

Connecting California:

The Impact of the Stimulus Package on Broadband and Telehealth Expansion

Introduction

The American Recovery and Reinvestment Act of 2009 (ARRA), a massive federal stimulus package, includes more than \$7 billion to expand broadband access and use, promote the adoption of telehealth, and establish a framework for future investments in broadband and telehealth. Given the competition for these funds and the tight statutory time-lines for their expeditious distribution by federal agencies, California must act promptly and in a coordinated fashion to take maximum advantage of this opportunity. California's telecommunications research and development prowess puts it in a strong position to blaze the telehealth trail.

ARRA funds would enable California to ensure access to high-quality health care, optimize telehealth in the most efficient way possible, create a significant number of jobs, and spur economic growth. New jobs would include those for telehealth coordinators and trainers; information technology support staff, such as network and equipment technicians; staff to support clinical telehealth equipment; professionals to create, prepare, and distribute telehealth curricula for distance education; and professionals to design and implement software.

California is a leader in demonstrating the value of telehealth technologies to improve health care access and quality for medically underserved populations in rural and urban areas. In the last two-and-a-half years, several organizations have established an agenda for broadband and telehealth, and created coalitions that are necessary to move this agenda forward.

The University of California health system, other clinical centers of excellence, and inpatient and ambulatory care providers statewide are experimenting with and exploring ways to sustain a broad range of telehealth programs to transform health care. Improvements in the availability of broadband and health-related hardware and software make it possible to create new models of remote consultation among providers, assess medical images, and establish new ways for clinicians to interact with patients. Resources available through various ARRA programs would give California the crucial support necessary to realize the vision of technology-enabled health care reform.

Understanding the connection between telehealth, health information exchange (HIE), electronic health records (EHRs), and other health information technologies is critical to understanding how they and broadband factor into the state's plan to improve residents' health. The value of telehealth encounters is greatest when they are supported by clinical and administrative information technology (IT), such as interoperable EHRs that enable providers in different health care settings to readily exchange patient information. Secure and reliable broadband connections are crucial to making telehealth and HIE possible. Therefore, universal deployment of and affordable access to broadband services are fundamental building blocks in California's efforts to improve residents' health and reduce health care costs.

ARRA recognizes the critical links between broadband, telehealth, and HIE, and ensures that funding will focus on improving health care in medically underserved communities. As California implements a health IT infrastructure, broadband and telehealth are considered to be an integral part of planning and investment strategies. HIE components in ARRA and California's telehealth objectives are complementary; synchronized planning and implementation will increase the value of both efforts.



California and its stakeholders will be best served if they view broadband, telehealth, and HIE as key components in a broader framework and coordinate all related initiatives.

Recovery Web Site

On March 13, 2009, Governor Arnold Schwarzenegger launched (www.recovery.ca.gov) to ensure the transparency and accountability of federal stimulus funds that California receives and spends. Tools at this Web site enable visitors to monitor ARRA-related activities and view current information about how, when, and where their federal tax dollars are being spent.

This issue brief describes California's leadership role in broadband and telehealth, discusses the related provisions in ARRA, and presents recommendations on how the state can position itself to take maximum advantage of ARRA funding opportunities.

Expansion of Broadband and Telehealth in California

California can leverage its leadership and investments in broadband and telehealth to secure ARRA funds that, spent strategically, would help the state significantly improve residents' health and slow the rise in health care costs. In November 2006, Governor Schwarzenegger signed an executive order establishing the California Broadband Task Force to promote broadband access and use. The task force brought together public and private stakeholders to develop a plan for removing barriers to broadband access, identify opportunities to increase broadband adoption, and create and deploy new, advanced communication technologies. The plan lays the groundwork for future investments in broadband and telehealth in a way that is coordinated and can achieve state, regional, and local objectives.

Making Broadband Universal and Affordable

The California Emerging Technology Fund (CETF) and the California Teleconnect Fund reflect the state's commitment to universal, affordable access to broadband.

The California Public Utilities Commission (CPUC) required that CETF, a nonprofit corporation, be established

as a condition for approval of the SBC/AT&T and Verizon/MCI mergers in 2005. CETF seeks to close the digital divide by accelerating the deployment and adoption of broadband and other advanced communication services to communities with little or no broadband capacity. It will spend \$60 million over the next five years on expanding broadband statewide.

The California Teleconnect Fund, administered by the CPUC, gives discounts on advanced telecommunications services to community technology centers and other nonprofit entities so they can afford to provide their communities with Internet-enabled technology services, such as training, telemedicine, and distance learning.

