



CALIFORNIA TELEHEALTH NETWORK

## **CTN Comments RE: FCC Rural Health Care Reform**

WC Docket No. 02-60

CTN comments on FCC's Public Notice dated July 19, 2012

**Eric Brown, President & CEO  
August 23, 2012**



**Summary:**

CTN recommends the Commission adopt the following changes to the Pilot Program in the Broadband Services Program:

1. Continue to support urban HCP participation in the Broadband Services Program without arbitrary caps or restrictions
2. Maintain the Broadband Services Program subsidy level at the current 85% Pilot Program subsidy level for recurring and non-recurring charges
3. Expand Broadband Services Eligibility to include:
  - a. Patient monitoring HCP facilities such as Dialysis Centers, Assisted Living, Skilled Nursing Facilities and Nursing Homes
  - b. Relax restrictions on Behavioral Health, Family Resource Centers, substance abuse, family therapy and mixed use facilities in underserved areas
  - c. Data Centers critical to hospital and clinic operations hosting Electronic Health Records, scheduling, billing and practice management platforms
  - d. Safety net doctors in rural and medically underserved areas
4. Provide for standard administrative operating expenses to support adequate dedicated staffing to provide:
  - a. Management and administrative expertise
  - b. Site outreach and education
  - c. Technical and programmatic support for telehealth adoption
  - d. On premise wiring and network optimization
  - e. Broadband Services Program evaluation

## **CTN Comments on July 19, 2012 FCC Public Notice**

The California Telehealth Network (CTN) is pleased to provide comments on Federal Communications Commission (FCC) Docket Number WC Docket No. 02-60 pertaining to reform of the FCC's Rural Health Care (RHC) program. In light of the significant public policy implications of RHC reform, and in accordance with the principles identified in the National Broadband Plan, CTN encourages the Commission to take an open minded approach with regards to implementation of the proposed Broadband Services Program. CTN cautions the Commission not to unnecessarily continue legacy arrangements conceived and implemented under the primary RHC program (Primary Program) or the RHC Pilot Program (Pilot Program), but to consider the full range of best practices already implemented in the E-rate program which is also administered by the Universal Services Administrative Company (USAC). Notably, there is no statutory directive supporting the large disparity in funding and administrative resources devoted to implement the RHC program versus E-rate.<sup>1</sup> With health care accounting for a growing and much larger percentage of U.S. government spending and the overall gross domestic product (GDP) than education, a more balanced allocation of universal service funding and FCC administrative resources in favor of the RHC program is warranted.

Very often CTN finds that educational institutions and libraries in rural California share the same broadband challenges that rural anchor health care institutions encounter. RHC program rules have in theory long permitted these entities to pool resources while receiving Universal Service Fund (USF) support; however in practice this has never been implemented.<sup>2</sup> If through the new Broadband Services Program, CTN were able to pool resources with educational broadband subsidy recipients and Broadband Technology Opportunity Program (BTOP) grant recipients to share the cost of deployment into rural and frontier communities, we believe we could more efficiently use precious USF funds to increase broadband penetration in the communities that are

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<sup>1</sup> See 47 U.S.C. § 254(h)(2)(A) (directing FCC to establish rules "to enhance . . . access to advanced telecommunications and information services for *all* public and nonprofit elementary and secondary school classrooms, health care providers, and libraries") (emphasis added); see also *Conference Report on S. 652, Telecommunications Act of 1996: Joint Explanatory Statement Of the Committee of Conference*, 142 Cong. Rec. H1078, 1112-1113 ("New subsection (h) of section 254 is intended to ensure that health care providers for rural areas, elementary and secondary school classrooms, and libraries have affordable access to modern telecommunications services that will enable them to provide medical and educational services to all parts of the Nation.").

