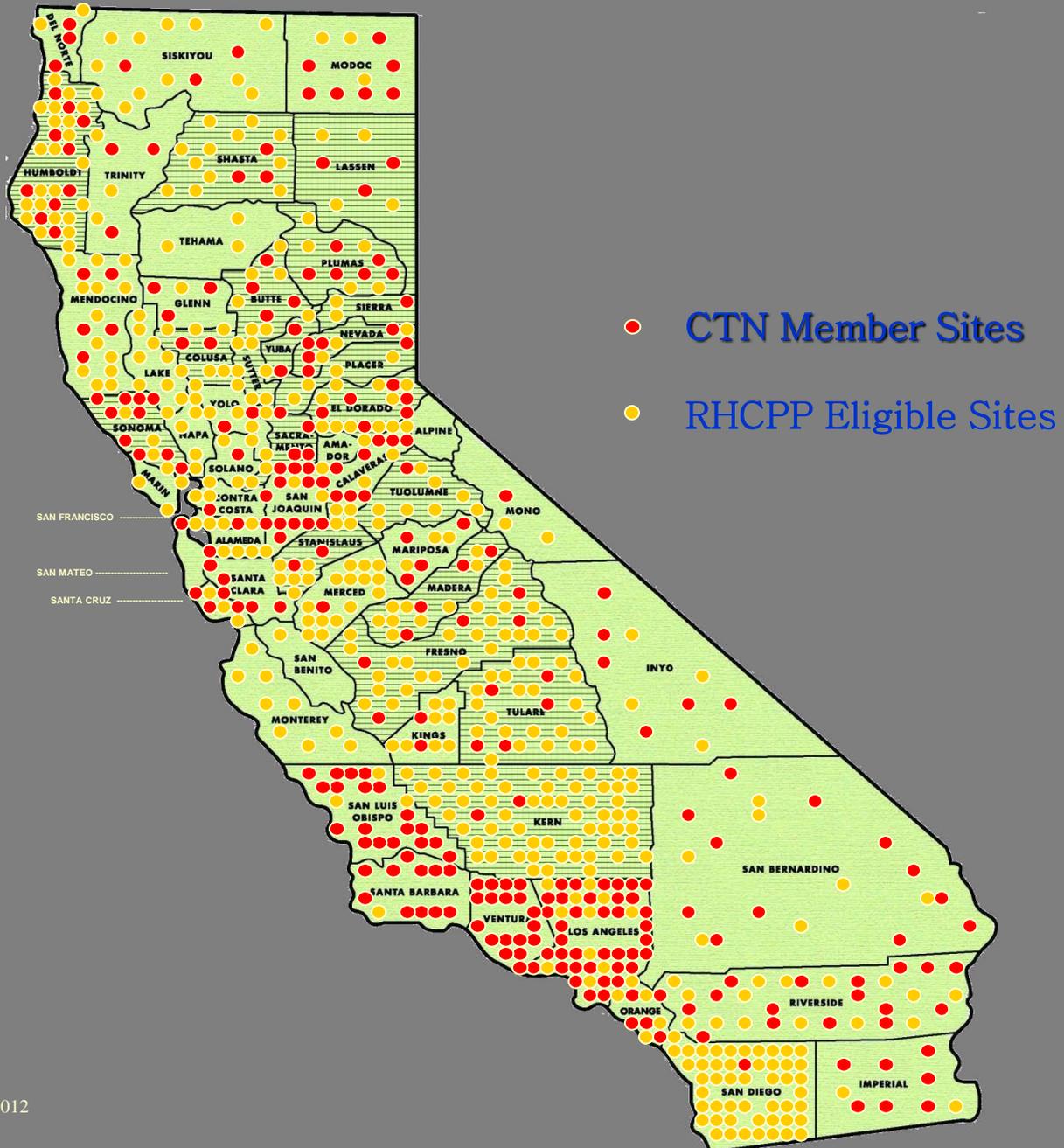
Redundant Circuits – due to the critical care nature of their services, some sites may merit the installation or redundant PE-CE circuits. Note that each PE-CE circuit terminates at a separate Regional Hub facility. Should one circuit fail (or a catastrophic failure occurs at one Provider Edge facility) the redundant circuit will automatically assume the full load. During normal operation, the two circuits can share the aggregate load through “load sharing” programming.

