

RECIPIENT NAME:University of California, Davis

AWARD NUMBER: 06-43-B10584

DATE: 10/30/2012

OMB CONTROL NUMBER: 0660-0037

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### QUARTERLY PERFORMANCE PROGRESS REPORT FOR SUSTAINABLE BROADBAND ADOPTION

#### General Information

<b>1. Federal Agency and Organizational Element to Which Report is Submitted</b> Department of Commerce, National Telecommunications and Information Administration	<b>2. Award Identification Number</b> 06-43-B10584	<b>3. DUNS Number</b> 047120084
<b>4. Recipient Organization</b>  University of California, Davis 1850 Research Park Drive, STE 300, Davis, CA 95618		
<b>5. Current Reporting Period End Date (MM/DD/YYYY)</b> 09-30-2012	<b>6. Is this the last Report of the Award Period?</b>  <input type="radio"/> Yes <input checked="" type="radio"/> No	
<b>7. Certification: I certify to the best of my knowledge and belief that this report is correct and complete for performance of activities for the purposes set forth in the award documents.</b>		
<b>7a. Typed or Printed Name and Title of Certifying Official</b>  Sandra Stevens	<b>7c. Telephone (area code, number and extension)</b>	
	<b>7d. Email Address</b>  smstevens@ucdavis.edu	
<b>7b. Signature of Certifying Official</b>  Submitted Electronically	<b>7e. Date Report Submitted (MM/DD/YYYY):</b>  10-30-2012	

**Project Indicators (This Quarter)**

**1. Please describe significant project accomplishments completed during this quarter (600 words or less).**

**Access to Broadband Network:** The California Telehealth Network (CTN) continues to make progress towards the mission of expanding access to broadband in underserved regions in the state. CTN successfully submitted the required filings and completed enrollment to fully utilize the \$22.1 million Federal Communications Commission (FCC) Rural Health Care Pilot Program (RHCPP) award with an enrollment of 367 sites through 307 membership agreements. Installed site numbers continue to progress; as of the end of Q3, 212 sites currently have access to the network, of these 150 sites have direct CTN connections and an additional 62 sites have access with logical connections.

**Model eHealth Communities:** The Model eHealth Community (MC) awardees span 26 counties in rural, urban and suburban regions. In Q3, 2012, site visits were conducted at 53 sites in 10 different Model eHealth Communities. During these site visits the MC Program Manager and representatives from the CTN, and the California Telehealth Resource Center (CTRC) met with administrative and clinical leadership at each site to receive an update on the progress of implementation and provide training and technical assistance to key project staff. Contracts to address implementation challenges (Implementation Support Grants) were initiated with nine sites from five Model eHealth Communities, totaling \$45,000. Based on assessment interviews conducted with the MC, the decision was made to focus on workshop content to support community providers participation in health information exchange. A Health Information Exchange Guide will be developed as an additional resource.

**Comprehensive eHealth Training:** At the end of Q3 2012, 60 lessons, representing 94% of the online eHealth training course content are available online. The final three Change Management lessons (those covering organizational change) for the eHealth Online Training were released this quarter. Content, including audio recording, for the final two Telehealth lessons (TeleICU and Teledentistry) was received from the Subject Matter Experts (SME). These are the final two online training lessons; production for these two lessons will be completed next quarter. At the end of Q3 2012, 462 individuals have accessed course content through the online eHealth Training site.

**Development of training and educational opportunities for consumers and other anchor institutions continues to move forward.** The majority (16 of 20) of the eHealth course content for community colleges targeting nursing, medical assistant and computer information sciences students is available for integration by community college faculty into existing course content. Although course content was made available after the start of the fall session, 22 instructors accessed the content by the end of Q3 2012; curriculum for Technical Project Management and the Importance of Broadband for Health Care Delivery has been utilized by two community college instructors. At the end of Q3 2012, twenty ExploreHealth kiosks, the web-based portal to assist consumers accessing health information via the internet, have been installed in community anchor sites. One in-person training on reliable internet-based consumer health resources was held this quarter; all work was completed on the self-paced eResources in Health online tutorials for library staff; participants from 59 libraries have registered and 26 are actively participating. Registrations have been received nationally for the eResources tutorials, indicating a broader scale impact than anticipated.

