eHealth Proposals
May 2008

#	Project Name/ Submitting Entity	Amount Requested	Notes
1	Nebraska Health Information Initiative—UNO & NeHII	$100,000	A revised proposal will be submitted with UNO as a joint applicant.
2	Medicaid Electronic Billing for Long-Term Care— Dept. of Health and Human Services & Nebraska Health Care Association	$92,000	
3	Western Nebraska Health Information Exchange Implementation— Panhandle Public Health District	$100,000	
4	Public Input on Sharing Electronic Health Records—University of Nebraska Board of Regents on behalf of the Nebraska Public Policy Center	$39,777	
5	Behavioral Health Information Exchange Network Development— Region V Services	$40,000	
6	Health Information Security and Privacy Consumer Education— NITC eHealth Council Health /Office of the CIO	$8,037	Proposals 6 & 7 are complementary proposals.
7	Health Information Privacy and Security Website—eHealth Council-HISPC#2 Workgroup	$8,600	Proposals 6 & 7 are complementary proposals.
	TOTAL REQUESTED	**$388,414**	

Nebraska Information Technology Commission
Community Technology Fund

Standard Application Form

Project Title: Nebraska Health Information Initiative (NeHII)
Submitting Entity: University of Nebraska at Omaha, in partnership with NeHII, Inc
Grant Amount Requested: $100,000.

Project Contact Information:

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Executive Summary

In the United States, patient-specific health information is highly distributed across multiple unrelated entities – stored in organizational silos – with the transfer of patient-specific health information between organizations usually occurring via paper-based methods. In addition, major components of the healthcare delivery system still use paper-based methods for recording and storing health information. The combination of these two characteristics renders the vast majority of patient-specific health information inaccessible on a timely basis by anyone other than the host organization. The inaccessibility of patient-specific health information results in avoidable errors, redundant or unnecessary clinical services, and redundant or unnecessary administrative activities. In total these consequences represent an enormous economic cost to individuals, corporations, government, and the economy as a whole as well as the pain, suffering, and inconvenience resulting from some of them.

NeHII has been formed to serve as a trustworthy, neutral entity to develop and operate a statewide health information exchange in a secure manner; thus, address the data inaccessibility issue described above. Entities expected to participate in this undertaking include, but are not limited to, physicians, hospitals, health systems, health insurers, employers, self-insured employers, foundations, state government, government-sponsored health plans, pharmacies, labs, and radiology operations. The largest participant group potentially includes all Nebraska's citizens who become patients in the NeHII statewide system.

NeHII is partnering with the University of Nebraska at Omaha, with assistance from the Scott Technology Center, to request funding from the Nebraska Information Technology Commission to assist the project for implementing the system across the State of Nebraska. Details follow in this proposal.

About The University of Nebraska at Omaha

The University of Nebraska at Omaha (UNO) is a public institution and is one of the four campuses of the University of Nebraska System. UNO is located in the heart of Nebraska's largest metropolitan area. UNO is a comprehensive university with over 100 undergraduate majors and 50 graduate majors, including several Ph.D. programs. Situated on 160 acres, the handsomely landscaped campus is surrounded by beautiful parks and residential areas. A full-time faculty of more than 450 serves a student population in excess of 14,000. UNO is accredited at the doctoral level by the North Central Association of Colleges and Schools.

The College of Public Affairs and Community Service (CPACS) was created amidst the social and racial turbulence occurring in Omaha in the early 1970s to ensure the university was responsive to the critical social needs and concerns of our community and state.

Central to the new college's mission was the provision of educational and training programs of the highest caliber that would prepare students for careers and leadership in the public service. Today, the College remains one of the only such institutions in the United States to include "Community Service" in its title.

From those days 30 years ago the College has grown into a nationally recognized leader in public affairs research. Its faculty ranks among the finest in their disciplines. Faculty, staff, and students have become integral to the community and the state through applied research, service learning and various extensive outreach activities harkening back to our responsibility to address critical social needs and concerns.

About NeHII, Inc.
NeHII, Inc. is a Nebraska corporation organized under the Nebraska Nonprofit Corporation Act. It was formed by a collation of not-for-profit Nebraska hospitals, private entities and health care providers. Representatives of these entities and the Lt. Governor sit on the Board of Directors of NeHII.

NeHII, Inc. was formed to:

- Provide Nebraska with a system for the secure exchange and use of health information;
- Be a leader in the secure exchange of health information enabling a healthier Nebraska;
- Enable the sharing of timely and accurate patient healthcare information in a secure environment to improve patient care;
- Provide a seamless, electronic patient-centric health information exchange allowing authorized access to health information;
- Improve the health status of the residents of Nebraska;
- Improve quality and safety in the delivery of healthcare throughout the state by facilitating the sharing of health information;
- Support state and federal initiatives to improve healthcare quality and safety and to reduce cost through shared access to health information;
- Establish the basis for development of state-wide and regional electronic health records in Nebraska as a means to improve quality, reduce errors, and control healthcare costs;

- Conduct and support healthcare education for students, graduate students, providers, and other healthcare workers in Nebraska; and
- Monitor and recommend strategies to assist Nebraska providers to comply with state and federal technology standards and mandates in the healthcare field.
- NeHII, Inc. hopes to receive a 501(c)(3) designation under the Internal Revenue Code.

Goals, Objectives, and Projected Outcomes (15 points)

Goals

- Sharing timely and accurate patient health care information in a secure environment to improve patient care.
- A seamless, electronic medical system driven by patients who give doctors access to their health information to take good care of them.

Principles

The NeHII principles were defined at the outset of the strategic planning process and have naturally evolved throughout the business planning process and are the result of input from many participants. They are meant to create a framework for working together collaboratively.

- Statewide approach
- Patient-centric
- Collaboration and consensus
- Open and transparent process
- Neutrality
- Shared resources, shared burden, shared planning
- Investments should reflect benefit flow
- Economically self-sustaining
- Inclusion of those with less resources
- Keep it simple
- Incremental implementation with early victories
- Build on what is available
- Support quality improvement
- Ensure interoperability

Project Measurement Indices – Nebraska, Other States and Internal Measurement

The foundation for measuring the current status of Nebraska's healthcare was to compare healthcare in Nebraska externally against states with creative approaches to helping patients and agencies manage the costs of healthcare delivery. As the NeHII project evolves over the next several years, the measurement and assessment methods will be internalized – measuring the outcomes stated above against Nebraska's own expected results – maturation, process improvement, system satisfaction, interoperability and significant cost reductions and cost savings.

Project Justification / Business Case

Electronic medical records (EMRs) have been identified as a national need for twenty years. While early attempts via community health information networks (CHINs) seem to have failed, new momentum was created on April 27, 2004 when President Bush called for widespread adoption of interoperable EMRs within 10 years, and also established the position of National Coordinator for Health Information Technology.