CE Router – the CTN connection to each site will terminate on a “Customer Edge” router that is located at the local facility. The Prime Contractor will be responsible for comprehensive support of the network, including the CE router. The router will provide an Ethernet connection to which the individual sites can connect a Local Area Network (LAN) to gain access to the CTN. Neither CTN Management nor the Prime Contractor will be responsible for supporting the Site’s LAN, or any network-based equipment that may attach to it (PC’s, telemedicine devices, printers, etc.).

Security DMZ – all traffic to/from external networks passes through a “De-Militarized Zone.” Various security devices, including firewalls, Anti-Virus Systems, Intrusion Prevention Systems, etc., interrogate the traffic and enforce security rules. CTN has the option to contract for these managed services from the Prime Contractor, but is not obligated to do so.

CTN Technical Architecture





*Map is a replication of sites as of April 2012



Press Release

California Telehealth Network

Funding to FCC's Rural Health Care Pilot Program

For more information, please contact:
Danielle Smith, 916-341-3371

California Emerging Technology Fund Presents \$1 Million Grant to California Telehealth Network

SACRAMENTO, December 12, 2011 – On December 2, the Board of the California Emerging Technology Fund (CETF) presented a check for \$1 million to the California Telehealth Network (CTN), the largest FCC Rural Health Care Pilot Program in the country. The funding will assist the CTN in continuing the efforts to significantly increase access to broadband for healthcare sites in rural and medically underserved communities throughout California.

Sunne Wright McPeak, President and CEO of CETF, presented the \$1 million grant to Eric Brown, President and CEO of CTN, at the CETF Regional Leaders Workshop in San Francisco, CA.

“This \$1 million investment is intended to support the ongoing expansion of CTN as the premier telehealth provider in California,” said Sunne Wright McPeak, President and CEO of CETF. “We encourage other foundations, corporations and health care providers to learn more about CTN and find ways to support the transformation of health care delivery in this state.”

The CETF provides leadership statewide to close the "Digital Divide" by accelerating the deployment and adoption of broadband to unserved and underserved communities and populations.

“This important funding allows CTN to expand the capacity of our autonomous 501c3 non-profit organization to achieve the mission of using our medical grade broadband network to improve access to the best quality health care in rural and medically underserved California communities,” said Brown.

The CTN project intends to leverage and build upon California's historic and recent investments in telehealth. This funding opportunity enables CTN to support rural health clinics that are providing vital services to individuals and families in need.

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About the California Telehealth Network

The CTN is a statewide broadband partnership for telehealth dedicated to healthcare. Initially funded through the FCC's Rural Health Care Pilot Program – with the goal of significantly increasing access to acute, primary and preventive health care in rural America – the FCC will provide California with up to \$22.1 million, the largest single state award of its kind with \$3.6 million in matching funds from the California Emerging Technology Fund and additional funding from the California HealthCare Foundation, the California Teleconnect Fund, the National Coalition for Health Integration, the University of California and United Healthcare.

CTN will connect over 800 California healthcare providers through a statewide broadband network to improve access to the best quality health care in rural and medically underserved communities statewide.



Press Release

For Immediate Release

California Telehealth Network Unveils Public Service Announcement Campaign to Raise Awareness of Telehealth Services

For more information, please contact:
Danielle Smith, 916-541-2882

Initial Campaign Launch Targets Southern California

SACRAMENTO, January 24, 2012 – The California Telehealth Network (CTN), announced the release of public service announcements (PSA), to highlight the availability of telehealth services in local communities. Featured health care providers include: Catalina Island Medical Center, Clinicas del Camino Real in Ventura County, Community Health Alliance of Pasadena, Children’s Dental Health Clinic of Long Beach, Ridgecrest Hospital and Tarzana Treatment Centers. Beginning this month, the commercials will air on Time Warner, Charter and Catalina Cable systems. California Telehealth Network is California’s statewide partnership for telehealth utilizing broadband technology to expand access to health care with a focus on rural and medically underserved communities.

Initially funded by the Federal Communications Commission’s Rural Health Care Pilot Program, over 800 health care providers around the state have qualified to participate in the program which provides medical grade broadband connections enabling patients to be seen by specialists using video consultations without leaving their local communities. The program also provides the ideal environment for the exchange of electronic health records, MRI’s, x-rays and other patient information over a secure broadband network.

