

**RFP-02 Network Implementation**  
**Arizona Rural Community Health Information Exchange**  
**April 7, 2011**

1. Introduction and Background
  - RFP General Information and Layout
  - ARCHIE Participants
  - Project Overview
  - Project Scope and Long Term Goals
  
2. Requirements Definition
  - Inventory of each phase one participant
  - Clear definition of packet size for first year data exchanges
  - General definition of packet size for multi-year data exchanges
  - Determination of maintenance requirements on each entity
  
3. Implementation Proposal
  - Costs
  - Project management
  
4. Bid Selection Matrix
  - Compatible hardware platforms
  - Scalability
  - Security and standards
  - Cost: initially and ongoing
  - Ease of implementation, maintenance, and upgrades
  - Potential for facilitating applications
  - Project management capability
  - Sustainability of technology and costs
  - Prior experience and performance
  - Personnel qualifications and Cochise County staff/services
  - Environmental/energy considerations
  - Compatibility of goals, mission, work style with ARCHIE
  
5. Company Information
  - Company Information
  - 2009 Financial Information
  - Federal Communications Commission [FCC] experience
  - SPIN
  - Healthcare, HIE experience
  - Project Manager and staffing
  - Implementation concerns

## **1.0 Introduction and Background**

### **1.1 General Information and Layout**

#### **1. RFP Scope**

This Request for Proposal [RFP] document;

- Outlines the current requirements for the infrastructure implementation for the Arizona Rural Community Health Information Exchange [ARCHIE] and associated costs.
- Encourages suppliers of such a product, or of supplier services that can develop such a product, to respond in writing to this request with a proposal to meet these stated requirements.

#### **2. Not an Offer to Contract**

This Request for Proposal is not an offer to contract but rather an attempt to establish a common framework within which an agreement may be reached.

#### **3. Response is an Offer to Contract**

Responses submitted by a supplier to this Request for Proposal represent a firm offer to contract on terms and conditions described in the supplier's response.

#### **4. RFP and Response Become Part of Contract**

This Request for Proposal and the response to this Request for Proposal shall become part of the contract.

#### **5. Supplier's Proposal and Selection**

ARCHIE reserves the right to accept or reject any or all proposals, to take exception to this Request for Proposal specifications or to waive any formalities. Suppliers may not be accepted for further consideration as a result of failure to fully comply with the specifications as set forth in this document.

#### **6. Competitive Bidding**

ARCHIE encourages free and open competition among suppliers. Whenever possible, specifications, bid invitations and conditions are designed to accomplish this objective, consistent with the necessity to satisfy the needs and the accomplishment of a sound economical operation. The supplier's signature on its proposal guarantees that the prices quoted have been established without collusion with other eligible suppliers or informed parties and without effort to preclude ARCHIE from obtaining the lowest possible competitive price. At no time shall ARCHIE be considered to be under any obligation or commitment to purchase any proposed product from any respondent to the RFP until after a contract has been entered into. The award will be made to the supplier whose overall proposal is determined to be the most cost-effective to ARCHIE.

**7. Proposal Preparation Costs**

Supplier shall absorb all costs incurred by the supplier in the preparation and presentation of a proposal in response to this Request for Proposal document.

**8. Proposal Format**

To ensure that all suppliers are fairly evaluated, it is mandatory that your responses to this request for proposal follow the prescribed format. Failure to follow these requirements may result in the disqualification of your proposal. Your Proposal must be submitted electronically.

**9. Proprietary Information**

All data and information contained in your Proposal shall be deemed to be non-proprietary unless specific items in which proprietary interest is claimed are clearly marked and an agreement has been entered into. You are not encouraged to submit such data or information unless such is absolutely required to understand and evaluate your Proposal. If such data and information is submitted, you agree that ARCHIE shall not be liable for disclosure of such data and information.