During this same timeframe, findings from the Nebraska Biomedical Informatics Project (NBIP) identified in April 2004 that an immense economic opportunity for the State of Nebraska is to implement a business and technology infrastructure that can enable Nebraska to deliver the highest possible quality of care to all of its citizens at the lowest possible cost. The new program was named the Nebraska Health Care Transformation (NHCT).

In January 2005, NBIP approached Nebraska Hospital Association (NHA), the Nebraska Medical Association (NMA) and Blue Cross and Blue Shield of Nebraska (BCBSNE) regarding an HIE and interoperable data exchange initiative to request their providing the leadership for Nebraska's effort. These discussions led to the creation of the Nebraska Health Information Initiative and Collaborative to develop a Nebraska-wide nonproprietary and publicly available health information network, which has the potential for nationwide interoperability, as well as foster market innovation. BCBSNE provided the initial funding for the planning process which resulted in this document. Virtually all of the Collaborative participants have dedicated substantial personnel resources to the planning effort as well

Return on Investment (ROI) / Intangible Benefits to Nebraska's Citizens

Nebraska's per capita personal health expenditures are close to the national average, but roughly 30% higher than the state with the lowest cost per capita – Utah. When benchmarking Nebraska against Utah, the most efficient state, a substantial savings opportunity on the order of $1.56B per year is revealed[*]. Using the HealthAlliant Model™, NeHII estimates that the annual savings opportunity associated with sharing health information technology for Immunizations, Medication History and Clinical Messaging provide an annual opportunity of $946M per year[*].

By developing a health information exchange (HIE) that will link physicians, hospitals, pharmacies, laboratories and imaging centers through technologies and processes that protect patient privacy, NeHII anticipates improved outcomes for individual patients as well as for the state at large, and better use of the dollars spent for health care in the state. It is conservatively estimated that investors in the system (i.e. physicians, hospitals, insurers and self-insured employers) will see a return on investment (ROI) of 48% by the end of sixth year. This is achieved through a collaborative approach, which includes shared investments, high yielding clinical programs, statewide adoption of priorities and a layered (or incremental) approach to program implementation.

[*] Per original HealthAlliant calculations or research

[*] Per original HealthAlliant calculations or research

Evaluated Solutions and Implications of Doing Nothing

The core of the NeHII system is a centrally-managed, enterprise-level, commercial-off-the-shelf (COTS) IT solution to securely control patient information and that patient data gets exchanged with other agencies for the sole purpose to improve the delivery of healthcare to a specific patient. The COTS enterprise system securely brings together the specific data required to sustain a patient's medical condition while protecting privacy and gather the critical data a hospital, pharmacy, clinic or doctor needs to make a medically-required assessment, diagnosis and treatment plans. That is the core technology to manage the system using an ASP model.

Timeliness of error-free data exchange and cost savings are critical motivators to ensure NeHII gets installed and rolled-out correctly across the State of Nebraska. From admissions through discharge and follow-up, protected patient data needs to be timely accessible especially when the patient is unconscious or unable to provide assistance in their own healthcare. Critical data needs to be immediately available to the physician during the 'critical hour'.

Furthermore, the rising cost of healthcare can be slowed by introducing reliable systems which manage the data. Automating paper-intensive tasks, reducing the need for duplication, and eliminating the wait for reliable information to be made available contribute to real dollar and personnel savings. NeHII can be the system which combines the opinions of two, three to ten or more specialties into a one-stop profile eliminating the need for multiple appointments across one or more weeks to resolve a difficult assessment, diagnosis and treatment plans. Follow-up care is slowed as physicians compile the necessary discharge information.

Other Solutions Evaluated – Strengths and Weaknesses

At a minimum, the following options with a brief description of their strengths and weaknesses were thoroughly analyzed and discussed by the NeHII Steering Committee. The ideal solution was integrating a solution, centrally managed, to provide the needed healthcare patient data to improve the care and treatment of the citizens of Nebraska.

- Perform little to no changes to the IT infrastructure as it exists the Nebraska's health providers:
  - Strength – IT systems at health providers' agencies are operational and with regularly scheduled maintenance would work for several years. Dollars already have been invested into these systems and IT, staff and managers are familiar with the current systems.
  - Weakness – The current IT systems have no connectivity, do not permit a rapid exchange of patient healthcare information, lack collaboration options, and continue to cost dollars to maintain as these IT systems become legacy labyrinths.
- Develop a new enterprise system locally which would interact with existing agency-based systems providing the required connectivity and interoperability:
  - Strength – A customized IT system would allow agencies to maintain their IT systems, thus promoting familiarity while minimizing the attitude associated with change and eliminating the need for training.

  - Weakness – Some continuity and interoperability may be loss. Errors in patient healthcare data may increase due to incompatibility of IT systems. Coordinating upgrades and version changes across the State would require dollars invested into maintenance.
- Identify and implement a statewide ERP system COTS solution:
  - Strength – The main strength is a tried and tested already operational system could be implemented with the vendor carrying the costs of system development and maintenance. Healthcare provider agencies would serve a centralized master with several options in providing the required healthcare provider data.
  - Weakness – Beyond the necessity to assist some healthcare providers in making a decision to join with NeHII, funding the project along with long term project monitoring may be a concern for the agency.

Technical Impacts

Technological Impact of NeHII Project

1. With respect to healthcare in Nebraska, this project is an opportunity for Nebraska's citizens to better manage their healthcare including accessibility to their healthcare records.
2. The solution – an enterprise IT system – will link physicians, clinics, hospitals, pharmacies, imaging agencies, etc. to permit timely exchanges of patient assessments, diagnoses, treatments and discharges.
3. This solution would place the State of Nebraska in a leadership role with respect to integrating medical records data and IT systems.
4. Nebraska will be ahead of any Federal initiatives and mandates to automate, digitize, etc. patient records independent of a specific agency permitting the collaboration of the healthcare team.
5. Lastly the State of Nebraska will have the required infrastructure which may be wed to Medicare, Medicaid and other types of Federal-provided healthcare dollars.

Hardware, Software and Communication Requirements

NeHII is a self-incorporated entity responsible for this project. The NeHII Board oversees the daily actions of the NeHII project. The roles and responsibilities of the NeHII partners including its Board of Directors are defined in the corporate documents on file with the State of Nebraska. The Board and related positions are listed in Appendix A. Integral to the structure of the corporation and Board is the Communications Plan approved and followed by the Board.

During 2006, NeHII released a Request for Information (RFI) to identify potential vendors for the project. Subsequently, NeHII released a Request for Proposal (RFP) to those vendors in a position to provide the IT system. The winning vendor had to demonstrate integration with diverse third party EMR systems as well as providing functionality for those physicians without a technological solution. One primary goal for NeHII was finding a partner that would share in short term startup activities in order to gain long-term success. Decisions required during pilot testing include the hardware proposed by the vendor and a permanent place for hosting the hardware.

