Regional Network Approaches to the FCC Rural Health Pilot  
April 23, 2008, 1:15 PM - 2:30 PM

Background to the FCC’s RHCPP  
(Rural Health Care Pilot Program)  
http://www.fcc.gov/cgb/rural/rhcp.html  

with  
A Brief Summary of the Alaska RHCPP Project  
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• An independent not-for-profit corporation created by the FCC in 1997 – as *a follow-on to the 1996 Telecom Act* - to administer the newly created Universal Service Fund (USF)

• The Fund is not federally appropriated but is a percentage of telecom industry revenues collected through customer billing, *i.e., you contribute to USF when you pay your telephone bill*

• There are four USF programs: High Cost, Low Income, Rural Health Care (RHC), and Schools and Libraries (aka “E-Rate”)

• $50 billion has been disbursed over the last decade: $30 billion to telecommunications carriers operating in remote or rural areas; about $15 billion to connect the nation’s public and private schools and public libraries; nearly $7 billion to help low-income consumers; and almost $200 million to assist rural health care providers.

• Historically, most of the $400 million authorized annually for RHC has not been disbursed, hence the birth of the RHCPP!
Most RHC applications seek telephone subsidies, not Internet
RHC = Small Potatoes

Calendar Year
Approved Disbursements by Program
As of December 31, 2007
(Unaudited - in thousands)

2007 Total: $6,954,836

High Cost
$4,286,733

Rural Health Care
$37,381

Schools & Libraries
$1,807,961

Low Income
$822,761
The Traditional RHC Program

• Ensures that rural health care providers pay no more than their urban counterparts for their *telecommunications* and *Internet access*
• Reviews almost 6,000 applications annually
• By helping health care providers pay for telecommunications and Internet services, the Rural Health Care Program:
  – reduces expenses and travel time for consumers
  – helps decrease medical errors
  – enables health care providers to quickly share critical patient-care information electronically
  – encourages the spread of telemedicine
  – helps hold down health care costs
Follow the money:

### 2007 Program Statistics

#### Rural Health Care Program – Commitments and Disbursements

(unaudited • in thousands)

<table>
<thead>
<tr>
<th>State</th>
<th>Commitments</th>
<th>Disbursements</th>
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Hundreds of Millions of $ Authorized, Only Tens of Millions Obligated

Rural Health Care Program

<table>
<thead>
<tr>
<th>Millions of Dollars</th>
<th>2003</th>
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- **Unaudited commitments by Funding Year, as of December 31, 2007**
- **Unaudited disbursements by Funding Year, as of December 31, 2007**
- **Unaudited projected commitments (based on USAC historical data as of January 2008)**
- **Unaudited projected disbursements (based on USAC historical data as of January 2008)**

Note: Commitments and disbursements for FY2007 are for the regular RHC program and do not include any data for the RHC Pilot Program. A Funding Year runs from July 1 to June 30.
Politics of USF & RHCPP

- Demands on four funds – especially High Cost - have grown
- Contribution factor has grown to over 11% of your telephone bill
- Much talk of USF reform, little action yet – after the election
- USAC must still prove its worth by effective use of authorized funding
- Most authorized Rural Health Care funding has never been disbursed
- Hence, last November the FCC announced a $417 million RHCPP

![Overall USF Disbursements](chart.png)
The Pilot Program

On November 19, 2007, the FCC released its *Rural Health Care Pilot Program Selection Order* selecting 69 participants covering 42 states and three U.S. territories to be eligible to receive funding for up to 85 percent of the costs associated with:

(1) *the construction of a state or regional broadband network and the advanced telecommunications and information services provided over that network;*

(2) *connecting to Internet 2 or National LambdaRail (NLR);* and

(3) *connecting to the public Internet.*

The FCC’s Vision of a National Healthcare Network

- Enhanced funding to help public and non-profit health care providers deploy broadband
- Deployment of state- and region-wide broadband networks for telehealth and telemedicine
- Access for rural health care providers to medical hubs located in urban areas
- Funding up to 85% of the costs of deploying those networks
- Funding up to 85% of connection costs to Internet2 or National LambdaRail (NLR) dedicated nationwide backbones and public Internet
Rural Health Care Networking Without I2 & NLR
Plus I2 and NLR = National Health Care Network