“CTN is transforming the delivery of health care in California by enabling patients in rural and medically underserved areas to receive health care consultations from the best specialists in the State without leaving their local communities. Our mission is to expand access to quality care while reducing health care delivery costs,” said CTN President and CEO, Eric Brown.

The testimonial videos can be seen online at the CTN’s YouTube Channel:
(<http://www.youtube.com/user/CalTeleHealth>).

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About the California Telehealth Network

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CALIFORNIA TELEHEALTH NETWORK

Press Release

For Immediate Release

California Telehealth Network Reaches 100 Connected Sites

For more information, please contact:
Danielle Smith, 916-541-2882

SACRAMENTO, February 21, 2012 – The California Telehealth Network (CTN), today announced that its membership has reached the milestone of 100 sites with direct connections. California Telehealth Network is California’s statewide partnership for telehealth utilizing broadband technology to expand access to health care with a focus on rural and medically underserved communities.

Initially funded by the Federal Communications Commission’s Rural Health Care Pilot Program, over 800 health care providers around the state have qualified to participate in the program which provides medical grade broadband connections enabling patients to be seen by specialists using video consultations without leaving their local communities. The program also provides the ideal environment for the exchange of electronic health records, MRI’s, x-rays and other patient information over a secure broadband network.

“The connection of our 100th site is tremendous,” said CTN President and CEO, Eric Brown. “This momentum demonstrates how CTN is truly transforming the delivery of health care in California by enabling patients in rural and medically underserved areas increased access to care without leaving their local communities.”

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About the California Telehealth Network

The CTN is a statewide broadband partnership for telehealth dedicated to health care. Initially funded through the FCC’s Rural Health Care Pilot Program – with the goal of significantly increasing access to acute, primary and preventive health care in rural and medically underserved areas of California – the FCC will provide CTN with up to \$22.1 million, the largest single state award of its kind with \$3.6 million in matching funds from the California Emerging Technology Fund. Additional funding has been provided from the California HealthCare Foundation, the California Teleconnect Fund, the National Coalition for Health Integration, the University of California and United Healthcare. For more information visit (www.caltelehelath.org).

**PRESS RELEASE**

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Cheryl Randolph
UnitedHealthcare
714-226-3441
cheryl.randolph@uhc.com

UNITEDHEALTHCARE GIVES \$700,000 GRANT TO THE CALIFORNIA TELEHEALTH NETWORK TO HELP EXPAND ACCESS TO QUALITY CARE

Donation follows UnitedHealthcare's \$600,000 grant in 2010 to help launch the network

SACRAMENTO, April 3, 2012 – UnitedHealthcare has donated \$700,000 to the California Telehealth Network to help expand telemedicine training and provide technical support for rural and medically underserved clinics and hospitals in California.

California Telehealth Network (CTN) is the Golden State's statewide partnership for telehealth. It uses broadband technology to improve access to quality health care with a focus on rural and medically underserved communities. CTN plans to partner with the California Telemedicine and eHealth Center (CTEC) and other stakeholder partners to provide training and technical support for CTN sites throughout the state.

This is the second grant UnitedHealthcare has given CTN. In 2010, UnitedHealthcare donated \$600,000 to help launch CTN and its goal of connecting telehealth providers across the state.

"CTN thanks UnitedHealthcare for this important funding that enables us to expand offerings beyond broadband services to include increased technical and programmatic support for CTN sites all over California," said Eric Brown, president and CEO, California Telehealth Network. "Less than 20 percent of our locations have onsite information technology expertise. The UnitedHealthcare funding also enables CTN to provide much needed IT support to our sites to enable them to better utilize the technology CTN makes possible."

"UnitedHealthcare shares California Telehealth Network's goal of ensuring that people statewide have access to the care they need," said Dan Rosenthal, CEO, UnitedHealthcare of Northern California. "We are grateful for the opportunity to continue our support for CTN as it brings much-needed health care into underserved communities throughout the state."

UnitedHealthcare offers health benefits, including employer-sponsored and Medicare health plans, to nearly 3 million Californians, and partners with about 50,000 physicians across the state.