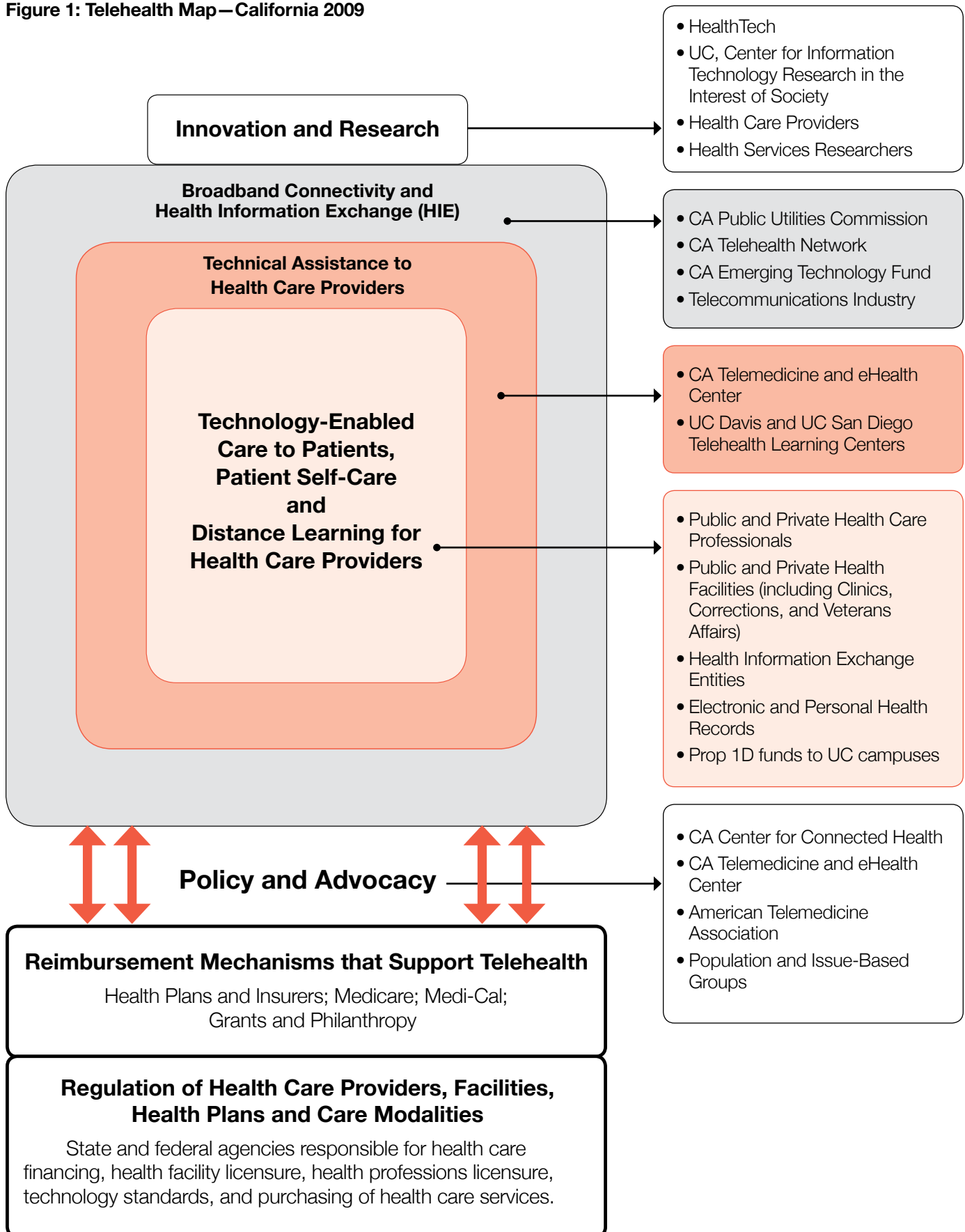
Expanding Telehealth

California has been firmly committed to telehealth for more than a decade. Under the California Telemedicine Development Act of 1996, private and public insurers cannot require face-to-face encounters between clinicians and patients, and payers must adopt reimbursement policies for telemedicine services. The law, which other states have used as a model, was one of the first and most comprehensive telemedicine statutes in the nation. In November 2006, California voters approved Proposition 1D, a \$200 million bond measure to pay for designing, building, and equipping facilities at the University of California to enhance medical education, with an emphasis on telemedicine.

In 1997, the California Endowment, in collaboration with the California Telemedicine and eHealth Center (CTEC) and the University of California, Davis, began developing a rural telemedicine and training program. This effort culminated in funding for 10 rural telemedicine networks with more than 100 patient sites and the establishment of two training centers.

The California Telehealth Network (CTN), a coalition established in 2007 at the request of the governor's office and administered by the University of California, is building a statewide broadband network to improve health care in rural and underserved urban areas. Coalition members include CETF, CTEC, government agencies, health care providers, and others.¹ CTN has been awarded \$22.1 million from the Federal Communications Commission (FCC) to connect more than 300 providers, including nonprofit hospitals and clinics.

Figure 1: Telehealth Map—California 2009



What Can the State Do Immediately Regarding Broadband and Telehealth?

California must move quickly if it hopes to take advantage of ARRA because a portion of the funds for broadband and telehealth programs will be released within 90 days of ARRA's enactment and much of the money must be expended by September 30, 2010. The state should spearhead and proactively coordinate its resources and stakeholders to ensure that it maximizes funding for providers and programs to advance the health status of Californians.