Reliability, Security and Scalability

All decisions and selections were based on following a disciplined and structured project management methodology. Furthermore, experience with similar implementations along with using software engineering principles and practices have created the necessary foundation to maximize the milestones planned and described in the next section of this proposal.

NeHII is intimately aware of security and privacy of handling patient records and data related to assessments, diagnoses and treatments. All agencies associated with the project have active HIPAA training programs. Secure channel communication networks will not only be implemented but thoroughly tested through pilot testing and implementation.

Earlier in this proposal, NeHII addressed the legacy systems which may exist in agencies affiliated with this project initiative. The option to select an outside COTS vendor assures that the system selected grows as IT becomes more-and-more a part of the healthcare delivery environment. The selected COTS vendor will maintain the system including maintenance, updates, service packs, etc. The vendor owns the system used by the NeHII Project.

Technical Standards and Guidelines

NeHII has accessed the http://www.nitc.state.ne.us/standards/ website. The NeHII project team understands, uses and intends to follow the full intent of the standards and guidelines. IT personnel associated with the project are process savvy having implemented IT process improvement approaches using CMM, ITIL, PMP, ISO 9000 and local agency quality programs.

Compatibility with Existing Systems

A critical factor in selecting an enterprise IT system is to ensure compatibility and interoperability with the many technologies and systems already operational in multiple agencies across the State of Nebraska. Will every system be compatible with the enterprise IT system proposed? The answer to the question will be assessed and analyzed during pilot system testing and prior to rollout across Nebraska. The vendor and NeHII project team are responsible for addressing and resolving reasonable compatibility issues and problems.

Preliminary Plan for Implementation

Implementing the NeHII Project has been thoroughly considered and defined in both the NeHII Business and Project Plans. The plans have been reviewed and accepted by the Board of Directors.

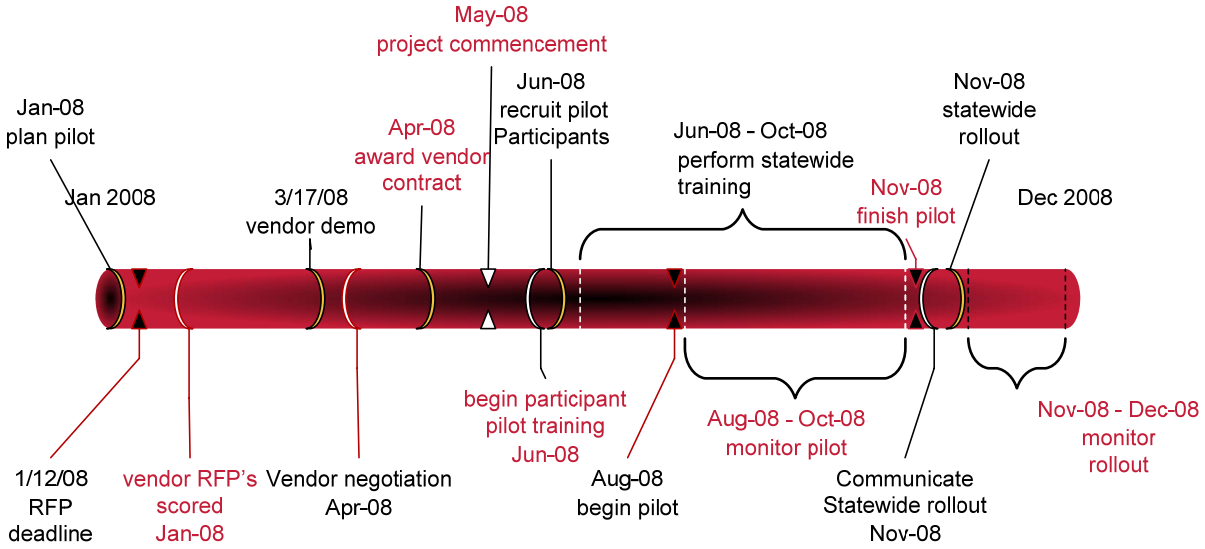
Preliminary Project Plan

Sponsors, roles and responsibilities for the NeHII effort include those defined in Appendix A. Additionally, the NeHII Project includes healthcare agency types defined earlier in this proposal. Again, the NeHII Project includes and invites all Nebraska's healthcare delivery agencies.

Following a brief pilot phase, NeHII plans to provide functionality to all Nebraska providers that will:

- Allow real-time lookup of patient information, such as drug allergies or history
- Obtain lab or radiology reports quickly and electronically
- Allow members of RHIOs to exchange information with providers not in that RHIO
- Match patient records in different systems, ensuring the information is only shared in appropriate ways
- Ensure all information is transmitted and stored in a secure fashion
- Patient safety is maximized
- Provider costs are minimized
- And many, many more.

Major Milestones



Training and Staff Development

Most of the training delivery method will be train-the-trainer. In addition to testing functionality, the pilot testing program's training components will be evaluated. Training evaluation forms during pilot testing will reveal additional information on what concepts to improve.

Ongoing Support Requirements

The NeHII Project will rely on an application service provider (ASP) model, a business strategy and approach that provide computer-based services to customers over a network. Software offered using an ASP model is also sometimes called On-demand software or software as a service. The most limited sense of this business is that of providing access to a particular application program (such as medical billing) using a standard protocol such as HTTP. The ASP model solves the issues of upgrading because they have been eliminated from the end-firm by placing the onus on the ASP

to maintain up-to-date services, 24 x 7 technical support, physical and electronic security and in-built support for business continuity and flexible working.

Risk Assessment and Risk Mitigation Plan

A Risk Mitigation Plan has been implemented to address principle risks that have been identified which could affect the success of this effort. The items that have been identified and will be monitored include

- Failure to produce meaningful cost reduction will render the business model unsustainable.
- Lack of adequate financial participation may result in insufficient income to sustain operations.
- Lack of complete participation by data producers may result in insufficient data for effective patient care and inhibit physician participation.
- Lack of user functionality may inhibit physician participation.
- Lack of physician acquisition and acceptance of technology will result in failure.
- Lack of a proactive patient engagement strategy may limit physician adoption success.
- Public perception issues and legal risk regarding privacy may create barriers to success.

Financial Analysis and Budget

Financial Information

	GTCF Grant Funds	Other Sources / Match	Total
1. Personnel Costs			$1,200,000
2. Contractual Services			
2.1 Design			
2.2 Programming			
2.3 Project Management	$100,000	$125,000*	$225,000
2.4 Other		$375,000*	$375,000
3. Supplies and Materials			$ 36,000
4. Telecommunications			$ 60,000
5. Training		$1,565,000*	$1,565,000
6. Travel			$160,000
7. Other Operating Costs		$935,000*	$1,080,000
8. Capital Expenditures			
8.1 Hardware			
8.2 Software			
8.3 Network			
8.4 Other		$2,000,000*	$8,750,000
TOTAL COSTS		$5,000,000	$13,451,000

* Currently seeking financial assistance for these amounts

The budget items above are the 3-year total costs for implementing NeHII statewide. The implementation model is an "Application Service Provider" or ASP model. Therefore, there are no hardware or software purchase requirements. Items in Section 2 are interim staffing requirements to implement the project, as are training and travel costs. All other costs are ongoing costs throughout the life of the system.