**2. Please provide the percent complete for the following key milestones in your project. Write "0" in the Percent Complete column and "N/A" in the Narrative column if your project does not include this activity. If you provided additional milestones in your baseline report, please insert them at the bottom of the table. Figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the percent complete is different from the target provided in your baseline plan (300 words or less).**

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
2.a.	Overall Project	69	The baseline milestone for Q3 2012 was 85%. Variance from the milestone is due to invoicing delays.
2.b.	Equipment / Supply Purchases	-	Progress reported in Question 4 below
2.c.	Awareness Campaigns	-	Progress reported in Question 4 below
2.d.	Outreach Activities	-	Progress reported in Question 4 below
2.e.	Training Programs	-	Progress reported in Question 4 below
2.f.	Other (please specify):	-	Progress reported in Question 4 below

**3. Please describe any challenges or issues faced during this past quarter in achieving planned progress against the project milestones listed above. In particular, please identify any areas or issues where technical assistance from the BTOP program may be useful (600 words or less).**

**Access to Broadband Network:** As noted in the Q2 2012 report, the CTN experienced delays obtaining Funding Commitment Letters (FCLs) from the FCC's Universal Service Administrative Company (USAC). During this quarterly period CTN received FCLs from USAC to fully encumber the entire \$22.1 million FCC Rural Health Care Pilot Program award. This allowed CTN to begin placing

orders with the primary vendor for the 148 RHCPP funded sites remaining to be installed.

**Model eHealth Communities:** Some MC sites that are launching new eHealth programs and activities faced the following challenges: CTN installation took longer than anticipated due to internal wiring issues and vendor timelines; hospitals that are launching Electronic Health Records have limited resources to dedicate to multiple new initiatives. A few sites still have not had telehealth equipment installed due to CTN installation delays and internal facility issues. One site (Critical Access Hospital) declared Chapter 11 Bankruptcy.

**Comprehensive eHealth Training:** There have been delays in the submission of new content for Phase 2 development of the online eHealth Training; consequently, production of the elearning modules was also delayed. All final lessons are now in production. The Community College course curriculum development was delayed due to health and quality issues. Additional development team members were identified and they are working hard to complete the curriculum. Identifying the proper audience for the eResources in Health in-person training proved challenging. The best solution found this quarter involved identifying interested participants first, and then scheduling the location for the specific audience. This proved to be a very successful model and will be used for any future in-person sessions. Installation for the ExploreHealth kiosks faced the following challenges: wide geographic distribution area; and levels of wireless routers' security at recipient locations. Driving 200-400 miles/day resulted in 2-3 installations each day. Some locations have extraordinary security measures on their wireless routers that averaged 1-2 hours including kiosk placement. Locations with "coffee shop" level of security took 30 minutes for total installation. Family and community resource centers were the easiest, hospitals and tribal health clinics were the most difficult.

**4a. In the chart below, please provide the requested information on your BTOP grant-funded SBA activities. Please also provide a short description of the activity (600 words or less). Figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please ensure that the numbers of new household subscribers and business or community anchor institution (CAI) subscribers reflected in the "Total" row represent the unduplicated number of new subscribers that can be attributed to your SBA project as a whole.**

Name of the SBA Activity	Location of SBA Activity	Description of Activity (600 words or less)	Size of Target Audience	Actual Number of Participants	New Subscribers: Households	New Subscribers: Businesses and/or CAIs
See Attached Addendum	See Attached Addendum	Activities have been reported on the attached addendum	0	0	0	0
<b>Total:</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**4b. Please describe your method for determining the number of households, businesses, and/or (CAIs) subscribing to broadband as a result of your SBA programs (600 words or less).**

As stated in the original proposal, funding from the Federal Communications Commission (FCC) was estimated to allow enrollment of 863 Community Anchor healthcare sites to the California Telehealth Network for medical grade, secure access. Of these 575 will be medical and healthcare providers, 262 will be public safety entities, and 26 will be institutions of higher education. In addition to these healthcare sites, 55 community colleges and 480 libraries will be involved with the eHealth Training component.

**4c. Please provide a narrative explanation if the total number of new subscribers is different from the targets provided in your baseline plan (600 words or less).**

The targeted number of new subscribers (as defined in number 4b above) noted in the baseline plan for Q3 2012 was 900. At the end of September 2012, the total has grown to 519. In addition to the 367 CTN sites, 100 additional anchor sites (44 unique sites) are involved through the Model Community initiative. These 100 sites include libraries, institutions of higher education, government and public safety facilities as well as non-profit organizations, and tribal and non-CTN healthcare providers. 36 additional anchor sites participated in trainings for public libraries and other consumer health organization; 14 sites had the ExploreHealth kiosk installed and 2 community colleges incorporated eHealth course content into existing curriculum.

**4d. Please provide the number of households and the number of businesses and CAIs receiving discounted broadband service as result of BTOP funds.**

<b>Households:</b> 0	<b>Businesses and CAIs :</b> 0
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**Project Indicators (Next Quarter)**

**1. Please describe significant project accomplishments planned for completion during the next quarter (600 words or less).**

**Access to Broadband Network:** In June, 2012 the CTN Board approved a revised Strategic and Operating Plan which includes an initiative to expand the number of broadband providers to provide CTN services beyond the current vendor. Accordingly, CTN staff has initiated discussions with a number of other broadband providers. By the end of October, CTN plans to issue a request for proposals

to formally invite alternative broadband providers to provide services to CTN Fair Share sites with secure interconnections to the core CTN MPLS (Multiprotocol Label Switching) network. In September, 2012 CTN installed its first two fair share sites at family resource centers in Humboldt County.