Broadband and Telehealth Leadership Recommendations

- **Recommendation 1. Immediately engage with federal officials and policymakers.** The governor and senior administration officials need to ensure that California has a meaningful voice at the table when the federal government sets the specific requirements and mechanisms for disbursement of ARRA funds. (Steps the state can take regarding each of several funding sources are listed below.)
- **Recommendation 2. Coordinate state entities.** The California Health and Human Services Agency should work closely with the state Office of the Chief Information Officer and the Business, Transportation, and Housing Agency to include broadband and telehealth as priorities in California's health IT strategy.
- **Recommendation 3. Develop a plan to tap multiple ARRA sources.** To optimize the full value of stimulus funding, the state should coordinate efforts to obtain funds from multiple programs under ARRA. As soon as possible, it should create a health care stakeholder workgroup to guide senior administration officials on developing a strategy for this purpose and to avoid duplicating efforts.

The following section describes ARRA's impact on specific broadband and telehealth programs, and presents recommendations on how the state can position itself to take advantage of the related funding opportunities.

Broadband and Telehealth Programs Under ARRA

Broadband Technology Opportunities Program

The Broadband Technology Opportunities Program (BTOP) allocates \$4.7 billion to provide affordable and quality broadband service to the largest possible number of users. It focuses on expanding broadband access to underserved populations and community and public institutions by aggregating demand for service. This ensures community involvement and fosters the development of new applications, thereby creating jobs and stimulating economic growth. BTOP builds on the Department of Commerce's Technology Opportunities Program, which has invested \$233.5 million in state broadband initiatives over the last 10 years.

The assistant secretary of commerce for communications and information at the National Telecommunications and Information Administration (NTIA) will administer BTOP in consultation with the FCC. The program seeks to:

- Provide and improve access to broadband service for consumers residing in underserved areas;
- Provide broadband awareness, education, training, access, equipment, and support to community organizations, including health care providers; to entities that facilitate greater use of broadband by or through these organizations; and to entities that facilitate access to health care for vulnerable populations;
- Improve access to and use of broadband service by public safety agencies; and
- Stimulate job creation and economic growth through greater demand for broadband services.

Of the \$4.7 billion in BTOP funding, at least \$250 million is for innovative programs that encourage sustainable adoption of broadband services. The remaining amounts are for expansion of the number of publicly available computers and existing broadband deployment programs, oversight and administration of BTOP, development and maintenance of a broadband inventory map, and the development of a national broadband strategy. Funds must be distributed by September 30, 2010.

The assistant secretary and the FCC will develop a national broadband plan and comprehensive inventory map of current service capability and availability to build the framework for future broadband investments. The plan, which must be submitted to the U.S. Department of Agriculture (USDA) by May 22, 2009, is expected to be a comprehensive analysis of the current broadband infrastructure and service deployment, and will include a strategy for using this infrastructure and service to advance health care delivery.² The inventory map must be completed and publicly available on the NTIA Web site within two years of ARRA's enactment. Together, the plan and map will help guide and inform planning and implementation of future projects, promoting more efficient and effective adoption of broadband and telehealth services.

The University of California has received more than 1,000 applications from providers who want to be included in the California Telehealth Network, far more than the approximately 300 that CTN cited when it originally applied for FCC funding. Because only a portion of interested sites are likely to be accommodated under the project's current budget, additional funds are necessary to meet the broadband needs of all qualified applicants.

BTOP presents a unique opportunity for CTN to build upon its early successes and accommodate all health care sites that are eligible to participate.

Table 1. Broadband Technology Opportunities Program

Funding Mechanism	Federal appropriations
Funding Entity	U.S. Department of Commerce
Allocation Process	<ul style="list-style-type: none"> • Competitive grants. A notice of funds available (NOFA) will provide additional grant information, including details about the process, timelines, and scoring criteria. • Competitive grants, including a requirement that a minimum of one grant be awarded to each state). • Three grant rounds. The exact deadlines are still being decided, but these timeframes are anticipated: Round 1: April–June 2009 Round 2: October–December 2009 Round 3: April–June 2010
Matching Funds Requirement	Recipients or a third party must contribute at least 20% of the total cost. This requirement may be waived for financial hardship. Financial hardship criteria have yet to be established.
Timing	Funds available starting April–June 2009 through September 30, 2010.
Funds Flow Through	National Telecommunications and Information Administration
Eligible Recipients	<ul style="list-style-type: none"> • State and local governments. • Foundations and nonprofit corporations, institutions, and associations. • Any other entity, including broadband service or infrastructure providers, is eligible if the NTIA's assistant secretary determines that the funds will promote the public interest. • The assistant secretary shall consider if applicants are socially and economically disadvantaged small business concerns as defined under Section 8(a) of the Small Business Act.
Level of Federal Funding	<p>\$4.7 billion:</p> <ol style="list-style-type: none"> (1) At least \$250 million will be available for innovative programs that encourage sustainable adoption of broadband services. (2) At least \$200 million will be available to upgrade technology and capacity at public computing centers, including community colleges and public libraries. (3) \$10 million will go to the Office of Inspector General for BTOP audits and oversight. (4) Up to \$350 million will fund the development and maintenance of statewide broadband inventory maps.