Sustainability

NeHII is expected to be fully sustainable immediately, assuming sufficient grants are received to fund implementation costs. NeHII will purchase licenses from the vendor at discount prices, and provide those to Nebraska physicians at retail price. Assuming sufficient provider participation, the margin will be used to fund overhead costs, making NeHII self-sufficient in Year 1.

NeHII Board Membership & Officers

(*Approved March 28, 2008*)

Board Officers

President:	Harris Frankel, MD - Goldner, Cooper, Cotton, Sundell, Frankel, Franco Neurologists, Omaha, NE
Vice President:	Ken Lawonn - Alegent Health System, Omaha, NE
Secretary:	George Sullivan - Mary Lanning Memorial Hospital, Hastings, NE
Treasurer:	Steve Martin - Blue Cross Blue Shield of Nebraska, Omaha, NE

Board Membership

Elected Directors

Delane Wycoff, MD - Pathology Services PC, North Platte, NE
Harris Frankel, MD
Steve Martin
Ken Lawonn
Michael Westcott, MD - Alegent Health Systems, Omaha, NE
George Sullivan
Lisa Bewley - Regional West Medical Center, Scottsbluff, NE
Dan Griess - Box Butte General Hospital, Alliance, NE
Placeholder
Placeholder

Appointed Directors

Lt. Gov. Rick Sheehy
Kevin Conway - Professional Organizations, Nebraska Hospital Association, Lincoln, NE
Deb Bass - Executive Director (interim appointment until a permanent Executive Director hired), Bass & Associates Inc., Omaha, NE
Sandy Johnson - Consumer Representative, Lincoln, NE

Nebraska Information Technology Commission

Community Technology Fund

Standard Application Form

For projects which meet all of the following characteristics:

- Moderate to high budget (over $40,000)
- Moderately difficult to complex implementation of technology
- Moderate to high risk
- Type of projects: Projects involving health IT

Project Title: Medicaid Electronic Billing for Long-Term Care (LTC)

Submitting Entity: Department of Health & Human Services (DHHS) and Nebraska Health Care Association (NHCA)

Grant Amount Requested: $92,000

Project Contact Information (Name, address, telephone, fax, and e-mail address):

Vivianne M. Chaumont or Cindy Kadavy, DHHS Division of Medicaid & LTC, PO Box 95026, 301 Centennial Mall South, Lincoln, Nebraska 68509-5026 402-471-4684 402-471-9092 (fax) cindy.kadavy@dhhs.ne.gov

Pat Snyder or September Stone 3900 NW 12 Suite 100, Lincoln NE 68521 402-435-3551 402-475-6289 (fax) septembers@nehca.org

Executive Summary

Provide a one or two paragraph summary of the proposed project, clearly and succinctly describing the project goals, expected outcomes, the information technology required, and what the grant will fund.

This project will establish a system to identify and troubleshoot electronic billing and submission of Medicaid long-term care (LTC) service claims. This will be a one-year project that will include hiring a part-time consultant and facilitator to work with Nebraska Department of Health and Human Services Division of Medicaid and Long Term Care and long-term care facility staff to implement a process for successful electronic claim submission.

The proposal also provides for mini-grants to facilities or vendors to offset some costs for program changes and software or hardware purchases. The expected outcome of this grant is that after one year, a fully developed system for electronic billing will be utilized by 25 percent of nursing facilities that are Medicaid certified and will set the standard to move toward 100 percent electronic claim submission.

Goals, Objectives, and Projected Outcomes (15 points)

1. Describe the project, including:
   - Specific goals and objectives;
     - Establish a workgroup of NDHHS, LTC facilities, and information technology vendors to define concerns and solutions.
     - Pilot test clearinghouse or software to meet Medicaid requirements for electronic claim submissions.
     - Closely monitor consultant and group of facilities to ensure project success with 50-60 facilities by the end of one-year.

   - Expected beneficiaries of the project; and
     - Long-term care residents
     - Long-term care facilities
     - Medicaid/DHHS

   - Expected outcomes.
     - Reduce dependence on paper billing for 25 percent of nursing facilities in Nebraska for claim submission to Medicaid.
     - Reduce time associated with duplicative data-entry processes and associated key-punch errors.
     - Improve resident-centered care by improving efficiency and by reducing confusion regarding billing and various information technology systems.
     - Increase interest and incentivize LTC to expand use of technology to improve resident care and outcomes.

2. Describe the measurement and assessment methods that will verify that the project outcomes have been achieved.
   a. The number of facilities moving to electronic billing will be measured.
   b. The number of successful electronic claim submissions and the reduction in paper claim submissions will be measured.
   c. Amount of time from submission to payment will also be measured.

Project Justification / Business Case (25 points)

3. Provide the project justification in terms of tangible benefits (i.e. economic return on investment) and/or intangible benefits (e.g. additional services for customers).

   Benefits for moving from paper billing to electronic billing include the following:
   - Increased accuracy in data entry and billing.
   - Reduced time spent by the state and the facility on data entry and paper error reconciliation.
   - Reduction in time for turnaround and billing through payment.
   - Reduction in costs related to printing, postage, and paper costs for the State and the facility.
   - Reduced staff time after the system is established for the State and the facility.
   - Currently there are more than 15,000 licensed nursing facility beds in Nebraska. If 50 percent are Medicaid certified residents, that

equates to approximately $11,250 in paper and mailing costs monthly for separately billed residents assuming $1.50 per resident. This does not factor in time or personnel costs. This is an expense of $135,000 per year. If 25 percent of those bills were converted to electronic billing, there is a potential savings of $33,750 annually in Medicaid and facility expenses.

- *Actual Medicaid certified beds are 14,008 not including AL Medicaid waiver (5,470). If 25% of the NF Medicaid certified beds were converted to electronic billing the cost savings in paper and postage alone is $63,000. For 100% ebilling the savings is over $250,000 annually for NF residents.*

4. Describe other solutions that were evaluated, including their strengths and weaknesses, and why they were rejected. Explain the implications of doing nothing and why this option is not acceptable.