**10. Ownership of Documents**

All supporting documentation submitted by the supplier with a proposal shall become the property of ARCHIE unless the supplier specifically requests in writing that the documentation be returned. These materials are to be appended to any formal documentation, which further defines or expands the contractual relationship between ARCHIE and the supplier. Title to all plans, drawings, specifications, ideas, concepts, models or other tangible work product produced specifically for this project by the supplier pursuant hereto shall remain with ARCHIE. The supplier shall deliver all original work products to ARCHIE, but may retain copies thereof for its permanent records so long as the same are not used without prior express written consent from ARCHIE. Upon the completion of the supplier's services, or upon the sooner termination of the definitive agreement, the supplier shall submit to ARCHIE. All such work products except for copies thereof to be retained by the supplier as herein above provided.

**11. Ownership of Software**

All software services and programs specifically written for and furnished to ARCHIE under the definitive agreement shall be confidential and become the proprietary property of ARCHIE. The supplier shall take all reasonable precautions to maintain the confidentiality of the same, and shall cause its subcontractors to do likewise. These programs shall include all documentation, including flow charts, program listings, and program descriptions and costs. The supplier must deliver and price separately all hardware and software necessary to complete the implementation of the implementation.

**12. Company Name**

Any publicity with regard to this proposal, future contract negotiations, and/or subsequent installation, whether in the form of brochures, releases or verbal announcement may be made only with the express prior written consent of ARCHIE.

**13. Functional/Technical Proposal Response**

Supplier shall provide a response to each category (2-6) and the questions within the category. Supplier must list each category independently followed by listing the specific question, and then providing a detailed response to each of the questions. Supplier must also provide a detailed explanation for each individual requirement/ question that cannot be met in its entirety, or that will utilize a subcontractor.

**14. Proposal Submission**

Suppliers should prepare one electronic copy and send to:  
[cochisenetwork@cableone.net](mailto:cochisenetwork@cableone.net)

Proposals must be received no later than 28 days after the 465 is posted to the RHC website.

**15. Supplier Terminology**

Suppliers should make every attempt to use terminology in their proposal that is consistent with that of ARCHIE. Comparable terminology may be substituted where appropriate if the supplier provides clear and concise definitions.

**16. Letter of Transmittal**

Each proposal shall include a letter of transmittal that bears the signature of an authorized representative of the supplier company. The letter of transmittal will also include the name(s) of the individual(s) authorized to negotiate with ARCHIE as well as the names of sales representatives appointed by the vendor, and the name of the supplier's project manager.

**17. Experience/References**

Provide a list of like references to this implementation proposal. For each user listed, provide the following.

- Company name
- Company address
- Person to contact
- Telephone number of contact
- Hardware platform
- Implementation Topology
- Date implementation was completed
- Date the infrastructure was implemented

**18. Product Literature**

Product literature may be included as an attachment to your proposal. Product literature alone does not constitute a response to this RFP

**19. RFP Vendor conferences**

One general vendor conference will be scheduled for clarification questions one week after the posted RFP date.

**1.2 ARCHIE Participants**

Member Organizations

Sierra Vista Regional Health Center [SVRHC] is a full service acute care not-for-profit hospital located in Sierra Vista, Cochise County, Arizona. Many of the county's referred patients end up at SVRHC temporarily, but they will return to their communities and Primary Care Providers [PCP]. It would greatly improve patient safety if their medical information also returned to their communities with them, and to their PCPs.

Chiricahua Community Health Centers, Inc [CCHCI] is a federally qualified community health center with 3 outpatient clinics, a mobile unit, and a dental unit. They provide sliding fees based on income to their healthcare clients. With no inpatient capability, their clients must utilize lab, imaging, emergency, and inpatient services at other locations, preferably within Cochise County.