As an important milestone towards CTN anchor site growth, CTN anticipates installation of the California Rural Indian Health Board (CRIHB) broadband circuit into the CRIHB data center during the upcoming quarter which will provide logical connections to over 300 additional Indian Health Services (IHS) sites.

Model eHealth Communities: Due to delays in CTN activation, telehealth equipment installation has not been completed in some MCs. During the next quarter, all remaining equipment will be installed. Site visits will be conducted at 13 sites for the three remaining MCs. Additional Implementation Support Grants will be awarded and contracts executed. Completing and scheduling the HIE training curriculum and developing the HIE Guide in a timely manner will be a challenge.

Comprehensive eHealth Training: We anticipate completing all eHealth Online Training courses during the upcoming period. The final two Telehealth lessons (TeleICU and Teledentistry) will be released in Q4 2012 as they are completed. Certificates of completion will begin to be issued to students who complete all lessons.

Another in-person session of eResources in Health is scheduled for October and is filled to capacity. Minor edits to the online self-paced tutorials for library staff (such as making the project component of the course optional and updating links) and continued monitoring of learners' progress by the instructor will continue in the next quarter. An organized approach to announcing new sessions of the self-paced modules is also being developed.

The Spanish version of the ExploreHealth kiosk project will be ready at the beginning of the next quarter. This is another attractant for host location participation in the program. Given the time-consuming nature of installations in this large state, additional kiosk installers will be employed.

The following community college courses will be completed in the next quarter: Telehealth Clinical Considerations - Inpatient; Telehealth Clinical Considerations - Outpatient; Health Care Data Exchange - Clinical; Consumer Focused Applications and Devices - Technical; Equipment and Network Communications. A direct marketing campaign to nursing, medical assistant and computer science faculty at community colleges will be implemented next quarter to encourage curriculum integration.

**2. Please provide the percent complete anticipated for the following key milestones in your project as of the end of the next quarter. Write "0" in the second column if your project does not include this activity. If you provided additional milestones in your baseline report, please insert them at the bottom of the table. Figures should be reported cumulatively from award inception to the end of the next reporting quarter. Please provide a narrative description if the planned percent complete is different from the target provided in your baseline plan (300 words or less).**

	Milestone	Percent Complete	Narrative (describe reasons for any variance from baseline plan or any other relevant information)
2.a.	Overall Project	79	The overall project baseline milestone was projected to be 90% by the end of December 2012. The projected completion percentage (79%) is about 11 percentage points below baseline projections. The reasons for the variance are outlined in number 3 below.
2.b.	Equipment Purchases	-	Milestone Data Not Required
2.c.	Awareness Campaigns	-	Milestone Data Not Required
2.d.	Outreach Activities	-	Milestone Data Not Required
2.e.	Training Programs	-	Milestone Data Not Required
2.f.	Other (please specify):	-	Milestone Data Not Required

**3. Please describe any challenges or issues anticipated during the next quarter that may impact planned progress against the project milestones listed above. In particular, please identify any areas or issues where technical assistance from the BTOP program may be useful (600 words or less).**

Access to Broadband Network: CTN will need to complete approximately 68 implementations in the next quarter (Q4) in order to stay on schedule for completion of the balance of vendor orders for the following quarter (Q1 2013).

Model eHealth Communities: MC sites using telehealth equipment have identified peripherals and/or software that would enhance or increase their capacity for equipment utilization. Requests for the equipment enhancements will be reviewed during the next quarter; approximately \$15,000 per MC will be made available for these requests. The HIE Guide and curriculum will be completed by the end of the calendar year; it will be challenging to deliver all of the HIE trainings within that timeframe. The subcontract to complete this work will be extended to March 31, 2013.

Comprehensive eHealth Training: Installation time for the ExploreHealth kiosks is a challenge. Training and managing additional installers will be a new challenge but it will provide an opportunity for project staff to continue to locate and survey new host locations.

We anticipate that promotion of the in-person eResources in Health trainings will continue to be a challenge. Sessions this quarter have been successful when specific CAI were identified and trainings offered to their constituents. Although participation has increased, promoting the sessions in this way proves to be challenging and time consuming. Institutional and bargaining unit requirements for recruitment and hiring for the Library Field Trainer have resulted in unforeseen delays in filling the position. The primary role of this position would be to conduct on-site trainings, primarily in rural locations, for library staff to increase their knowledge of and ability to provide reliable internet-based information and resources on consumer health promotion and wellness. We anticipate continued delays in our ability to fill the position due to the requirements relating to the position classification and appointment.