A small workgroup was formed in October 2007 to address this situation with limited success. The workgroup consisted of NDHHS employees, LTC facility representatives, and Nebraska Health Care Association employees. The result of this has been limited to 1-2 participating facilities working directly with Medicaid staff to address individual issues rather than a system success. The Nebraska Medicaid program is moving towards increasing use of technology in providing and paying for services. Time and financial issues strongly encourage the use of electronic billing. Many health care provider systems such as hospitals, pharmacies and clinics have received assistance with increasing use of technology to improve care such as universal service funds and grants and have achieved success with shared partnerships. This situation would target a group of providers with significant Medicaid usage, and savings could be quickly realized. This process would allow a smooth transition to electronic billing rather than an abrupt change when the new MMIS system goes into effect.

Technical Impact (20 Points)

5. Describe how the project enhances, changes or replaces present technology systems, or implements a new technology system. Describe the technical elements of the project, including hardware, software, and communications requirements. Describe the strengths and weaknesses of the proposed solution.

This project provides an opportunity to allow the providers, vendors and the payers to work together to develop a sustainable and successful process for electronic Medicaid billing that could potentially be used in more that one type of health care facility. The current process of Medicaid billing in LTC is a paper turnaround document that the state sends to the facility, the facility reviews, makes changes for each resident receiving Medicaid services, and then sends back to the state. After the state reviews the documents and keys in changes made by the facilities, Medicaid issues payment.

This project would have a facilitator work for one year with facilities, Medicaid, and vendors to establish electronic billing, assist in correcting any

technology-related issues, and to assist facilities with the transition to electronic filing. The facilitator would also work with interested vendors of software or clearinghouses that are interested in assisting with electronic billing of Medicaid claims in Nebraska.

The project would provide mini-grants to participants to assist in incentivizing facilities and vendors to initiate the change process and stimulate interest. Education to facilities and vendors and promoting the project would be part of the process to encourage participation.

6. Address the following issues with respect to the proposed technology:
   - Describe the reliability, security and scalability (future needs for growth or adaptation) of the technology.
     - This project is designed to initiate the use of more technology and improve systems of care as a profession in LTC. The Nebraska Medicaid system is undergoing significant changes related to technology. Once facilities establish the effectiveness, efficacy, and the understanding that the technology is not going to go away or bypass them, the work can begin to effect change in concepts and thinking. The project will provide resources to safely transition from paper to electronic billing without interruption in services or financial stability.
     - An electronic system will be more reliable than hand-written, paper-based forms, which are often difficult to read, require duplicative data-entry, and run a greater risk of human error.

   - Address conformity with applicable NITC technical standards and guidelines (available at http://www.nitc.state.ne.us/standards/) and generally accepted industry standards.
     - Nursing facilities already conform to HIPAA standards and to current Medicaid standards. The appropriate technical standards for electronic billing are established and there are few modifications if any anticipated to meet NITC technical standards and guidelines.

   - Address the compatibility with existing institutional and/or statewide infrastructure.
     - The Medicaid system is undergoing dramatic infrastructure changes and this is the ideal time to establish the system for electronic billing for long-term care as LTC has minimal current technical infrastructure. The vendors that are interested in participating in this project are likely already electronically billing Medicare and are compliant with federal requirements with that system. It is thought that there are limited modifications required and limited compatibility issues between systems.

Section 6: Preliminary Plan for Implementation (10 Points)

7. Describe the preliminary plans for implementing the project. Identify project sponsor(s) and examine stakeholder acceptance. Describe the project team, including their roles, responsibilities, and experience.

Sponsor- 1. Nebraska DHHS Division of Medicaid & LTC
Vivianne M. Chaumont, Director

Cindy Kadavy, Manager, LTC Services Unit
Pat Darnell, Manager, Medicaid Claims Unit

Sponsor – 2. Nebraska Health Care Association
Pat Snyder Executive Director
Brendon Polt Assistant Executive Director
September Stone Director LTCWIN
Wendy McClellan Accountant

Responsibilities:
Pat Snyder would provide executive oversight of the project in relation to the facilities, vendors, and NHCA.

Brendon Polt would be the direct coordinator of the project and the lead facilitator for the workgroup and working with the involved entities.

Wendy McClellan would provide financial accountability and provide budget and payment of grant money to approved entities.

Vivianne M Chaumont would provide executive oversight of the project in relation to DHHS.

Pat Darnell would provide oversight of the Medicaid NF claims process.

Cindy Kadavy would provide oversight of the Medicaid NF authorization process.

Stakeholder acceptance- Medicaid has a focused plan to increase electronic billing and improve efficiency in claims systems. LTC facilities are gradually moving to more acceptance of technology in health care with the requirements of electronic Medicare filing initiating some of the interest. There remains some resistance to changing from a familiar and simple turnaround document to electronic submission. A survey of nursing facilities in Nebraska was completed in 2007. The results identified a lack of awareness that electronic claim submission was an alternative and over 90% are interested in electronic submission.

A facilitator or consultant will be the lead agent to bring the project groups together. The facilitator will be hired on a temporary part time basis. He will work with facilities who are interested in electronic submission either by direct billing or by a clearinghouse. He will also work with the Medicaid program to determine system and program requirements for submission. The facilitator will also work with vendors of clearinghouses or billing software to assist with any modifications needed to comply with Medicaid requirements and facility needs. This person will act as a support and liaison between all groups.

8. List the major milestones and/or deliverables and provide a timeline for completing each.
    a. Convene a workgroup of all parties involved - 3 weeks.
    b. Hire a facilitator and complete a needs assessment including identifying interested facilities - 8 weeks.

c. Identify interested vendors and identify system requirements from Medicaid and compatibility with vendor products - 10 weeks.
d. Identify ten interested facilities and test vendor software and send test file batches through Medicaid successfully - 16 weeks.
e. Complete successful electronic billing with 10 facilities - 26 weeks.
f. Educate and actively recruit 40-50 more facilities and bring on successfully for electronic billing - weeks 27-52.

9. Describe the training and staff development requirements.

The person sending claim submission will need assistance with understanding the vendor product used. This staff development must be supported and trained. If a universal need is identified for training on a specific item, this can be arranged and developed through the Nebraska Health Care Association.

10. Describe the ongoing support requirements.

Ongoing support after the grant period will remain through the workgroup and the systems and relationships gained through the grant. Requirements are expected to be reduced over time as familiarity and knowledge grows through the LTC community.

Section 7: Risk Assessment (10 Points)

11. Describe possible barriers and risks related to the project and the relative importance of each.

a. Knowledge about the process of electronic file submission. Lack of knowledge about electronic Medicaid billing could limit the functionality of use of technology in LTC. Technology often starts in the business practices before moving into resident care. Educating and informing about electronic billing is necessary to expanding the use of technology throughout the field. Suggestions this grant could perform to address this issue include.
    1. Facilitator to work with focused group of facilities.
    2. Marketing and education through the association resources on benefits and process of e-billing.
b. Resistance to change from current system of paper billing. Change is a significant risk to many people in the workforce. Working with people to coach, support, and encourage the process is a highly effective method of ensuring success. Two possible solutions to encourage widespread adoption of the change to e- billing include the following in addition to the consultant support.
    1. Marketing and education through the association resources on benefits and process of e- billing.
    2. Reinforcement from Medicaid of reassurances of success and need to convert to E-Billing
c. Fear of not being paid in a timely fashion. This barrier is a top priority to overcome with this project. The risk to facilities that have a relatively high population that is receiving Medicaid benefits could be extremely high. It is essential to have the support and assurances from the workgroup and Medicaid that concerns will be addressed in a timely and supportive fashion.