<sup>2</sup> See 47 C.F.R. § 54.601(b) ("An eligible health care provider may join a consortium with other eligible health care providers; with schools, libraries, and library consortia . . . and with public sector (governmental) entities to order telecommunications services.").

most in need. As an example, CTN believes the Broadband Services Program should fund CTN connections to BTOP grant recipients such as the California Broadband Cooperative (CBC) also known as Digital 395, which is constructing a high capacity broadband network to communities along the US Highway 395 corridor from Barstow, CA in the South to Carson City, Nevada to the North through the center of Death Valley. Without collaborative direct connections between CTN and CBC, anchor health care sites in this region are faced with the decision whether or not to connect to CTN or take BTOP funded connections from CBC which also offers discounted broadband services. CTN believes the better approach to minimize the cost of construction to underserved areas is to partner with these entities rather than compete with them.

The Broadband Services Program should fund direct connections to Homeland Security sites, Public Safety sites, National Lambda Rail, Internet2 and other federally funded broadband adoption initiatives which currently have no meaningful incentives to partner with RHC consortia.

**CTN encourages the FCC to transition Pilot Program administrative resources to the development and establishment of the next rural health care Broadband Subsidy Program as quickly as possible.** In particular, beyond the focus of CTN's comments in the balance of this document, we encourage the Commission to allow sufficient time for USAC to obtain participant input on the proposed forms, SharePoint site elements, processes and administrative operational considerations of the program that currently require significant Primary and Pilot Program participant resources. Once again, a best practices approach to identify and carry forward lessons learned across the E-rate, Primary Program and Pilot Program administrative operations at the USAC level informed by objective feedback from program participants in these programs is encouraged.

Whatever the future funding allocation considerations may be for the new Broadband Services Program, we urge the Commission to adopt the principle of leveraging the best practices learned from the Primary and Pilot Programs to make the new program as effective as possible rather than compromising the potential impact of the new program by altering elements found to be previously effective.

As a Pilot Program participant, CTN received a \$22.1 million award in November 2007 and has identified over 900 Health Care Providers (HCP's) in the State of California that are eligible for Pilot Program participation. By June, 2012, CTN had fully committed the \$22.1 million in Pilot Program funding enrolling 367 health care sites including 76 self reported logical connections. Over 100 HCP's that have been turned away that were seeking CTN participation. With the momentum that has now been generated through this program, the CTN Board and stakeholders believe we have only begun addressing the needs of the rural and underserved populations in the State of California. With over 14,000 HCP's currently enrolled in the State's Regional Extension Centers and over 900 Federally Qualified Health Center (FQHC) sites in California alone, CTN must continue to efficiently expand its medical grade broadband network if it is to have a meaningful impact on the State's overall health outcomes. Near term, continued FCC broadband subsidy support as seed capital will be a key element to CTN's success. Long term CTN has begun implementation of a sustainability plan designed to reduce its dependence on grants and subsidies and increase self generated revenue from the provision of value added advanced health information technology services to California HCP's. CTN currently has enrolled 367 HCP sites and seeks to further extend its reach to achieve the original vision of serving over 850 sites.

**Inclusion of Urban Sites in Consortia (Section II, Paragraph 8)**

**CTN very strongly supports the continued inclusion of urban sites in consortia participating in the Broadband Services Program.** At the time of the CTN Pilot Program award in November 2007, CTN identified 863 sites that were eligible for Pilot Program participation. Roughly 60% of the original 863 site were in rural areas with 40% in urban areas. It would be 2 ½ years (July, 2010) before the first Funding Commitment Letter (FCL) was released. It was at this point CTN began enrolling CTN site participation on a first come first served basis. Today 55% of enrolled CTN sites are categorized as urban sites. There remain more than 360 urban Pilot Program eligible HCP's that have yet to enroll in CTN with annual membership fee revenue potential of roughly \$500,000 per year. This revenue would be jeopardized if the Commission were to limit urban HCP participation. CTN plans to continue outreach to HCP's in rural and medically underserved areas of California.

CTN frequently encounters urban HCPs with patient populations that are as isolated from clinical specialty care as our most rural HCP's. St. John's Well Child and Family Clinics in Los Angeles is a good example. Dr. Ellen Rothman, Chief Medical Officer at St. John's shared with us how when she was the medical director for an Indian health clinic "out in the middle of the desert in Arizona", they utilized telemedicine for access to specialty care, distance education, case conferencing, etc. She then shared that after moving to Los Angeles, and practicing primary care in the middle of the city, she "never felt so isolated in her life". Due to the patient population they serve, specialists are afraid to return her telephone call, as they're afraid the end result will be her patients showing up at their door. The ability to use telemedicine, to connect with specialty clinicians to care for patients "over a distance" is a life line for safety net doctors and their patients in urban and rural areas alike.