RW Bliss Army Health Center [RWBAHC] is located at Ft Huachuca, an Army intelligence base located near Sierra Vista. They have no inpatient, emergency, or urgent care services at the center. Therefore, they must send their active duty and retired military patients to other facilities in their area to receive those services. There are more than 27,000 shared beneficiaries between RWBAHC and Sierra Vista healthcare organizations. Currently there is no flow of information between the base health clinic and the outside services offered by other providers. This site is also extremely important in national security, emergency, and surveillance activities to be implemented with the deployment of this regional broadband network.

Southeastern Arizona Behavioral Health Services [SEABHS] provides the only publicly funded behavioral health services in 4 extremely rural counties in Arizona. In Cochise County, SEABHS has an inpatient psychiatric facility and 5 outpatient clinics, as well as a crisis intervention team, housing facilities for SMI clients [Seriously Mentally Ill], and a prevention & community development division. Health organizations in the county have been attempting to better integrate clinical medicine and behavioral health. We see ARCHIE as fundamental in this process.

Southeast Arizona Medical Center [SAMC] is the inpatient and emergency health facility in Douglas. They also have an outpatient clinic, and partner with a dialysis center, which is only the second such facility in the entire county. Douglas is directly on the international border with Mexico. Agua Prieta is their sister town which begins on the other side of the border and is a major crossing point for illegal entry into the US.

The Cochise County Sub-Regional Emergency Medical Services Council [CCEMSC] is a network made up of the 25 fire and EMT agencies in the county (many are small volunteer forces). Approximately 90% of their calls are regarding emergency medical services, fighting fires are no longer their main activity. They work closely with Ft Huachuca, air ambulance services, and all of the hospitals in our county. They are involved with many search and rescue operations related to illegal border crossings.

Southern Arizona Health Information Exchange [SAHIE] is a formational regional health information exchange based in Tucson that has been collaborating with the healthcare entities there to implement a centralized data exchange. ARCHIE's plans are to link into the centralized hub in Tucson when operational.

We have also discussed ARCHIE with the provider community in Cochise County, through meetings of the Cochise County Medical Society, and we anticipate some small IP's will want to eventually join ARCHIE. We plan to have web portals available in our MPLS Network, at a smaller cost to these entities.

We have designed our Network Diagram showing some of these potential future members such as SAHIE, CCEMSC, and IP's, but initially we will begin the project with the Phase I members.

**PHASE I**

Sierra Vista Regional Health Center [SVRHC] <b>Contact:</b> Bruce Norton, CFO	300 El Camino Real Sierra Vista, AZ 85635	520-417-3003
Chiricahua Community Health Centers, Inc [CCHCI] <b>Contact:</b> Richard Sampson, COO	10566 Highway 191 Elfrida, AZ 85610	520-642-2222
Chiricahua Community Health Centers, Inc [CCHCI] <b>Contact:</b> Richard Sampson, COO	108 Arizona Street Bisbee, AZ 85603	520-642-2222
Chiricahua Community Health Centers, Inc [CCHCI] <b>Contact:</b> Richard Sampson, COO	1100F Avenue Douglas, AZ 85607	520-642-2222
R W Bliss Army Health Center [RWBAHC] <b>Contact:</b> Debra Scott, CIO	2240 E Winrow Ave Bldg. 45001 Ft Huachuca, AZ 85613	520-533-9313
SouthEastern Arizona Behavioral Health Services [SEABHS] <b>Contact:</b> John Motowski, CFO	590 S. Ocotillo Ave. Benson, AZ 85602	520-586-0800
Southeast Arizona Medical Center [SEAMC] <b>Contact:</b> Brian Bickel, CEO	2174 W Oak Ave Douglas, AZ 85607	520-364-7931

**1.3 ARCHIE Project Overview**

Cochise Health Network, the parent of ARCHIE, is leading the Cochise County effort to automate the sharing of health information by connecting and exchanging individual and

population health data via a stable, secure, and scalable network infrastructure.