12. Identify strategies which have been developed to minimize risks.

1. Testing of software or clearinghouses prior to going live with file submissions.
2. Education and support at the local level to minimize risk at the facility level.

Section 8: Financial Analysis and Budget (20 Points)

13. Financial Information

	GTCF Grant Funds	Other Sources / Match	Total
1. Personnel Costs	10,000	15000 (NHCA)	*25000*
2. Contractual Services			
2.1 Design			
2.2 Programming			
2.3 Project Management	3000	3000 (NHCA)	6000
2.4 Other	40,000		40,000
3. Supplies and Materials			
4. Telecommunications	1000	1000(NHCA)	2000
5. Training	1000	1000 (NHCA)	2000
6. Travel	2000	2000(NHCA)	4000
7. Other Operating Costs (mini-grants)	35,000		35,000
8. Capital Expenditures			
8.1 Hardware			
8.2 Software			
8.3 Network			
8.4 Other			
TOTAL COSTS	92,000	22,000	114,000

14. Provide a detailed description of the budget items listed above. Include an itemized list of hardware and software.

1. NHCA will provide in kind contributions supportive personnel match of $15,000 over 12 months to assist with marketing, education, and supporting facilities transitioning to electronic Medicaid billing.

1. DHHS Division of Medicaid & LTC will provide supportive personnel to assist with LTC claim submission and testing; provide technical assistance; resolve issues and problems; and implement any necessary changes to the claims processing and authorization systems.

2.3 NHCA will provide in kind contributions of marketing and education accounting services for grant fund management with a matching amount from the grant.

2.4 The grant funds will be used to contract with a consultant/facilitator for a 12-month period as described in the previous sections.

4.0 Telecommunication resources will be used to direct communications between workgroup, facilitator, facilities, Medicaid, and vendors.

5.0 Training may include webinars, or in person workshops/ in-services based on the needs of the billing personnel or other appropriate parties.
6.0 Travel is likely to include mileage and lodging for the facilitator to work directly at the facility that is piloting the project.
7.0 Mini-grants will be awarded to facilities and/or vendors to make programming changes to meet Medicaid requirements, or to facilities to purchase software or hardware.

15. Describe how any ongoing costs will be sustained after the grant funds are expended.

Ongoing costs will need to be absorbed by the facility to continue or enhance the process. It is not anticipated that there will be significant ongoing costs to maintain the infrastructure.

Nebraska Information Technology Commission

Community Technology Fund

Standard Application Form

For projects which meet all of the following characteristics:

- Moderate to high budget (over $40,000)
- Moderately difficult to complex implementation of technology
- Moderate to high risk
- Type of projects: Projects involving health IT

Project Title: Western Nebraska Health Information Exchange Implementation

Submitting Entity: Panhandle Public Health District

Grant Amount Requested: $100,000

Project Contact Information (Name, address, telephone, fax, and e-mail address):

Kim Engel
Panhandle Public Health District Director
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Executive Summary

Provide a one or two paragraph summary of the proposed project, clearly and succinctly describing the project goals, expected outcomes, the information technology required, and what the grant will fund.

This project will provide partial funding for implementing a regional health information exchange within an established network of rural health care providers across Western Nebraska. The project will enable partners to improve patient safety and quality of care. Particularly in rural areas, health care is provided through an array of geographically-dispersed providers, each often having only pieces of the total health care record. When full medical information is unavailable to providers, decisions must be made either with incomplete information or with time and resource investment (e.g., staff time, transportation) to obtain. The current system compromises quality care through the underuse, overuse, and misuse of health care services.

This project will demonstrate phased health information exchange among partners with disparate electronic health record sophistication. The exchange will accommodate partners with substantial, standards-compliant existing assets and will equip partners with

little or no current infrastructures to develop capacities (with an emphasis on economies that are achievable through collaborative purchasing, training, and support). Priority functionalities include patient clinical information, e-Prescribing, and integrated results management. Funding from the Nebraska Information Technology Commission will be applied to the capital expenditures required to implement the system. The Exchange's approach observes national standards and creates a system for information sharing among hospitals and providers in real time while at the same time preserving the autonomy of hospitals and other providers. The project will model how health information exchange may be beneficial to public health monitoring and surveillance activities. The project builds upon the Critical Access Hospital Network framework and will model interconnections with rural health clinics, behavioral health providers, physicians' practices, public health providers, and other health and human services organizations.

Goals, Objectives, and Projected Outcomes (15 points)

1. Describe the project, including:
   - Specific goals and objectives;
   - Expected beneficiaries of the project; and
   - Expected outcomes.

In sparsely populated, low-income rural areas, health care providers understand that survival through collaboration makes sense for patients and providers. Medicine in the 21st century makes unmatched demands for breadth of expertise. Rural providers must take advantage of technology and economies of scale through collaboration, because in most cases, the hospitals and providers are not a large enough scale. Just as the Critical Access Hospital network system creates the economies for accessing increasingly sophisticated medical expertise and "shared" patients, the same system offers economies for collaborative electronic health information exchange.

The vision of the Western Nebraska Health Information Exchange is to create a sustainable system of healthcare for the region developed through collaboration and cooperation which respects the autonomy of partners. The Exchange's mission is to enhance patient safety and quality of care through the effective exchange of health information among all providers and partners. The specific objective for this proposal is to improve quality of care and patient safety by:

A. Enabling the exchange of health information between providers;
B. Ensuring that all hospitals and providers have the capacity to participate in electronic exchange;
C. Continuing to promote the vision of a system of care for Panhandle residents; and,
D. Contributing to the viability of partners by identifying and promoting efficiencies.

2. Describe the measurement and assessment methods that will verify that the project outcomes have been achieved.

Both process and summative outcomes will assess the implementation outcomes. Measurements will include:

1. **Numbers of organizations and employees who have access to the health information exchange**. The documentation of this information will focus on the extent of availability of the health information exchange.
2. **Acceptance and use of the health information exchange.** The assessment will be focused on the extent to which the participating organizations' and individuals' penetration and volume of usage and how the data is used.
3. **Improvements to the quality of care and patient safety.** Quantitative and qualitative measures will be reviewed to identify how quality of care and patient safety has been positively impacted because of the Exchange.
4. **Financial and other efficiencies experienced among the Panhandle health partners.** It is expected that the Exchange will result in efficiencies within organizational partners. These will be monetized and compared to expenses to create a cost effectiveness profile.