CTN has established a strong working relationship with LA Care, the largest public health plan in the country operating in Los Angeles County. LA Care is the lead agency in one of CTN's 15 BTOP Grant funded broadband enabled Model Communities featuring an eConsult application that expands access to specialty care for underserved communities in Los Angeles County. This is just one of many health care innovations that have the potential to positively impact care delivery statewide. Continuing to leverage California's innovation resources such as LA Care will require continued Broadband Services Program funding for urban HCP's. The University of California is another example of an important CTN foundational partner with medical center locations in California's urban population centers of Irvine, Los Angeles, Sacramento, San Diego and San Francisco. Aided by an array of stakeholder organizations, UC Davis took the lead role in incubating CTN by providing staffing and funding support to initiate operations and also provided the administrative and technical expertise which enabled CTN to apply for the initial Pilot Program award and a BTOP grant, both of which were the foundational sources of CTN infrastructure and staffing funding. The long term economic sustainability of CTN is critically dependent on further growth in participation from California's urban areas which

- 1) Have the clinical specialists required to provide specialty care services for rural CTN sites and

2) Provide the patient populations to provide sufficient scale to support the ongoing infrastructure and organizational investments CTN will need to sustain services at affordable costs to rural HCP's.

CTN respectfully submits for the Commission's consideration that using broadband technology to expand access to health care is not an urban versus rural issue, the relevant metric is whether or not the community is medically underserved in terms of the number of available HCP's, and in particular specialty care providers. Unrestricted inclusion of urban and rural HCP's has worked well for CTN in the Pilot Program, is an essential ingredient for the successful start-up of new networks in other regions of the country, and should therefore be continued in the Broadband Services Program. **Accordingly, CTN strongly opposes any change to the current Pilot Program eligibility requirements for rural versus urban HCP's and recommends the FCC use Health Provider Shortage Areas (HPSA) as a better measure of medically underserved areas.**

#### **Maintain Pilot Program Subsidy Level**

**CTN strongly recommends that the Commission establish subsidy levels for the Broadband Services Program (for non-recurring and recurring expenses) based on the current 85% Pilot Program levels.** Finding match funding for the remaining 15% cost, particularly for rural sites, has proven to be a challenge for many Pilot Program participants. Increasing the required match funding requirement would be particularly ill advised at this time given the economic environment currently facing rural HCPs. Many of California's Critical Access Hospitals (CAHs), Rural Community Health Clinics (RHCs), Federally Qualified Healthcare Centers (FQHCs) and hospitals are struggling with very thin operating margins. The California Health Care Foundation published a report in March, 2012 "California's Rural Health Clinics: Obstacles and Opportunities" which indicates the majority of California RHC's reported feeling financially unstable; 56% of RHCs did not make a profit in their most recent fiscal year while 40% self-identified as unstable or very unstable.<sup>3</sup> CTN commonly hears from California Community Clinics, CAHs and FQHC's that they are doing the best they can to maintain positive operating

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<sup>3</sup> See also EVALUATION OF RURAL HEALTH CARE PILOT PROGRAM, WC Docket 02-60, Wireline Competition Bureau Staff Report, DA 12-1332, ¶ 74 (rel. Aug. 13, 2012) (recognizing "[m]ost rural HCPs operate on a very thin margin, and many operate at a loss") (citations omitted).

margins from core operations and that they would not have been able to invest in obtaining sufficient broadband and the equipment to support telehealth activities without the help of grants and subsidies like the Pilot Program, the Primary Program, Rural Utilities Services (RUS) and BTOP grants. Any change in the Broadband Services Program that would have the effect of making HCP participation more difficult by increasing the match fund requirement runs counter to the goal of accelerating adoption of broadband enabled health care for the underserved. Accordingly, CTN recommends that the Commission continue the Pilot Program 85% subsidy award level in the new Broadband Services Program. **CTN also recommends the Commission continue the Pilot Program practice of funding associated routers, switches, firewalls, border proxy, and other edge equipment necessary to configure broadband network services for HCP sites.**