Table 1 continues on page 6

Table 1. Broadband Technology Opportunities Program (continued)

Rural Requirement	None. BTOP focuses instead on improving access to underserved areas. It does not define “unserved” areas, “underserved” areas, or “broadband,” rather, BTOP directs the NTIA to coordinate its understanding of these terms with the FCC.
Funding Requirements	<ul style="list-style-type: none">• Grants must be used for one or more of the following:<ol style="list-style-type: none">(1) To acquire equipment, instrumentation, networking capability, hardware, software, digital network technology, and infrastructure for broadband services.(2) To construct and deploy broadband infrastructure.(3) To ensure access to broadband service by community anchor institutions.(4) To facilitate access to broadband service by low-income, unemployed, aged, and otherwise vulnerable populations to give them educational and employment opportunities.(5) To construct and deploy broadband facilities that improve public safety.(6) To undertake other projects and activities that the assistant secretary determines are consistent with BTOP’s purposes.• Projects must be substantially completed within two years of the awards.• Applicants must demonstrate that they need federal grant assistance to implement their project.• No area of a BTOP-funded project may receive funding under the Distance Learning, Telemedicine, and Broadband program for the same purpose. However, applicants may apply for and receive funding from both programs.
Contact Information	Barbara Brown, NTIA, (202) 482-4374, bbrown@ntia.doc.gov . For the latest BTOP information, to submit comments (by April 13, 2009), or to see the joint request for information from NTIA and the Rural Utilities Service, visit (www.ntia.doc.gov/broadbandgrants). The two entities share this Web site.

Broadband Technology Opportunities Program Recommendations

- **Recommendation 4.** The University of California, in consultation with CTN’s advisory council, should apply for first-round BTOP funds that would enable all qualified providers to gain access to the broadband network and enable CTN to launch and operate it.
- **Recommendation 5.** The state Office of the Chief Information Officer should coordinate and work closely with the FCC and the assistant secretary to develop the national broadband inventory map to ensure that the mapping effort builds upon California’s work in this area.
- **Recommendation 6.** California stakeholders should submit comments to NTIA (at www.ntia.doc.gov/broadbandgrants) before the April 13, 2009 comment deadline about regulatory and implementation details in BTOP, such as definitions of key terms, that have yet to be spelled out.³ This will ensure that California’s needs are taken into consideration.

Distance Learning, Telemedicine, and Broadband Program

The Distance Learning, Telemedicine, and Broadband Program (DLTB), administered by the USDA Rural Utility Service (RUS), allocates \$2.5 billion through a combination of loans, loan guarantees, and grants for broadband infrastructure and technical assistance to facilitate rural economic development. Although the DLTB program does not specifically cite expansion of existing RUS programs as part of its efforts, RUS provides states and organizations with significant resources for broadband, telehealth, and distance learning through its Distance Learning and Telemedicine Program, in which grants have typically averaged \$500,000. In addition, loans are available at Treasury interest rates.

DLTB explicitly focuses on rural areas. More than 80 percent of California is rural and at least five million residents live in rural areas.⁴ Because DLTB funds cannot overlap with funds received from BTOP, organizations will need to carefully consider how best to apply for funding from each of the two programs and coordinate their efforts.

Table 2. Distance Learning, Telemedicine, and Broadband (DLTB) Program

Funding Mechanism	Federal appropriations
Funding Entity	U.S. Department of Agriculture
Allocation Process	<ul style="list-style-type: none"> • Loans, loan guarantees, grants. • Three funding rounds. • NOFAs will likely be issued with additional details about the process, timelines, and scoring criteria.
Matching Funds Requirement	To be determined.
Timing	<ul style="list-style-type: none"> • Funds are expected to be available around June 2009. • No deadline for expenditure of funds.
Funds Flow Through	Rural Utilities Service (RUS)
Eligible Recipients	ARRA does not specify which entities are eligible. However, current or former borrowers under Title II of the Rural Electrification Act of 1936 and traditional telecommunications borrowers receive priority. Three California-based telephone companies and a telecommunications company based out of state that serves a California county are borrowers under this act. ⁵
Level of Federal Funding	\$2.5 billion
Rural Requirement	Seventy-five percent of a project area must be rural and have insufficient access to high-speed broadband. The criteria for “rural” are being defined. RUS is working closely with NTIA to help define program terms.
Funding Requirements	<ul style="list-style-type: none"> • Certain applicants receive priority. They include those: <ol style="list-style-type: none"> (1) Whose projects will begin promptly after approval. (2) Whose projects will be fully funded if they receive aid. (3) That offer a choice of multiple service providers. (4) With the highest proportion of rural residents who do not have broadband access. • Specific uses of funds are being defined. However, the focus is expected to be on broadband infrastructure. • No area of a DLTB-funded project may receive funding from BTOP for the same purpose. However, applicants may apply for and receive funding from both programs.
Contact Information	<ul style="list-style-type: none"> • Mary Campanola, RUS, (202) 720-8822, mary.campanola@wdc.usda.gov. • USDA, (www.usda.gov/rus/telecom/staff/index_staff.htm). <p>Public comments to RUS (by April 13, 2009) or responses to the request for information can be submitted using the same link for NTIA comments: (www.ntia.doc.gov/broadbandgrants).</p>

Distance Learning, Telemedicine, and Broadband Program Recommendations

- **Recommendation 7.** The state Office of the Chief Information Officer and the Business, Transportation, and Housing Agency should work closely with RUS to ensure that key terms such as “rural,” “underserved,” and “broadband” reflect the goals and interests of the state’s health care community and economic development needs.
- **Recommendation 8.** The University of California, in consultation with CTN’s advisory council, should determine if providers who are participating in the telehealth network can apply for DLTB funds. It should also consider the feasibility of a collective application made by CTN on participants’ behalf.
- **Recommendation 9.** Senior state health officials should convene and encourage organizations that represent California’s rural communities and providers who meet the DLTB eligibility requirements to identify and prioritize projects that can begin promptly after approval and to apply for funding.
- **Recommendation 10.** California stakeholders should submit comments to RUS at (www.ntia.doc.gov/broadbandgrants) before the April 13, 2009 comment deadline about the regulatory and implementation details in DLTB that have yet to be spelled out.