Project Justification / Business Case (25 points)

1. Provide the project justification in terms of tangible benefits (i.e. economic return on investment) and/or intangible benefits (e.g. additional services for customers).

The implementation of the Western Nebraska Health Information Exchange will provide tangible benefits for patient safety and quality of care.

Clinicians need access to comprehensive information about patients, support to make decisions, and timely order execution. Rural physicians provide care under alarming pressures to serve significantly more patients with less access to technological and collegial support than do their counterparts in urban areas. Information is needed at the point of care at the time of care. When clinicians do not have important information about conditions, previous test results, medication and allergy lists, precious time may be lost in locating, obtaining releases between providers, and transporting or otherwise communicating information. The result may be medication errors, repeated tests, protracted diagnoses and longer-than-optimal recovery periods. When patients are referred to other providers, tests, orders, results, and specialists' information may never be communicated back to the local doctor or hospital. Because of the breadth of their patient care responsibilities, rural clinicians need support to inform their diagnoses and care decisions, and need to have their orders executed in a timely manner. Health information technology enables providers to have comprehensive information and provide timely, quality care.

Providers must use scarce resources productively and efficiently. In rural areas, efficiency at all levels of the organization is necessary to survive. Physicians, instead of spending time with patients and making treatment decisions, are faced with juggling and requesting records from multiple, distant providers. Staff spend time capturing, storing, and retrieving information that has already been captured by others. Records transfer costs (e.g., staff costs, copying, long distance telephone calls, postage) can be significant. Providers need to speed receivables and reduce denials, including: reducing duplicate or erroneous billing, improving billing and coding quality, and increasing legible documentation. Staff are frustrated by the overwhelming paperwork and time away from their patients. Health information technology maximizes the productive and efficient use of resources, which enables providers to have more time for patient care, and reducing time and resources spent on data management.

Patients need to have healthcare that is geographically and financially accessible. The creation of the Critical Access Hospital designation has created regional systems of primary, secondary, and tertiary care that promote local health service as the medical home and key point of contact. However, Critical Access Hospitals are thinly-funded and patient volumes make profitability difficult. Patients must be able to rely on networks of viable critical access hospitals, particularly in remote rural regions where they provide the only care for hundreds of miles. However, the critical access hospital network concept breaks down when clinicians do not have information about patients as they move back and forth between providers. When care is duplicative, delayed, or inappropriate, patients (particularly among the large, uninsured population in rural areas) end up paying more, both in direct charges as well as in the related, and very real costs for transportation, time off work, and so on. Health information exchange helps providers securely share information. Information sharing can lead to important reductions in healthcare costs, thus making healthcare more affordable to patients. Studies have found that information sharing, including linking to outpatient and postacute care and other services during discharge planning, reduced rehospitalizations by 50%. Other studies have found that more complete information about patients' histories results in fewer unnecessary tests.

Public health systems find that they do not have current data for public health monitoring and surveillance. Public health is responsible for assessing health status, determining problems, searching for causes, and designing solutions for their populations. Increasingly, too, public health must have rapid access to information for credible responsiveness to biological outbreaks and threats. Yet, public health agencies often have to rely incomplete, delayed, and out-of-date information for these tasks. Public health reporting can be burdensome and time-consuming. Electronic lab reporting addresses some of these issues, but often lab reports do not have complete information

(such as patient signs and symptoms, treatments, pregnancy status) and do not integrate multiple tests and results that would be needed for satisfying case definition. Health information exchanges may improve reporting of notifiable diseases beyond either traditional clinician-initiated or automated laboratory-based reporting systems. Health information exchanges, with public health agencies as participants, provide active notifiable disease surveillance that is more timely, complete, and clinically detailed. In Massachusetts, a recent study of a pilot EMR-based electronic surveillance system documented increases of 39% in reported chlamydia and 53% in reported gonorrhea when compared to the existing passive surveillance system. Eighty-one instances of pregnancy not identified by passive surveillance were reported by the electronic system in patients with chlamydia or gonorrhea. In addition, the electronic system identified 20 cases of pelvic inflammatory disease and four cases of acute hepatitis A, compared with none and one, respectively, reported via the passive system. Improved reporting can help public health districts better allocate limited resources for targeted investigations and interventions.

4. Describe other solutions that were evaluated, including their strengths and weaknesses, and why they were rejected. Explain the implications of doing nothing and why this option is not acceptable.

The partners have affirmed that the vision for shared health information is to achieve patient-centric, rather than organization-centric information sharing. It is expected that providers should be enabled to access all needed information about a patient, regardless of which hospital or which other provider was involved in care. Additionally, the partners have affirmed the desire for the patient-centric information to be “owned” by the patient, available for notation by the patient, and ultimately accessible and transportable by the patient.

The partners have directed that the information sharing strategies and structures must enable a viable means to share information to others within the region not currently involved in the planning effort, and to those providers outside of the region. This decision is in recognition of the interdependencies that regional providers have with one another and with those outside the region. Thus, adherence to national standards will be a hallmark of the process.

The partners have determined that a parallel local organization/regional process will most effectively address the need to equip local organizations to make informed decisions, while also creating the policies and affirming national standards needed to facilitate information exchange.

By doing nothing, providers and patients will continue to operate in information silos that make it difficult and time-consuming to have complete information about a patient. At the least, this means inconvenience, but incomplete information may lead to misuse, underuse, or overuse of scare healthcare resources and medical errors resulting in injury and death.

Technical Impact (20 Points)

6. Describe how the project enhances, changes or replaces present technology systems, or implements a new technology system. Describe the technical elements of the project, including hardware, software, and communications requirements. Describe the strengths and weaknesses of the proposed solution.

The health information exchange enhances existing electronic records systems. The Exchange is not a “rip and replace” solution, rather it implements new sharing technology between current electronic and paper-based systems. Hospital technological capacity varies significantly among partners. In 2007, the project undertook an extensive survey of electronic systems currently implemented in all Panhandle hospitals, the Federally Qualified Health Center, the Behavioral Health Region, and rural health clinics. The health information exchange, using national and international standards, will sit in the space between organization electronic systems. For those organizations without electronic systems, information may still be shared through scanned copies and two-way faxing. The Exchange has undergone a rigorous evaluation process of the major vendors in the health information exchange space, issued an Request for Bids, narrowed the responses to a finalist pool, convened vendor demonstrations in the Panhandle, sent a delegation of stakeholders on a series of site visits, and is finalizing its due diligence and reference checks. Both health information exchange vendor finalists have proposed a hybrid (federated and centralized) architecture with a Master Patient Index, Record Locator Service, and some centralized storage of specific data for analytics.

