



**Broadband Alliance Public Outreach Meeting
Special Presentation by the California Telehealth Network**

Friday, September 11, 2015 10 am - 11:30 am
Community Foundation - 204 S. Oak St., Ukiah

Introductions:

Eric Brown, President/CEO, California Telehealth Network (CTN), **Dan Kurywchak**, CTO, CTN, **Caren Bishop**, Program Director, CTN, **Gary Morton**, Regional Outreach Engineer, CTN, **Chloe Guazzone-Rugebregt**, CEO, Anderson Valley Health Center, **Jacky LaGrace**, Director Integrated Care Network, Adventist Health - Ukiah/Willits, **Lentz Ferrell**, ISite Director, Adventist Health - Ukiah/Willits, **Rod Grainger**, ED, Long Valley Health Center, **Paula Cohen**, ED, Mendocino Coast Clinics, **Heather Holland**, Development Director, Santa Rosa Community Health Centers, **Barbara Wilson**, Navigator of Health Care for seniors, **Wally Clark**, Mendocino County Librarian, **Heather Gurewitz**, Field Representative, Congressman Huffman, **Brian Churm**, BAMC Technical Chair, **Katie Gibbs**, BAMC Executive Committee, **Brooke Clark**, community member, **David Pai**, Mendocino College Faculty, Computer Science, **Dave Smith**, MCOE Director of IT Services, **Maureen "Mo" Mulheren**, Ukiah City Council Member, **Mike Nicholls**, NBNCBC Management Team Member, Sonoma, **Tom Woodhouse**, Supervisor 3rd District, **Dan Hamburg**, Supervisor 5th District, BAMC Executive Committee, **Trish Steel**, BAMC Chair, **Diann Simmons**, BAMC Administrative Coordinator

By phone/video conference: Shirley Freriks, Mendocino Coast Broadband Alliance; **Dave Turner**, CFO, Redwood Coast Medical Services, **Rod Lorimer**, Mendocino Coast Broadband Alliance

CALIFORNIA TELEHEALTH NETWORK PRESENTATION
www.caltelehealth.org

CTN MISSION AND BACKGROUND - Eric Brown, CEO

Originally CTN was created to provide broadband subsidies to clinics and hospitals. Its mission has expanded to supporting sites to utilize broadband to expand the health care available to their patients including accessing telehealth and providers and accessing remote storage patient records. CTN focuses on rural and medically underserved urban areas. They serve 230 sites in 47 counties and have a strong presence in areas of Los Angeles where health care facilities face challenges similar to rural areas, with very low doctor to patient ratios. They serve not only non-profit clinics and hospitals but also for-profit medical centers and doctor's offices, although the for-profit groups are not eligible for the subsidies that significantly bring down the cost of service. CTN is an independent 501(c)(3) that was originally incubated by

UC Davis Medical School and funded through the FCC's Rural Health Care Pilot Program.

Services Offered

CTN provides broadband access through their private network, which is not exposed to the public internet, ensuring secure and consistent speeds between 1.5Mbps to 100 Mbps. If a facility doesn't have access, CTN helps gain it for that site. If a provider won't serve the site, CTN can access funds to pay for the total cost of construction from the FCC's Health Care Connect Fund and the California Band Services Fund through the CPUC. CTN selects a vendor to build the infrastructure to the site.

CTN also offers high speed access to the public internet through the CENIC network, which is a private network for schools, libraries, all UC campuses, and community colleges. CTN offers access to every academic medical center in California through CENIC. CTN's network is also connected to the Indian Health Service network. All non-profit sites receive a 65% discount for their broadband network connection utilizing the federal and state subsidies that CTN accesses for their members.

CTN offers to work with each site to help evaluate what the needs are and the best ways to meet those needs. **Their services also include:**

- Tier 1 technical assistance
- CTN Connect - a secure web based video conferencing platform that enables healthcare providers to launch multi-site video conferencing from any web base enabled device (allowing visual interaction with patients at home - proving especially valuable with diabetic patients)
- Telehealth consulting and training for site personnel and physicians
- Telemedicine specialty care providers - they maintain and track a directory and will help find and broker a relationship as needed
- Distance learning support
- Grant funding assistance

CTN also operates the California Telehealth Resource Center, which is federally funded through the Health Resources and Services Administration (HRSA) of the US Dept. of Health and Human Services. It offers programs and technical assistance with telehealth equipment selection and funding, telehealth implementation and other services. www.caltrc.org

The Year Ahead:

CTN is beginning to survey their member sites on a regular basis using independent consultants to get honest feedback. **Their goals include:**

1. **Advocacy** for telehealth and telemedicine - although they legally cannot lobby, they plan to be more pro-active with legislators to educate them about the problems CTN is seeing.