Indian Health Service

ARRA appropriates \$85 million for IHS's health IT activities. The funds are for telehealth service development and related infrastructure. They also support activities that fit the IHS mission to improve access to and the quality and safety of health care, and to improve the overall health of Native American and Alaska Native patients and populations. In California, there are 108 federally recognized tribal governments and 31 tribal health programs that operate 57 ambulatory clinics under the authority of the Indian Self Determination Act. These programs had 130,855 registered users and 76,505 active service users in fiscal 2008.⁶

IHS recognizes the critical role that health IT plays in efficient and effective care for patients. Nearly 30 years ago, it developed a clinical information system, the Resource and Patient Management System, that gives facilities access to decades of personal health information and epidemiological data about local populations for the purpose of evaluating clinical quality and population and public health status. IHS modernized the EHR in this system a year ago, incorporating important clinical functions such as e-prescribing.

IHS and tribal governments are discussing health IT priorities for ARRA funds (Table 3). A report that IHS recently sent to Congress describes its general expenditure plan.⁷

Table 3. Indian Health Service (IHS)

Funding Mechanism	Federal appropriations
Funding Entity	U.S. Department of Health and Human Services
Allocation Process	<ul style="list-style-type: none"> • Funds to be allocated at the discretion of the IHS director. • About 95% of funded activities will take place under commercial contracts and possibly under contracts⁸ with a tribe or tribal organization. • About 20% of the funds will be spent on hardware purchases to modernize infrastructure for security, networking, communications, and health IT purposes. The purchases will occur under new, competitively awarded contracts with vendors whose products meet federal requirements. • A number of new purchases for software development and related services are anticipated. These purchases also will occur under new contracts and under existing tribal contracts as appropriate. • Several existing Government Services Administration contracts will be accelerated to accommodate the immediate funding opportunity under ARRA.
Matching Funds Requirement	To be determined.
Timing	IHS anticipates that it will obligate about 60% of the funds in fiscal 2009 and 40% in fiscal 2010.
Funds Flow Through	IHS
Eligible Recipients	Tribal governments
Level of Federal Funding	\$85 million
Rural Requirement	To be determined.
Funding Requirements	<p>Funded health IT activities will include those related to:</p> <ul style="list-style-type: none"> • The Resource and Patient Management System: EHR modernization, personal health record, enhancement of the population health application, acquisition of a practice management system, and architecture enhancements. • Telehealth infrastructure and development: security enhancements and network upgrades.

Indian Health Service Recommendations

- **Recommendation 11.** The California Health and Human Services Agency should work with IHS-funded tribal health programs to determine which tribal sites qualify for ARRA funds and what their broadband infrastructure, telehealth, and technical assistance needs are, and to develop a strategy that will yield the most funding for California-based tribes.
- **Recommendation 12.** The University of California, in consultation with CTN's advisory council and tribal health care providers, should determine if the providers participating in the telehealth network qualify for ARRA funds through IHS and if it is feasible for CTN to submit a collective application on their behalf.

Federally Qualified Health Centers

ARRA allocates \$1.5 billion to the Health Resources and Services Administration (HRSA) to fund capital needs at federally qualified health centers (FQHCs), primarily construction, renovation and equipment, and the acquisition of health information IT, including telehealth equipment. HRSA has tentatively indicated it will dedicate \$120 million in grants specifically to health IT acquisitions and broadly direct the remainder to construction, renovation, and equipment, which may also include health IT needs.

These funds are in addition to other ARRA appropriations available to FQHCs for health IT adoption. Through a combination of resources, ARRA aims to address a number of significant financial, technical, and operational challenges that contribute to low health IT adoption at these centers.

Funds are available for individual FQHCs and FQHC-controlled networks that provide shared health IT infrastructure and services to multiple centers. As centers consider how best to implement health IT, many of them may consider joining such networks and collectively applying for ARRA funding.

Table 4. Federally Qualified Health Centers (FQHCs)

Funding Mechanism	Federal appropriations
Funding Entity	U.S. Department of Health and Human Services
Allocation Process	Competitive grants.
Matching Funds Requirement	To be determined.
Timing	Funds will be available when HRSA delivers its funding plan to Congress, due by mid-May 2009.
Funds Flow Through	HRSA
Eligible Recipients	FQHCs and FQHC-controlled networks that now receive operating grants.
Level of Federal Funding	\$1.5 billion
Rural Requirement	To be determined.
Funding Requirements	<ul style="list-style-type: none"> • Grant recipients must use the funds specifically for construction, renovation and equipment, or acquisition of health IT systems. • FQHCs will likely have to comply with their own usual and customary reporting requirements as well as ARRA reporting requirements.