About the California Telehealth Network

The CTN is a statewide broadband partnership for telehealth dedicated to health care. Initially funded through the FCC's Rural Health Care Pilot Program – with the goal of significantly increasing access to acute, primary and preventive health care in rural and medically underserved areas of California – the FCC will provide CTN with up to \$22.1 million, the largest single state award of its kind with \$3.6 million in matching funds from the California Emerging Technology Fund. Additional funding has been provided from the California HealthCare Foundation, the California Teleconnect Fund, the National Coalition for Health Integration, and the University of California. For more information visit (www.caltelehealth.org).

About UnitedHealthcare

UnitedHealth Group is dedicated to helping people nationwide live healthier lives by simplifying the health care experience, meeting consumer health and wellness needs, and sustaining trusted relationships with care providers. The company offers the full spectrum of health benefit programs for individuals, employers and Medicare and Medicaid beneficiaries, and contracts directly with more than 650,000 physicians and care professionals and 5,000 hospitals nationwide. UnitedHealthcare serves more than 38 million people and is one of the businesses of UnitedHealth Group (NYSE: UNH), a diversified Fortune 50 health and well-being company.



Press Release

California Telehealth Network

California Telehealth Network Announces Separation from UC Davis

For more information, please contact:
Danielle Smith, 916-541-2882

California Telehealth Network Announces Creation of National 501(c)(3) Nonprofit Organization

SACRAMENTO, May 30, 2012 – California Telehealth Network (CTN), a statewide broadband partnership for telehealth dedicated to health care, has formally announced its transition to an independent non-profit status. Formerly under the umbrella of the University of California and UC Davis Health System, CTN now operates as a national 501(c)(3) non-profit organization. The transition took place in April upon approval from the CTN's board of directors.

CTN will connect more than 800 California health care facilities to a statewide medical-grade broadband network of health care and emergency services with a mission to improve access to the best quality health care in rural and medically underserved communities statewide.

"Establishing a dedicated broadband network for health care is the tipping point for the digital health highway in California," said Thomas Nesbitt, UC Davis associate vice chancellor for strategic technologies and alliances. "The California Telehealth Network links health care providers so they can provide access and quality care for patients at the right time, in the right place, to those who have lacked good access to specialty care for far too long."

Initially funded through a \$30 million joint funding effort between the Federal Communications Commission (FCC), the California Emerging Technology Fund (CETF), the California HealthCare Foundation, UnitedHealthcare, the National Coalition for Healthcare Integration, the University of California and other private and public entities, the California Telehealth Network is the largest single-state grant award of its kind.

"We will always be grateful to the University of California for their leadership in incubating CTN which allowed the organization to develop into the largest FCC Rural Health Care Pilot Program in the nation," said Eric Brown, CTN's President and CEO. "As we complete this important transition to an independent non-profit organization, we now encourage other health care organizations, vendors and foundations with a stake in California to bring to the table their innovative resources to help CTN realize the vision of using broadband technology to positively impact access to health care for all Californians."

The University of California played a key role in spearheading the original FCC Rural Health Care Pilot Program proposal and in CTN's initial development stages. The University also secured a \$9.1 million Broadband Technology Opportunity Program (BTOP) grant award from the Department of Commerce that funds CTN core operating needs and established 15 broadband enabled Model Communities to demonstrate technology enabled health care delivery. Now, with over 300 member sites enrolled, CTN will use the learning from the Model Communities to drive the development of additional health IT services that will be delivered over its secure, high-speed broadband network.

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About the California Telehealth Network

The CTN is a statewide broadband partnership for telehealth dedicated to health care. Initially funded through the FCC's Rural Health Care Pilot Program – with the goal of significantly increasing access to acute, primary and preventive health care in rural and medically underserved areas of California – the FCC will provide CTN with up to \$22.1 million, the largest single state award of its kind with \$3.6 million in matching funds from the California Emerging Technology Fund. Additional funding has been provided from the California HealthCare Foundation, the California Teleconnect Fund, the National Coalition for Health Integration, and the University of California. For more information visit (www.caltelehealth.org).



Press Release

California Telehealth Network

FCC Chairman to Visit Barton Health South Lake Tahoe

For more information, please contact:
Danielle Smith, 916-541-2882

Barton Health Member of the California Telehealth Network

SACRAMENTO, July 27, 2012 – Federal Communications Commission (FCC) Chairman Julius Genachowski is scheduled to visit Barton Health, a California Telehealth Network (CTN) member site located in South Lake Tahoe, CA and one of the FCC funded Rural Health Care Pilot Program (RHCPP) sites.