RHCPP Eligible Entities

Public and not-for-profit health care providers are eligible to receive funding. Eligible health care providers include:

- Post-secondary educational institutions offering health care instruction, teaching hospitals, or medical schools;
- Community health centers or health centers providing health care to migrants;
- Local health departments or agencies including dedicated emergency departments of rural for-profit hospitals;
- Community mental health centers;
- Not-for-profit hospitals;
- Rural health clinics, including mobile clinics;
- Consortia of health care providers consisting of one or more of the above entities; and
- Part-time eligible entities located in otherwise ineligible facilities.

Although emergency medical service facilities themselves are not eligible providers for purposes of the RHC Pilot Program, Pilot Program funds may be used to support costs of connecting an emergency medical service facility to eligible health care providers to the extent that the emergency medical services facility is part of the eligible health care provider.

From http://www.fcc.gov/cgb/rural/rhcp.html#faqs
RHCPP Eligible Costs

• Initial network design studies;
• Construction and network deployment;
• Transmission facilities;
• Recurring and non-recurring costs of advanced telecommunications and information services, such as connection to the public Internet; and
• If requested, costs of connecting the regional or state networks to Internet2 or National LambdaRail, which are both dedicated nationwide backbones.

http://www.fcc.gov/cgb/rural/rhcp.html#faqs
RHCPP Ineligible Costs

- Personnel costs (including salaries and fringe benefits), except for those personnel directly engaged in designing, engineering, installing, constructing, and managing the dedicated broadband network. Ineligible costs of this category include, for example, personnel to perform program management and coordination, program administration, and marketing.

- Travel costs.

- Legal costs.

- Training, except for basic training or instruction directly related to and required for broadband network installation and associated network operations. For example, costs for end-user training, *e.g.* training of health care provider personnel in the use of telemedicine applications, are ineligible.

- **Program administration or technical coordination** that involves anything other than the design, engineering, operations, installation, or construction of the network.

- **Inside wiring or networking equipment** (*e.g.*, video/Web conferencing equipment and wireless user devices) on health care provider premises except for equipment that terminates a carrier’s or other provider’s transmission facility and any router/switch that is directly connected to either the facility or the terminating equipment.

- **Computers, including servers, and related hardware** (*e.g.*, printers, scanners, laptops) unless used exclusively for network management.

- **Helpdesk equipment** and related software, or services.

- **Software, unless used for network management, maintenance, or other network operations;** software development (excluding development of software that supports network management, maintenance, and other network operations); Web server hosting; and Website/Portal development.

- Telemedicine applications and software; clinical or medical equipment.

- **Electronic records management and expenses.**

- **Connections to ineligible network participants or sites** (*e.g.*, for-profit health care providers) and network costs apportioned to ineligible network participants.

- **Administration and marketing costs** (*e.g.*, administrative costs; supplies and materials (except as part of network installation/construction); marketing studies, marketing activities, or outreach efforts; evaluation and feedback studies).
Where Do I Find Out More About the RHCPP?

- Not much at the FCC other than official Orders
- A lot more at USAC. Specifically at http://www.usac.org/rhc-pilot-program/
- This is where you will find the official historical record of the program, as well as current events
- If your state is not already a participant it is too late to receive an award, but you may be able to join existing projects
- And finally, our own website -
Internet2 Health Network Initiative

Providing connectivity to health networks across the country under the Health Network Initiative is a natural extension of Internet2’s existing network capabilities and complements its members’ ongoing work in the health sciences arena. The Internet2 Network links high-speed state and regional research and education networks to connect close to 50,000 research and education institutions and extends robust capabilities that are uniquely suited for healthcare and health applications.