#### **Broaden HCP Site Eligibility (Section III, Paragraph d.)**

**CTN recommends that the Commission expand eligibility for participation in the new Broadband Services Program to keep pace with major and emerging trends in health care.** Based on CTN's experience, two of the most frequent eligibility constraints we have encountered are:

1) Difficulty obtaining eligibility for behavioral health centers particularly when those centers operate in the context of integrated care delivery models such as Family Resource Centers or facilities that deliver a variety of social services. Current trends in California (particularly in public health facilities) favor integration of clinical/physical and behavioral health care to facilitate a more integrated approach to preventative health and wellness. Despite this, CTN has encountered difficulty obtaining eligibility confirmation for mixed use behavioral health sites presumably because the facilities are also providing services that may not be approved under the Pilot Program. The net result is exclusion of sites in rural and underserved areas creating a barrier to extending access to mental health care delivery to the underserved. This is an area where the Pilot Program can be improved by relaxing overall restrictions on behavioral health site participation and Family Resource Center participation.

2) Lack of support for HCP utilization of broadband connections in settings that enable patient monitoring for follow up care of the elderly, and treatment of chronic care conditions that are the most prominent drivers of health care costs in America. Use of broadband (wireless and

wired) to enable monitoring of patients with chronic conditions such as diabetes, heart disease, high blood pressure and cancer is one of the fastest growing areas of telehealth demand and has the potential to improve clinical outcomes while reducing costs. In many medically underserved communities, broadband enabled patient monitoring also has the ability to positively impact the cost and efficiency of Medicare and Medicaid by improving follow up care for underserved and elderly patient populations.

**CTN encourages the Commission to enable Broadband Services Program site eligibility to include:**

- **Assisted living facilities**
- **Skilled nursing facilities**
- **Nursing homes**
- **Behavioral health providers**
- **Data Centers - which have become critical for hosting patient data in the form of Electronic Health Records**
- **Residential patient monitoring**

CTN understands there may be statutory constraints to extending eligibility to for-profit or commercial HCP's in the aforementioned categories, however currently Pilot Program eligible sites with facilities in these categories such as St Josephs Hospital in Eureka, CA and Barton Health in South Lake Tahoe, CA are unable to receive Pilot Program subsidies for their Family Resource Centers and Skilled Nursing Facilities even though they operate under the same Tax ID as the hospitals with which they are affiliated. Indeed, if these different HCPs were located at the same street address of the affiliated hospital, they would surely be considered eligible for discounted broadband. Seemingly arbitrary restrictions such as this get in the way of supporting integrated care approaches to better serve communities and underserved patients.

**CTN also recommends the Commission broaden eligibility in the Broadband Services Program to include safety net physicians in medically underserved areas.** The California Association of Rural Health Clinics, (CARHC) includes over 300 rural safety net doctors in rural communities across the State that are generally not eligible for Pilot Program participation due to

their for-profit tax status as private doctors. Ironically, many of these rural doctors are the only health care providers in the rural communities they serve, and are among the most challenged from a broadband accessibility perspective. CTN encourages the Commission to include rural safety net HCP's in the new Broadband Services Program regardless of for-profit/non-profit status.

### **Provide Core Operational Support Through the Broadband Services Program**

The California Telehealth Network received its first Funding Commitment Letter (FCL) in July, 2010, over two and a half years following the announcement of the initial award. In the time that transpired between initial award announcement in November, 2007 and issuance of the first FCL, many Health Care Providers that had previously executed LOA's with CTN either made other arrangements for broadband services or had forgotten about their CTN broadband arrangements. Consequently, CTN staff found it necessary to begin the site outreach and education process all over again following FCL issuance to secure widespread CTN participation. Although the need for medical grade broadband was clearly evident, the implementation delays caused many HCP's to question if the program would ever be operational.