“We’re thrilled Chairman Genachowski is taking the time to visit one of our premier CTN sites. The FCC Rural Health Care Pilot Program has enabled CTN to use broadband technology to expand access to health care in rural and medically underserved areas of California. Barton is a prime example of how these resources allow local patients to be seen by the best clinical providers in the State without leaving the community,” said Eric Brown, CTN President and CEO.

CTN is the largest RHCPP participant in the nation with over 350 sites throughout California. Through the program, CTN provides Barton FCC subsidized high speed broadband which has enabled Barton to expand specialty care services through telehealth. Barton patients can be seen by the State’s best clinical specialists from distant locations using high definition cameras and monitors. Since the implementation of the program, Barton has averaged 75 telehealth patient visits a month. Barton’s clinical specialty services include: cardiology, endocrinology, infectious disease, dermatology, and adult psychiatry and neurology.

“CTN allows Barton to ensure its connections to external partners are fast, secure and of excellent quality. This is particularly important for specialists who are making a diagnosis and recommending treatment via telemedicine. You must be able to upload and download images and sound quickly which is sometimes not possible on the regular internet,” said Dr. Gregory Bergner, Barton Health. “CTN makes this possible.”

Barton Health serves a large percentage of medically underserved and uninsured patients. Clinical specialty services are available at Barton Memorial Hospital, Barton Community Clinic, Barton Family Medicine, Internal Medicine, Urgent Care and Family Practice.

About the California Telehealth Network

California Telehealth Network’s mission is to promote advanced information technologies and services to improve access to high quality healthcare focusing on medically underserved and rural Californians. An independent non-profit 501c3, CTN was initially funded through the FCC’s Rural Health Care Pilot Program which will provide CTN with up to \$22.1 million, the largest single state award of its kind with \$3.6 million in matching funds from the California Emerging Technology Fund. Additional funding has been provided by the California HealthCare Foundation, the California Teleconnect Fund, the National Coalition for Health Integration, United HealthCare and the University of California. For more information, visit (www.caltelehealth.org).

IMPROVE YOUR TELEHEALTH PROGRAM

One of the most important elements for successful adoption of any new product or program is user training. The California Telehealth Network offers **FREE** training and consulting services to our member sites, courtesy of grant funding provided by UnitedHealthcare.

The UnitedHealthcare Grant is designed to help member sites with telemedicine program design, implementation and sustainability.

CTN Member Sites receive the following:

- Up to one hour of training per training topic
- Upon completion of training, sites may utilize up to one hour of follow-up support with a UnitedHealthcare Consultant (*Refer to consultant descriptions on back page*)
- California Telehealth Resource Center (CTRC) is available to provide additional resources, training and support services to those member sites who require additional training and support services after completion of CTN training and meeting with a UnitedHealthcare consultant. *Fees may apply.*

REGISTRATION INFORMATION

To schedule training, contact Nicole Quesada at:

- **Phone:** 310-528-4452
- **E-mail:** nquesada@caltelehealth.org

REGISTRATION DEADLINE

Training requests accepted on a first-come, first-served basis through August 2013.

Early registration strongly encouraged.

CTN/CTRC Training Topics

Training topics being offered through the UnitedHealthcare grant:

- Establishing a program from ground zero
- Needs assessment
- Equipment selection
- Videoconferencing equipment, peripheral device and software user training
- Equipment and telecommunications network troubleshooting
- Contracting with specialists
- Models for reimbursement
- Clinic operations
- Patient presentation techniques
- Credentialing process and policy updates



If you are interested in a topic not listed above, please send your training topic request to: nquesada@caltelehealth.org.

California Telehealth Network
Phone: 855.385.5082
www.caltelehealth.org

California Telehealth Resource Center
Phone: 877.590.8144
www.caltrc.org

2001 P Street, Suite 100
Sacramento, CA 95811

Meet Our UnitedHealthcare Training Consultants



Susan Ferrier is a co-founder and Executive Director of Connecting to Care (CtoC), an incorporated, 501(c)(3) organization located in Grass Valley (Nevada County) and Redding (Shasta County), California. CtoC's mission is to provide charitable health services using innovative technology approaches to connect underserved populations to care, and promote the health and wellbeing of individuals regardless of their economic status. The primary service area is rural Northern California. Ms. Ferrier has extensive experience in rural telehealth development through her current position and ten years as Director of Telehealth at Northern Sierra Rural Health Network, which included 48 rural clinics, hospitals, county health departments and private providers.