2. **Training for hospital boards and providers** to better equip them to understand why change is necessary
3. **Increased activity in telemedicine specialty care** - increase virtual visits; CTN has been invited to submit an application to the Prop 63 “Innovation Fund” to use telehealth to deliver mental health services. (For example, it would be used by safety net providers to serve kids in schools). **CTN INVITES OUR SUGGESTIONS** for how this could be used in Mendocino County and needs your input by late October (send to carenc@caltelehealth.org).

Eric Brown is also a member of the Board of Directors of USAC - the Universal Service Administrative Company that is a non-profit that was designated by the FCC as the administrator of universal service. As the administrative arm of the FCC, it is focused on rural health care, E-rate, Lifeline and the Connect America Fund (CAF). **He would like to hear from us about issues or obstacles relating to these programs to include in his reports to Sacramento and Washington** (send to eric@caltelehealth.org). Currently the CAF funds are under-utilized and Eric would appreciate assistance in making sure all eligible institutions are getting their share.

TECHNICALLY SPEAKING - Dan Kurywchak, Chief Technical Officer

Telemedicine is making a dramatic difference in remote areas where it's being used to provide immediate emergency care when the local doctor who lacks the specific expertise connects to a remote site and receives the instructions needed to administer the appropriate care. In the early days telemedicine was very expensive, with access as the biggest barrier. CTN's development of a private network with subsidies applied for participating organizations has made the cost of telemedicine much lower for their member facilities.

Lack of training to be able to use the telemedicine equipment, is now one of the biggest barriers to its use. CTN provides training remotely or through a CTN team that goes to communities to host an implementation workshop, including multiple providers who offer hands-on training on equipment. It was suggested that BAMC could help organize this locally, with a local tech person from CTN assigned to work with our local providers

Telemedicine does not work over the public internet. The key is high quality reception and speed, with consistency. The internet is cyclical and there are major delays in transferring medical videos and images, with the potential of calls dropping at any time. The pixilation needed, especially for dermatology consults, is not good enough through the internet. CTN's backbone is a 10Gb MPLS network. The benefit of an MPLS network is that its bandwidth can fluctuate as more bandwidth is needed at various times by members.

CTN is able to get much better pricing on telemedicine equipment for their members because of the volume purchased through their large consortium and also can assist members in making the best choices on equipment for their needs.

Few clinics and hospitals have disaster plans. CTN is now leveraging with third parties to work with their members to develop disaster recovery plans.

Many smaller clinics can't afford to have in-house tech support and CTN plans to make that available in the future, by the hour, to make it affordable.

RESPONSES TO QUESTIONS

Site Technical Review - If a facility is having problems with their connections, CTN will come to the site, do a review and give recommendations.

At this time, CTN's network is not diverse and can go down in outages. They are working on partnerships with all the cable companies to ensure they have the diversity needed to avoid any outage. There is also a dialogue going on with CENIC about building redundancy and diversity into their system.

Because of the reduction in the Federal subsidy, T1 line use has increased in cost while all other types of access have *decreased* in cost per amount of speed. **CTN is encouraging their members to move away from T1 to fiber.**

A good telehealth site coordinator is the key to success in a clinic or hospital utilizing telemedicine. Some of the local smaller clinics are finding it too expensive and difficult to provide telemedicine consultations, especially without an on-site coordinator. It was requested that CTN coordinate design practices that could be used by smaller sites to help them better facilitate telemedicine services for their patients.

Eric does not see the FCC moving toward more regulation of the internet, making redundancy and diversity mandatory. Instead he thinks they want less regulation. Unfortunately, there is a strong rural voice in Washington that says, "Don't expand broadband. We don't want to expose our kids to the negative aspects of the Internet". Congressman Huffman is starting to look at ways on a legislative level to address the lack of redundancy and diversity.

Meeting adjourned - 12:00

Next meeting: Friday, Oct. 2, 2015, 10:00-11:30
Location: the newly renovated Community Foundation
204 S. Oak St., Ukiah

Next dates:
November 6th
December 4th