ARCHIE proposes to:

- Develop a regional network infrastructure that is shared among participating facilities
- Enable data access from any facility at any time
- Consolidate and centralize core technical resources for county efficiencies
- Expand existing telemedicine capabilities to all regional facilities
- Introduce telehealth capabilities to exchange electronic data
- Automate patient referral and transfer processes
- Facilitate connecting existing electronic clinical information

ARCHIE's objectives are:

- Aligned with state and federal roadmaps
- Phased, incremental, and manageable implementation
- Using purchased hardware & software tools that are augmented for our business needs
- Negotiating collectively to obtain reduced costs

Project monitoring will include process evaluation, seeing that project steps are implemented in a timely and cost-effective manner, as well as outcome evaluation, ensuring that project goals and objectives are met. Metrics identified include:

- Easy to install and maintain infrastructure
- Reliable uptime of entire network
- Increased physician adoption of electronic applications
- Increased number of local providers with access to telemedicine applications
- Improved ease of communication during emergency and disaster relief efforts
- Enhanced surveillance of disease outbreaks and epidemics
- Decreased adverse events attributable to prescribing errors
- Decreased number of laboratory and imaging studies by eliminating redundant testing
- Reduced unnecessary hospitalizations and procedures

The project will be a phased implementation over multiple years. The initial funding will be grants and member allocated funds with ongoing sustainability covered by membership subscriptions, transaction fees, new memberships, and ongoing investment.

#### Project Funding

Infrastructure implementation is initially subsidized by the FCC's Rural Healthcare Pilot Program. All FCC and USAC regulations will be followed to insure compliance and audit ability. 85% of the implementation costs will be supplied directly by USAC upon approval of the ARCHIE project coordinator. Bidders should be familiar with the

payment structure of this program [see <http://www.usac.org/rhc-pilot-program/vendors/>] and should be noted in the final contract.

#### **1.4 Project Scope and Long Term Goals**

The primary goal for the network is to provide consistent, redundant, bi-directional connectivity between the health care entities in Cochise County, then to extend that connectivity to Tucson or any other healthcare delivery site that ARCHIE finds beneficial to the Network. This linkage will directly facilitate the telemedicine program, and will also be a building block to assist in the realization of the other telehealth goals. The current connectivity infrastructure has problems regarding speed of transmissions, security and reliability of connections between healthcare entities. Installation times and costs have been prohibitive in the past for high-speed connections. Technical staff is minimal at each entity and telecom network provider contract negotiations have been difficult.

The infrastructure implementation proposed should be robust enough to manage the current telemedicine and telehealth needs, plus accommodate more advanced sharing of information whether that is text based, radiology images, or video images. The costs could include a shared network management service that will be purchased annually from a chosen network provider that will augment the region's technical abilities in security, routing and rerouting of transmissions, and separating private and public access.

There is a multi-faceted teleradiology program linking many of the rural entities with facilities of research and consultation in Tucson, this exchange of critical health information can be shared to less technology-advanced organizations utilizing the centralized management function. We could also share radiological information across entities in Cochise County allowing for better coordination of care closer to the patient's home. There is emergency transport information that is shared through faxes, and phone/radio. This information can be linked into the EMS system that is currently installed in many of the fire and ambulance services to facilitate accurate transfer of patient medical conditions and vital information. There is emergency room transfer information that is shared to many entities by fax, mail, or simple file transfers. This could be facilitated with a standardized Coordination of Care Record [CCR] transfer. This standard has been recommended by federal and state agencies as the appropriate data packet between healthcare providers. Standardizing these paper and simple electronic transfers to a common hub exchange would facilitate more efficient care and leverage the exchanges for other geographic sites.

An additional stage of the telehealth applications would be to build upon the basic one-way data exchanges listed above to a more complete bi-directional exchange of healthcare data that can be integrated into the more advanced entities' health information systems. This stage would need a more functional software toolset that is web-based and service oriented architecture to allow for industry standard data sharing



without requiring a huge overhead of services. The software and architecture that we are proposing is currently operational at other healthcare provider data exchanges.