Training Focus: Establishing a Program from Ground Zero, Needs Assessment, Contracting with Specialists, Models for Reimbursement and Clinic Operations



Frank Anderson was born and raised in Mexico City. His family moved to the SF bay area in 1963, and he moved to Humboldt County in 1974, currently residing in Arcata, CA. After a 25 year Nursing career, with experience in Emergency, Intensive Care, Surgery, Dialysis, Outpatient Care, Risk Management, and Education, Frank became Director of Telehealth Development for Open Door Community Health Centers. He has worked in Telehealth services since 1999, and is currently responsible for coordinating efforts to develop and promote Telehealth for Open Door and throughout California. He has spoken on the topic of Telehealth on regional, state, and national levels and has consulted with primary and specialty care providers on the development of their own programs for over 10 years.

Training Focus: Establishing a Program from Ground Zero, Equipment Selection, Contracting with Specialists, FQHC Models for Reimbursement, Clinic Operations and Patient Presentation Techniques



Amy Jean Ham has over 6 years of experience working with Federally Qualified Health Centers and an extensive background in program management and development. Amy guides organizations through the development, implementation, and on-going evaluation of their programs. Additionally, she is available to assist with telemedicine reimbursement and provider development questions. Amy is excited to share her recent experience with integrating Telehealth, Electronic Health Records and Meaningful Use in Community Clinics. Amy has a Bachelor of Arts in Political Science from Northern Arizona University. She also has certificate in nonprofit management from Arizona State University.

Training Focus: Needs Assessment, Models for Reimbursement, Clinic Operations



Dan Kurywachak is the founder and CEO of Telemedicine.com. He has developed hundreds of Telemedicine programs worldwide including: the Brazilian Amazon, China, India, Lebanon, Nigeria, South Africa, South Korea, and the United States. He has over 15 years of hands-on experience in the field of Telemedicine and has trained over 800 clinicians and also holds two patents in the field of Telemedicine. Prior to Telemedicine.com Dan worked for the University of CA, Davis for over 17 years. He held the positions of Director of Telemedicine Technology and the Director of the Telemedicine Learning Center. Dan later joined the Intel Corporation as a Senior Engineer and was responsible for Telemedicine operations worldwide.

Training Focus: Equipment Selection, Videoconferencing Equipment, Peripheral Device and Software User Training, Equipment and Telecommunications Network Troubleshooting and Patient Presentation Techniques



Mei Wa Kwong, JD is the Senior Policy Associate at the Center for Connected Health Policy (CCHP). She has over a decade of experience in policy work on both the state and federal level and has written numerous policy briefs, crafted state legislation and led several coalition efforts on a variety of issues. Ms. Kwong co-authored CCHP's report *Advancing California's Leadership in Telehealth Policy: A Telehealth Model Statute & Other Policy Recommendations* and the accompanying model statute legislation. She was the technical advisor to both the author and sponsor of the Telehealth Advancement Act of 2011 in California. Ms. Kwong will serve as the Program Director on the recently awarded National Telehealth Policy Resource Center grant that CCHP received from the Health Resources and Services Administration in September 2012.

Training Focus: Credentialing process and policy updates

CONNECT TO

CALIFORNIA TELEHEALTH NETWORK

www.caltelehealth.org

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California Telehealth Network (CTN) is a non-profit association that promotes advanced information technologies and services to improve access to high quality health care focusing on medically underserved and rural Californians.

CTN is available for all your broadband, training and telehealth needs. We also encourage you to contact the **California Telehealth Resource Center** (CTRC), CTN's partner association and one of the country's leading resources for telehealth education, expertise, and program implementation guidance. CTRC is your go-to source for unbiased telehealth information, serving health care providers, health systems, clinics, government agencies and others interested in telehealth.

Call Us: 877.590.8144

Email Us: info@cteconline.org

Visit Us: www.caltrc.org



CALIFORNIA TELEHEALTH NETWORK