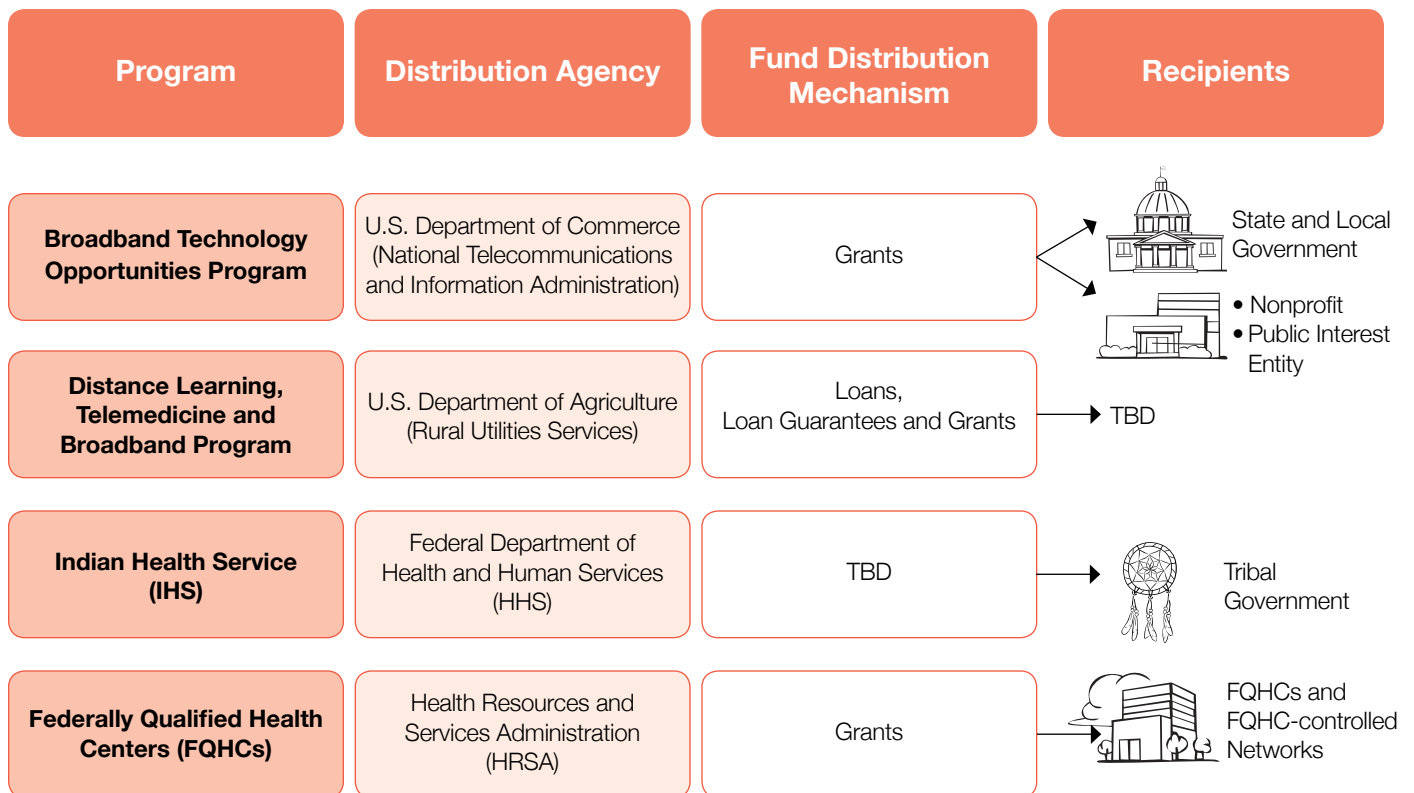
Federally Qualified Health Centers Recommendations

- Recommendation 13.** The University of California, in consultation with CTN’s advisory council and FQHC providers, should determine if centers participating in the telehealth network qualify for ARRA funds through HRSA and if it is feasible for CTN to submit a collective application on participants’ behalf.
- Recommendation 14.** FQHCs and FQHC-controlled health centers should analyze their eligibility for funds in all ARRA programs and develop a strategy that will yield the most funding. Centers should consider applying through a FQHC-controlled network to leverage economies of scale and use the funds most efficiently for health IT adoption.

Health Information Technology for Economic and Clinical Health Act

The Health Information Technology for Economic and Clinical Health Act (HITECH), a component of ARRA that seeks to strengthen the country’s health care delivery system, includes funding for infrastructure and tools that promote telemedicine.⁹ It allocates \$36 billion in grants for planning, development, health IT training, and provider adoption incentives. Between 2011 and 2016, \$34 billion will be distributed as Medicare and Medicaid incentives for health care providers and third-party administrators to adopt qualified EHRs. The remaining \$2 billion will be distributed via loans, grants, and technical assistance for HIE planning and implementation, a new EHR state loan fund, a new national health IT research center, new health IT regional extension centers, workforce training, and new technology research and development.