Largely financed through UC Davis Health Systems (UCDHS) and an American Recovery and Reinvestment Act (ARRA) BTOP grant obtained by UC Davis, CTN staff engaged regional and local site outreach consultants with pre-existing relationships with HCP's in rural and medically underserved areas of California to assist in addressing these concerns and providing the necessary technical assistance required to develop CTN adoption in these areas. This was critical to CTN's ability to enroll rural HCP's. CTN will need additional site outreach resources to expand participation particularly in rural areas which in our experience require more in person communication and relationship building. **The FCC should consider an allocation of future Broadband Services Program awards to provide for site outreach and education to allow program participants like CTN to educate eligible HCP's on the benefits that broadband can provide.**

During the course of performing site outreach, particularly to rural sites, CTN discovered profound site preparation issues that often delayed or prevented HCP's from utilizing broadband

services. As an example, in a survey of rural HCPs conducted in September 2010, just 21% reported having access to on-site IT resources. Under the Pilot Program, on-site wiring and network optimization work are non-reimbursable. During the initial phases of CTN deployment, this caused significant delays as CTN found that many HCP's do not have the technical expertise nor the financial resources to complete "last 500 feet" of broadband connectivity. As an example, the first CTN 45 mbps circuit installation occurred at Ridgecrest Hospital in Ridgecrest, California which is located in a very remote area just east of the Southern Sierra Mountains, in Indian Wells Valley, California.

On paper, Ridgecrest already had broadband, a T1/1.5 mbps circuit through the local telephone provider. The reality was that like many rural HCP's, Ridgecrest was utilizing a public internet connection that was not suitable for reliable telehealth activities and experienced frequent outages and performance variability making it difficult to execute live video telemedicine consultations reliably. To address this problem Ridgecrest Hospital secured a 45 mbps connection through CTN.

During the installation process, Ridgecrest discovered that the minimum point of entry (MPOE) was located more than 500 feet from the main hospital building. Further, the MPOE was separated from the hospital by a paved parking lot with no accommodation for wiring in conduit under the pavement. Contractors for the local telephone provider presented the hospital with a work estimate of \$32,000 to complete the connection from the curb to the building.

Through resources provided by CTN Board stakeholders, CTN was able to eventually engage contractors to help resolve the issue. This example illustrates a common scenario for rural HCP's in which Pilot Program funding did not provide funding to complete the connection over the last few hundred feet. CTN will not be able to sustain this type of hands on technical assistance without additional funding.

CTN frequently encounters rural HCP's operating in aging buildings that have been repurposed as a health care clinic or small hospital. It is not unusual to find that a shower stall has been converted into a server room. Wiring can often be substandard for broadband purposes and

exposed to the elements. These rural HCP's are forced to make the best of extremely limited resources. The broadband and IT infrastructure in place is often inadequate to accommodate a high speed broadband connection which sometimes requires hands on site technical assistance to extend the broadband connection into the building, into examination rooms for patient treatment, or into meeting rooms for training and CME. **CTN recommends that the Broadband Services Program allow funding to include on site wiring and technical assistance as part of the broadband services covered just as the circuits and routers are covered in the Pilot Program.** In CTN's experience, if we do not complete the installation so that the HCP is fully operational in a turnkey fashion, sites are less likely to utilize the broadband connection.

Again, these examples highlight some of the barriers to success for CTN and other Pilot Program participants along with the absence of operational funding to support dedicated staff for implementation of the program. **CTN recommends the FCC consider allocating a modest portion of future Broadband Service Program subsidy award levels (10% to 15%) for core administrative and operating expenses to address this key need.** Staffing would be tied to specific program deliverables which would include:

- Site outreach and education on the benefits of broadband adoption in health care
- Technical assistance to assist HCP's with on-site wiring and network optimization, and
- Program evaluation based on a common set of program utilization and outcome metrics for all FCC program participants.