Get Involved

Visit the I2-HNI Collaboration Website

Learn about I2-HNI Benefits

Weekly Calls

Every Friday at 1pm EST for RHCPP participants and Internet2 Connectors discuss and issues and share implementation experiences. Please contact hni.internet2.edu for dial-in information.
Past Call Recordings

Mailing Lists

Subscribe to health@internet2.edu
Subscribe to fcc_order_interest@internet2.edu

http://www.internet2.edu/health/hni/
On to the Last Frontier!

At 591,000 square miles, Alaska is as wide as the lower 48 states and larger than Texas, California, and Montana combined.

National Geographic Society, 1994
Unique Challenges

- Alaska contains 586,412 square miles, and yet has a mere 12,200 miles of public roads. 75% of Alaskan communities and 25% of Alaska residents are unconnected by road to a hospital or physician.
- Communities must depend on other modes of transport, such as plane, boat, and snow machine to access basic medical services.
- Often providers as well as patients are required to travel in order for patients to receive needed medical services, travel which is much more expensive, treacherous, and complicated than in most states.
- The typical referral from rural Alaska is over 100 miles away and costs hundreds of dollars to fly the patient to the specialist. The distance from regional facilities to the four major hospitals in Anchorage average 700 miles and cost $800 to fly.
AeHN Goal

The overall goal of the Alaska eHealth Network is to enhance the ability of rural healthcare providers to utilize health information exchange and telehealth technologies in order to improve access to health services.

To accomplish this goal, AeHN must first establish the network infrastructure to electronically connect providers, patients, payers, other healthcare organizations, and federal and state agencies across Alaska, including public and private organizations in rural and urban communities.
AeHN Objectives

Specifically, the objectives of infrastructure development through the RHCPP are to:

- Unify disparate healthcare networks throughout Alaska and supply rural health providers with connectivity to urban health centers for the purposes of telehealth and information exchange.
- Provide Internet2 (I2) services across the AeHN to improve network capacities and gain access to health services in the lower 48 states.
- Work with the FCC to identify and test innovative methods of funding, investigate ways to increase network efficiencies, and develop a strategy for uninterrupted rural connectivity.
AeHN Organization

• Two statewide work groups, the Alaska Telehealth Advisory Council (ATAC) and Alaska ChartLink, are working together to establish an Alaska eHealth Network (AeHN).

• The Alaska Native Tribal Health Consortium (ANTHC) is the parent organization applying for this grant on behalf of all participating organizations and will fulfill fiscal management responsibilities.

• ATAC will provide the oversight of this project and has created Alaska ChartLink to manage, implement and operate the AeHN.
AeHN Project History

• Began with three open workgroups meeting in December 2006: Content, Video, Network

• Based on workgroup output, on May, 7, 2007, the ANTHC (Alaska Native Tribal Health Consortium), took the lead for the Alaska health care community by submitting a proposal to fund the creation of an Alaska Health Care Network, now called the Alaska eHealth Network (AeHN).
Two-Phase Project

• *Phase I* will focus on network design and will begin with recruiting and contracting engineers. The network design engineers will analyze the existing networks, identify gaps and duplications in connectivity, and conduct a best practices study to determine the most effective solution for connecting providers statewide.

• *Phase II* will commence with the installation and deployment of the designed telecommunications network, as recommended by the network design engineers. This phase will link existing networks, as well as create new connections to rural locations where no connectivity currently exists.

• It is intended for the AHCN to be powered through an I2 network, enabling high-speed data transfer capabilities while maintaining quick access for users.

• The support of I2 will directly facilitate HIE and telehealth applications by providing an effective medium for electronic data delivery to tertiary care facilities outside of Alaska and ensure that telehealth capabilities will be efficient and reliable.
Help! I’ve fallen and I can’t get up!

“Thank God for the FCC, the RHCPP & Internet2!”

“First, I’ll use my iPhone to google my GPS coordinates and email them to the nearest Medivac unit; next I’ll email a photo of my broken ankle using AeHN wireless; then I’ll listen to some Don Ho while I eat my berries …. before any bears come.”