Figure 2: ARRA Broadband and Telehealth Provisions: Funding Flow



HITECH also establishes the federal Health IT Policy Committee and the Health IT Standards Committee to advise the Office of the National Coordinator of Health Information Technology on developing and adopting a national health IT framework. They will make recommendations to the national coordinator regarding telemedicine technologies and technologies for monitoring patients who are recuperating at home.⁸

California's share of HITECH funds could amount to more than \$3 billion. HITECH complements the investments California has made in broadband, telehealth, EHRs, training, and IT implementation. Projects funded under HITECH would help the state move quickly toward establishing a sustainable telehealth network.

Health Information Technology for Economic and Clinical Health Act Recommendations

- **Recommendation 15.** California should take into account its telehealth needs when it applies for HITECH funds and ensure that the state is represented on the policy and standards committees.

Conclusion

The broadband and telehealth opportunities in ARRA offer an unprecedented opportunity for California to leverage organizational relationships and lessons from more than a decade of pilots and demonstrations to make dramatic progress toward a vision of technology-enabled health care reform. ARRA serves as a platform for the state's health care and telecommunications communities to work together to realize this goal while creating jobs and economic opportunity statewide. Timely action on the recommendations presented in this issue brief will strongly position the state and its communities to take advantage of ARRA programs and foster a healthier future for all Californians.

About The Authors

This issue brief was prepared by the California Center for Connected Health with support from the California Health-Care Foundation and Manatt Health Solutions, a division of Manatt, Phelps & Phillips, LLP.

California Center for Connected Health

Established in January 2009, and based in Sacramento, the California Center for Connected Health (CCCH) is a strategy and planning body designed to promote integration of telehealth within California's health care system, with the larger goal of enhancing access and quality of care for all Californians, particularly uninsured and low-income Californians.

CCCH will:

- Promote a shared vision for telehealth adoption and integration in the health care delivery system
- Work to assure that California is a national model of telehealth integration
- Identify and promote practice patterns, policies, regulations, and statutory changes that will maximize the ability of telehealth to improve health outcomes and care delivery.

One of the first projects of CCCH is to manage a specialty care pilot project for UC campuses and community-based clinics to develop a sustainable model for telehealth services.

www.ConnectedHealthCA.org

Glossary

American Recovery and Reinvestment Act of 2009

(ARRA): a \$787.2 billion measure signed by President Obama on February 17, 2009 that aims to stimulate the economy. Stimulus provisions include aid to states and cities, funding for transportation and infrastructure projects, expansion of the Medicaid program to cover more unemployed workers, health IT funding, and personal and business tax breaks.

Broadband: a term that generally refers to a communications network in which the bandwidth can be divided and shared by multiple simultaneous signals, such as those for data, voice, or video.

Broadband Technology Opportunities Program (BTOP): a federal program that will award \$4.7 billion in ARRA funds through the Department of Commerce's National Telecommunications and Information Administration. It will fund projects that accelerate broadband deployment in unserved and underserved areas, and strategic institutions that are likely to create jobs or provide significant public benefits.

California Broadband Task Force (CBTF): established in October 2006 by an executive order from Governor Schwarzenegger. CBTF comprised expert public and private stakeholders to advise policymakers on a framework for making California a global leader in the telecommunications revolution.

California Emerging Technology Fund (CETF): a nonprofit corporation established as a condition for California Public Utilities Commission approval of the SBC/AT&T and Verizon/MCI mergers. Its statewide leadership minimizes the digital divide by accelerating the deployment and adoption of broadband and other advanced communication services in unserved and underserved communities.

California Public Utilities Commission (CPUC): a state body that regulates privately owned electricity, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. It also authorizes video franchises.

California Teleconnect Fund (CTF): gives discounts on advanced telecommunications services so community technology centers and other nonprofit entities can afford to provide their communities with Internet-enabled technology services, such as training, telemedicine, and distance learning. The California Public Utilities Commission administers the fund.

California Telehealth Network (CTN): a coalition established in 2007 and administered by the University of California to connect health care providers in underserved areas to a statewide and nationwide broadband network dedicated to health care. It has received grants from the Federal Communications Commission Rural Health Care Pilot Program and other funders.

California Telemedicine Development Act of 1996: a law that prohibits private and public health insurers from requiring face-to-face contact between health care providers and patients. It also requires insurers to adopt reimbursement policies for telemedicine services.

Distance Learning, Telemedicine and Broadband Program (DLTB): a federal program that will award \$2.5 billion in ARRA funds through the U.S. Department of Agriculture's Rural Utilities Service for distance learning, telemedicine, and broadband projects.

Federal Communications Commission (FCC): a government body that regulates interstate and international communications via radio, television, wire, satellite, and cable.

Health Information Exchange (HIE): as defined by the Office of the National Coordinator and the National Alliance for Health Information Technology, the electronic movement of health-related information among organizations according to nationally recognized standards.

Health Information for Economic and Clinical Health (HITECH) Act: the health IT provisions in ARRA (Title XIII of Division A and Title IV of Division B).

Health Information Technology (HIT): as defined in ARRA, the hardware, software, integrated technologies or related licenses, intellectual property, upgrades, or packaged solutions sold as services to support health care entities or patients in the electronic creation, maintenance, access, or exchange of health information.

Health Resources and Services Administration (HRSA): an agency in the U.S. Department of Health and Human Services that is the primary federal entity for improving access to health care services for uninsured, isolated, or medically vulnerable people.