Implementation Approach

The telehealth services implementation is critical to the on going use and effectiveness of the network infrastructure. The work plan for this functional area is to work to automate and/or improve current data exchange projects. The focus will be to make this project more available to the entire county and create more reliable data transfers. The telehealth functionality in this step will be reengineered using a hub technology, one database and server that are used as the standardizing and dispatching services for these simple data exchanges. This server will be a federated, three tier architecture that will have logging and audit abilities but not a clinical repository for the region. The types of data exchanged will be:

**Initial data sets**

Patient Demographics  
Hospital & ED Summaries  
Medications/Allergies  
Lab & Radiology Reports  
Eligibility  
Advanced Directives

**Expansion data sets**

Video Conferences  
Radiology Images  
PCP Contact Info

**2.0 Requirements Definition**

This section will describe what information ARCHIE wants you to complete within your implementation. ARCHIE initial participants include the five listed in Section 1 and will be the focus of the implementation topology. The implementation needs to keep in mind that expansion of approximately 16 health organizations and 50-100 IP's [Independent Physicians] scattered throughout Cochise County are projected for years two and three. ARCHIE desires to have a strong, scalable network to facilitate adding unlimited amounts of entities in the future at various speeds.

Inventory of each phase one participant

Please describe how you will identify specific inventory requirements at each site.

Clear definition of packet size for first year data exchanges

Please describe how you will estimate packet size of the initial data exchanges and necessary transmission speeds. Include industry methods and probability of errors with these methods. Describe if you have had success in the past with these projection methods.

General definition of packet size for multi-year data exchanges

Please describe how you will project the packet size and necessary transmission speed on unknown or more nebulous data exchanges projected in the future. Describe the probability of error in these projections

Determination of maintenance requirements on each entity

Please describe how you will develop the maintenance requirements for managing the ARCHIE network and project the shared responsibility on each entity, or a centralized cooperative model.

### **3. Implementation Proposal**

#### **Costs**

Please cost out your implementation of this design, including USF, taxes. Address specifically how your implementation will minimize ongoing and recurring costs.

Outline any partnership opportunities consistent to FCC regulations. If costs to implement will be from a partnering company describe how you will substantiate these costs in your implementation proposal.

Please describe the business relationship you envision between ARCHIE and your organization. Will ARCHIE own the health network or a portion of it, have a long-term lease for connections/services from you, pay monthly rates for services provided, or some combination of the above?

#### **Project management**

Please describe how your work will be managed and the interactions with ARCHIE that will be required. Include a preliminary project plan with timelines. Also describe your communication process and frequency in regard to project status and issues.

#### **4. Bid Selection Matrix**

This section outlines sample components that ARCHIE will use to evaluate the implementation proposal. Please add any additional comments in regards to your implementation work meeting this criterion. Each section is worth 10 points, for a total of 120 possible points.

- Compatible hardware platforms
- Scalability
- Security and standards
- Cost: initially and ongoing
- Ease of implementation, maintenance, and upgrades
- Potential for facilitating applications
- Network management capability
- Sustainability of technology and costs
- Prior experience and performance
- Personnel qualifications and Cochise County staff/services
- Environmental/energy considerations
- Compatibility of goals, mission, work style with ARCHIE

**5. Vendor Information**

Company Information

Please describe briefly your company history

2009 Financial Information

Please attach your 2009 audited financial report

FCC Experience

Please explain your experience with the FCC Rural Healthcare Program and list past projects

SPIN

Please list your SPIN if you have one

Healthcare, HIE experience

Please explain your experience with and knowledge of the healthcare industry and Health Information Exchange.

Project Manger and Staffing

Please describe the location, experience, and availability of the management team assigned to this project, specifying the FTE amount you plan to allocate to ARCHIE.

**5.7. Implementation concerns**

From the information presented and questions asked, please specify any concerns you have in implementing a topology to meet ARCHIE requirements.

# AZ Rural Community Health Information Exchange ARCHIE

## Fiber Backbone Network