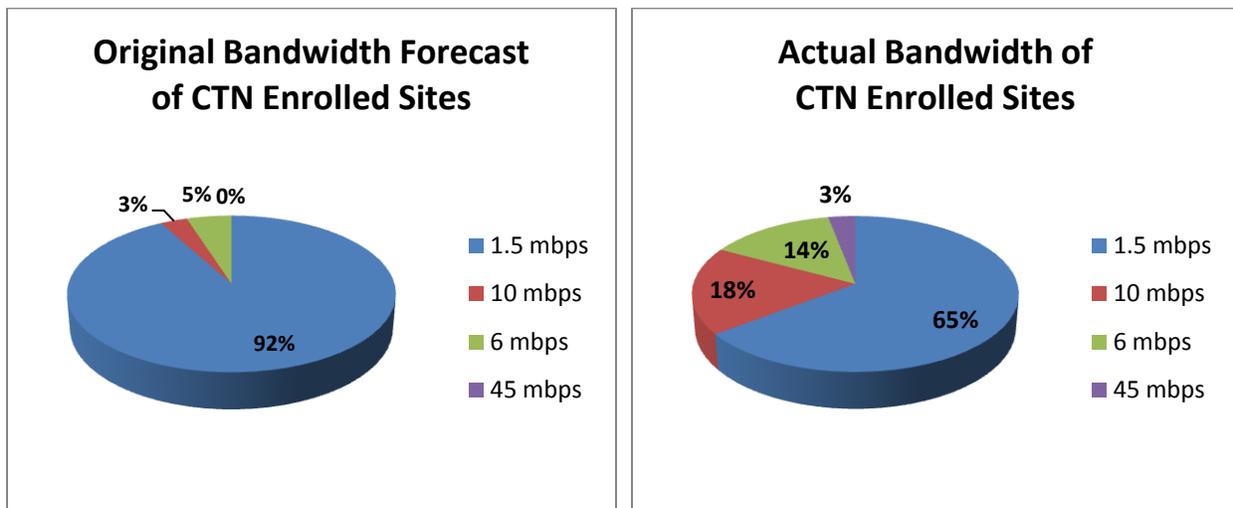
### **HCP Broadband Needs (Section V)**

CTN was originally conceived in 2007 with a network architecture that featured point to point MPLS, guaranteed Quality of Service connections to over 800 sites. CTN originally assumed 92% of CTN connections would be 1.5 mbps commonly referred to as "T1" connections. Over the past 4 years, as the bandwidth needs of individual CTN sites became clearer, CTN learned that member sites need higher capacity circuits to support high capacity IT applications such as:

- Live high definition video conferencing,
- Real time image transfer of patient MRI's and X-rays, etc. and
- Secure exchange of patient records.

Currently, 65% of HCP sites have selected T1 circuits since enrollment began in July, 2010, down from 92% in the original forecast. The trend towards higher capacity circuits continues to accelerate with time. Additional rural sites requested higher capacity broadband which is currently unavailable. Exhibit I charts the original circuit capacity assumptions versus the current site arrangements.

**Exhibit I**



Going forward CTN will continue to consult with individual sites on their specific bandwidth needs. In many rural and frontier areas of California today, T1 lines are still the best available broadband connection without engaging in prohibitively expensive construction.

Catalina Island Medical Center provides a good example of this. As one of the State's smallest licensed hospitals located in the City of Avalon on Catalina Island, 22 miles off the coast of Long Beach in the Pacific Ocean, it has no available wireline broadband service today. CTN provides a wireless microwave solution to deliver T1 broadband speeds. Catalina Island Medical Center is also a prime example of an HCP that is located in an urban county (Los Angeles), but is clearly in a medically underserved area isolated from physician populations in Greater Los Angeles.

Based on current trends for those areas of California with broadband availability, we anticipate 10 mbps will continue to be our most popular circuit selection in the near term for smaller

community clinics and CAHs. For District and Regional Hospitals 45 mbps connections are becoming more popular although 10 mbps are still the most selected, while 100 mbps connections will be in demand for large municipal and medical center hospitals and data centers. CTN plans to continue to provide connectivity to academic medical centers in California through CENIC.

Due to the diverse and rapidly evolving bandwidth needs of our participants, CTN urges the FCC not to create fixed bandwidth limits on the low-end or the high-end. At a minimum, such limitations will become rapidly out-of-date and thus an impediment to broad deployment. In addition, the FCC should continue to recognize that even a 15% match requirement provides a sufficient incentive for participants not to over-provision for their services. Indeed, CTN would support a presumption that HCPs, through the competitive bidding process, are in the best position to determine their bandwidth needs.