Indian Health Facilities Account: a federal funding source for an extensive array of Native American expenditures, including real property; the construction of health care and sanitation facilities, and staff quarters; maintenance; operations; environmental health; and injury prevention.

Indian Health Service (IHS): a division in the Department of Health and Human Services responsible for providing medical and public health services to federally recognized Native American tribes and Alaska Natives.

National Telecommunications and Information Administration (NTIA): an agency in the Department of Commerce principally responsible for advising the president on telecommunications and information policies.

Office of the National Coordinator (ONC): an entity established in 2004 in the Department of Health and Human Services that is the principal adviser to the department secretary regarding the development, application, and use of health IT. It also coordinates the department's health IT policies and programs internally and with other executive branch agencies; develops, maintains, and directs the department's strategic plan for nationwide implementation of interoperable health IT in the public and private health care sectors; and provides comments and advice to the Office of Management and Budget about federal health IT programs.

[Qualified] Electronic Health Record (EHR): a type of EHR, as defined in ARRA, that contains demographic and clinical health information about patients, such as medical histories and problem lists; provides clinical decision support; enables physician order entry; captures information regarding health care quality and enables related queries; and exchanges health information with, and integrates such information from, other sources.

Rural Electrification Act of 1936: legislation that created the Rural Electrification Administration, which provides federal funding for rural electrification and the delivery of power to rural areas.

Rural Health Care Pilot Program: fosters the development and use of broadband networking services by health care providers in rural communities nationwide. Established by the FCC in 2006.

Rural Utilities Service (RUS): provides loans, loan guarantees, and grants to rural utilities so they can expand and update their technology, which fosters new and vital services such as distance learning and telemedicine.

Technology Opportunities Program (TOP): a former program administered by NTIA that from 1994 to 2004 promoted the widespread availability and use of digital network technologies in the public and nonprofit sectors.

Telehealth: the delivery of health-related services and information via telecommunications technologies. This broad term encompasses telemedicine, which focuses more narrowly on the curative aspects of health care, and professional education, public health, and research.

Telemedicine: interactive health care—consultations between providers or between clinicians and patients—that takes place remotely via telecommunications and other IT.

U.S. Department of Health and Human Services (HHS): the agency responsible for protecting the health of all Americans and providing essential human services. It administers Medicare and Medicaid (through the Center for Medicare & Medicaid Services) and many other programs.

Additional Resources

<i>An Unprecedented Opportunity: Using Federal Stimulus Funds to Advance Health IT in California</i>	www.chcf.org/topics/view.cfm?itemID=133864
California Broadband Taskforce Final Report	www.calink.ca.gov/pdf/CBTF_FINAL_Report.pdf
California Economic Recovery Portal	www.recovery.ca.gov
California Emerging Technology Fund	cetfund.org
California Teleconnect Fund	www.cpuc.ca.gov/PUC/Telco/Public+Programs/CTF
California Telehealth Network	www.caltelehealth.org
Department of Health and Human Services activities funded through ARRA	www.hhs.gov/recovery
Health Resources and Services Administration—Telehealth	www.hrsa.gov/telehealth
<i>Meeting the Health Care Needs of California's Children: The Role of Telemedicine</i>	www.childrenspartnership.org/Report/Telemedicine For additional information on how broadband and telehealth can benefit children's health, see www.childrenspartnership.org/ehealth .
<i>Optimizing Telehealth in California: An Agenda for Today and Tomorrow</i>	www.cteconline.org/_pdf/Findings-Report.pdf Telehealth program guides are available at www.cteconline.org .
The Transformative Promise of Health Information Technology (a collection of articles published in <i>Health Affairs</i>)	www.chcf.org/topics/healthinsurance/index.cfm?itemID=133871

Endnotes

- For more details about CTN's funders, partners, and advisory council members, see (www.caltelehealth.org/about).
- The broadband plan should also seek to advance consumer welfare, civic participation, public safety and homeland security, community development, energy independence and efficiency, education, worker training, private sector investment, entrepreneurial activity, job creation and economic growth, and other national purposes.
- NTIA and RUS hosted public hearings on BTOP in March 2009 that focused on a number of specific topics, including eligibility for grants; definitions of terms such as "broadband," "unserved" areas, and "underserved areas"; and the role of states. Hearing comments are archived at (www.ntia.doc.gov/broadbandgrants) and (www.rurdev.usda.gov).
- California Telehealth Network—Frequently Asked Questions. California Telehealth Network: February 2008 (www.caltelehealth.org/documents/faqs.pdf).
- The California-based borrowers are Ducor Telephone, Sierra Telephone, and Ponderosa Telephone. Although Fort Mojave Telecommunications is based in Arizona, it serves San Bernardino County.
- California Area Indian Health Service. Indian Health Service (www.ihs.gov/FacilitiesServices/AreaOffices/California/Universal/PageMain.cfm?p=50).
- Details about the plan are available at (www.hhs.gov/recovery/reports/ihsreport.html).
- Contracts under the Indian Self-Determination Act (Public Law 93-638). See (www.tribal-institute.org/lists/pl93-638.htm).
- For more information about HITECH, see *An Unprecedented Opportunity: Using Federal Stimulus Funds to Advance Health IT in California*. California HealthCare Foundation: February 2009 (www.chcf.org/topics/view.cfm?itemID=133864).

