FCC Rural Health Care Pilot Program and Community Development

April 23, 2008
## FCC Rural Health Care Pilot Program Ohio Awards

### Holzer Consolidated Health System.
Awarded $1.8M over three years. Counties impacted Jackson and Gallia.

### Northeast Ohio Regional Health Information Organization.

### Southern Ohio Healthcare Network.
Goals and Objectives of the FCC Rural Health Care Pilot Project

- To facilitate broadband deployment to promote benefits of innovative telehealth and telemedicine to underserved areas
- To develop sustainable broadband capacity and advanced telecommunication services to connect public and non-profit health care providers to local and state networks
- To provide sustainable connectivity to national networks including Internet2, National Lambda Rail, or Internet
Guiding Principles for Cost Effective FCC Rural Healthcare Pilot Project

• To provide a strategy for aggregating the specific needs of health care providers within the state linking rural and urban areas

• To leverage existing technology to adopt the most efficient and cost effective means of connecting these providers.

• To ensure efficiency and avoid duplication of efforts and network facilities, existing network resources and expertise should be utilized, where available and applicable.

• To ensure that for profit healthcare participants will be responsible for all of their network costs if participating in the overall healthcare network
## Network Layers for FCC Rural Health Care Pilot

### Local Network
Designed to provide broadband connectivity to all healthcare providers in a local area. May also serve as anchor tenant to drive broadband expansion for entire community.

### State Network
Designed to provide broadband connectivity to all the community-based healthcare providers in the state. Utilizes the state network to promote efficiency by using existing technology and avoiding duplication of network facilities to ensure cost-effective service delivery.

### National Network
Designed to provide broadband connectivity to national healthcare network. Utilizes existing national network infrastructure to optimize network costs.
Recommended Networking Approach for Local Layer Connectivity and Community Development

• Community hub designed to support the entire demand for broadband services

• Cost savings are planned as a result of the lower cost structure associated with multiple entities

• Creates an environment designed to take advantage of the existing state network or national network infrastructure reducing duplication and network costs

• Promotes community collaboration and improves the network pricing reducing the self sustaining burden.
Local Access Connectivity Community Model
Increased Cost Effectiveness
Recommended Networking Options for State and National Layer Connectivity utilizing BON

• Utilizes the state network to aggregate broadband services and interconnect healthcare facilities, resulting in lower cost of service and reduces duplication of network facilities.

• Promotes connectivity to national network and collaboration on the infrastructure currently in place to provide access to these networks, thereby decreasing costs by utilizing existing technology

• Facilitate the self sustaining aspect of the healthcare network by reducing costs and increasing its long term viability and future expansion statewide.
State Network Aggregation Model
Increased Cost Effectiveness

- Internet2/ National LambdaRail (Non-Profit)
- Internet (Commercial)
- Broadband Ohio
  Next Gen Network & OSCnet
- (Local Access) Community Network Hub (eg DubLink)
- (Local Access) Vendor/Private Provider Central Office

Empower. Partner. Lead.
State Network Aggregation Model
Increased Cost Effectiveness
Keys to Success for the FCC Rural Healthcare Pilot Project

• To serve as a magnet to attract development of broadband services to their area.

• To generate affordable broadband connectivity to all healthcare facilities in the area.

• To expand broadband participation beyond healthcare to the community at large through collaboration and partnerships.

• To develop a sustainable cost model, following the grant period, by lowering the cost of broadband service through sharing the cost of services to entire community.
Keys to Success for the FCC Rural HealthCare Pilot Project

• Offer technical assistance with regard to network planning to take advantage of existing infrastructure and technology.

• Serve as planning liaison with the National and state network to reduce the cost to the local networks.

• Enable vendors to bid state term contract services to ensure the most cost effective pricing for last mile.

• Facilitate transition from the pilot program to the regular FCC Rural Health Care Program for sustainability.
Building Blocks – Broadband Ohio Network

• Meet with the recipients of the FCC awards to determine their interest in lowering costs through broader community participation.

• Determine and meet with the community leaders interested in collaborating on the development of a community broadband plan.

• Develop a joint meeting between the Awardees' and the community leaders to: formulate plans to achieve their goals.

  – Identify partnering opportunities in the community to participate in broadband services beyond healthcare.

  • State and Local Government entities
  • Schools
  • Non-profits
  • Business and Industry

  – Connect Ohio - Leverage the information and community planning.
Building Blocks – Broadband Ohio Network

• Determine the aggregate demand for services and locations to facilitate vendor negotiations.

• Develop a network design and network management plan to ensure the community is taking full advantage of existing network facilities.

• Identify the most cost effective service providers through bids to acquire affordable and sustainable services.

• Promote local, state and national network collaboration to coordinate access to optimize the cost of connectivity across all layers of the network.
Measure of Success

• If the counties identified in the FCC Pilot Project are successful in partnering with their communities to expand affordable broadband services, the impact would be:

  – **37 additional counties** in the State will be able to aggregate demand for services to **generate lower broadband prices for the community-at-large**

  – Additional costs to develop a shared network infrastructure would be covered by an expanded base of community clients, ensuring the integrity of the FCC pilot project funding

  – Promotes the inclusion of for-profit healthcare and community entities to participate in the program at a more affordable cost
Network Planning Guidelines

• Review original application to ensure compliance with Order
  – Re-evaluate entity and service eligibility
  – Ensure sources for 15% funding, by item, are eligible
  – Ensure application supports more than a *de minimis* number of rural Health Care Providers (HCP)

• Network modifications may deviate from initial application
  – Changes to upgrade, replace technology, or add eligible health care providers to the proposed network should be submitted to USAC prior to commencing and completing the competitive bidding process

• Project needs to be consistent with HHS’s health IT initiatives.
Network Planning Guidelines

• Focus on Local Healthcare Community Plan
  – What sites represent communities of interest?
  – What bandwidth is required to the sites?
  – Can the sites be connected in the local area or do sites cross service boundaries requiring state network connectivity?
  – Can the sites be connected centrally to state or national networks?
  – Who will be responsible for management of the local area network?
  – Collect site information address, contact name, telephone number
  – Determine location for any equipment (i.e. room number)
  – Ensure information will meet 465 requirements for bid for local connectivity
Network Planning Guidelines

• Focus on Statewide Network Connectivity
  – What site will serve as the hub to connect to the state network?
  – What bandwidth is required to the state network?
  – Ensure consideration for state bandwidth includes capacity to access national networks.
  – Is connectivity to the state network required to traverse service boundaries to serve the Healthcare community?
  – Who will be responsible for management of state network connection?
  – Collect site information address, contact name, telephone number
  – Determine location for any equipment (i.e. room number)
  – Ensure information will meet 465 requirements for bid for state connectivity
Ohio Supercomputer Center

Discussion

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