Users will interact with Exchange information through a web browser. The technological specifications for user access will likely include any basic PC, tablet, PDA, or other device using recent operating system software. The Exchange will “map” to existing electronic systems which will contribute data to the Exchange. Those organizations without electronic clinical information will still be able to view and contribute information through fax-based preferences that they may manage. The vendor products also offer solutions for clinic-based systems that are identical to the Exchange browser and it is expected that use of these systems will accelerate the adoption of electronic medical records within the Panhandle.

Persistent Internet-available sites will be maintained by partner organizations for the “federated” portion of the patient data that is being exchanged. It is expected that these will be mirrors of the operational systems.

As a web-based solution, connectivity throughout the Panhandle becomes key to successfully and rapidly exchanging information. Wide Area Network connectivity between all the hospitals via T-1 lines has been achieved. This network, with Regional West Medical Center as the hub, connects to two larger Wide Area Networks: the High Plains Rural Health Network and the Nebraska Telehealth Network. Additionally, Panhandle partners recently received a $19 million grant from the FCC to improve broadband connectivity throughout the Panhandle. Because of the importance of rapid response *within* the Panhandle, partners are negotiating with the vendor finalists to locate all hardware at a Panhandle location, while still having the vendor responsible for remote monitoring and support.

7. Address the following issues with respect to the proposed technology:
    - Describe the reliability, security and scalability (future needs for growth or adaptation) of the technology.
    - Address conformity with applicable NITC technical standards and guidelines (available at http://www.nitc.state.ne.us/standards/) and generally accepted industry standards.
    - Address the compatibility with existing institutional and/or statewide infrastructure.

Reliability

Our two vendor finalists have extensive experience in creating reliable architectures for patient information. Reliability will be ensured through backups, fault tolerance and system recovery, minimization of downtime through mirrored/parallel systems, and disaster recovery plans. In order to maximize responsiveness and availability, the Western Nebraska Health Information Exchange is negotiating hosting the hardware and software within the Panhandle.

Security

Data will exchanged in a secure manner compliant with the HIPAA Final Security Rule (Health Insurance Reform: Security Standards; Final Rule, 45 CFR Parts 160, 162, and 164, 68 Federal Register, 8334- 8381, Feb. 20, 2003). The successful vendor will satisfactorily address all aspects of HIPAA Technical Standards and all applicable sections of the Administrative and Physical Standards. The security structure will support Tier One and, possibly, Tier Two security practices. At a minimum, Tier One security would include all basic security (as defined by the HIPAA Final Security Rule) practices. Tier Two would enable us to introduce biometric-based or token security. Security of patient data is of utmost concern. Because of this, we have vetted our vendor finalists to two that have experience developing highly secure exchanges.

User Authentication

User authentication controls who may access to the Exchange. The authentication will be managed at two levels: the participation organization and centrally (Panhandle-wide). Each participating organization will be responsible for credentialing and verifying any user attached to their organization. The central administrator will also have the ability to create, update, delete, rename, disable, and enable users.

Access

Access to patient data will be through, at a minimum, successful logins (with password governors) into the system. Access will use role-based permissions. Meaning that organization-defined roles will dictate which users have access to what patients and what information about those patients is available. After a period of inactivity, all users' current sessions will be automatically timed out.

Encryption and Secure Messaging

Data delivered for display within the Exchange will be encrypted and delivered through secure messaging.

Auditing

All activities (user and administrator) performed within the Exchange, per HIPAA, will be logged. Audits may be initiated at the regional and local partnering organization level. It is likely certain accesses, such as "break-the-glass" access, will automatically trigger an audit review.

Privacy

Under the HIPAA Privacy Rule, the Western Nebraska Health Information Exchange will be a business associate of multiple covered entities. The Health Information Exchange has a User's Agreement that has been drafted and is under review by partners.

In compliance with HIPAA, partnering organizations may permit institutional restrictions, but these restrictions will not apply to the Western Nebraska Health Information Exchange. That is, partnering organizations will be permitted to make their own decisions about whether or not they will accept restrictions from patients. Partnering organizations will have policies and procedures to be included in the response to the request for possible restriction (and as part of the organization's privacy policies and procedures) to access by specific individuals within the organization. However, if responding in the

affirmative, that request will only be limited to access to the information within and outside their organization.

Scalability
The system is designed to expand to all health care providers in Western Nebraska, including pharmacies, physician practices, long-term care facilities, urgent care facilities, labs, home health/hospice providers, and others. In addition, organizations beyond the Panhandle will also be recruited to participate. We have already received interest from other organizations within Panhandle referral patterns and from other Nebraska healthcare organizations. Both vendors have large (over 1 million patient) implementations currently in place. The vision of scalability is possible through the hybrid approach that enables exponential addition of new contributing organizations.

Conformity with NITC Standards and Guidelines and Other Industry Standards
Although there do not yet currently exist NITC or other standards for health information exchanges, the Western Nebraska Health Information Exchange has staunchly observed and has created the expectation for vendors to observe those standards that do exist or are emerging. We expect the successful bidder to observe the Healthcare Information Technology Standards Panel (HITSP) standards harmonization work and to have or obtain certification from CCHIT for relevant products. Both vendors support, at a minimum, HL7 2.x and 3.x, ANSI HIPAA, XML – Continuity of Care Record, NCPDP, ANSI, LOINC, SNOMED CT, Rx Norm, NCPCS, and CPT. Both actively participate in standards-setting groups and are committed to observing standards when they are adopted.

Compatibility with Institutional/Statewide Infrastructures
The advantage of the system being proposed is that it fits within the structure currently supported by the Office of the National Coordinator (US HHS). That is, it will operate has a Regional Health Information Organization (RHIO) to facilitate exchange both with and outside its membership. Exchanges within the membership are based on role-based access. Exchange outside the membership may be negotiated either with individual organizations or on a RHIO-to-RHIO basis. Secure Internet-based communication channels mean that access is ubiquitous and builds upon the infrastructure created through the Nebraska Telehealth Network and other initiatives. Finally, because the data is structured based on existing standards, data may be exchanged more rapidly without user-to-user mapping.

Section 6: Preliminary Plan for Implementation (10 Points)

8. Describe the preliminary plans for implementing the project. Identify project sponsor(s) and examine stakeholder acceptance. Describe the project team, including their roles, responsibilities, and experience.

The Western Nebraska Health Information Exchange is truly a collaborative effort of the major healthcare providers in the Panhandle. The collaboration reflects the widely-endorsed concept of health information technology collaboration that includes government, business, academia, health care organizations, clinicians, and patients. Partners who have developed the Exchange have been working together since 2004. During that time a strong vision has emerged, much capacity-building has been delivered, documentation of participating organizations' technology conducted, new infrastructures and internal systems implemented, phasing and financing plans developed, and policies and procedures drafted. The operating body, the Western Nebraska Health Information Exchange is an LLC organized under Nebraska State law. The Rural Nebraska Healthcare Project is its "parent" organization. A seven-member board is responsible for overseeing the planning and implementation of the Exchange. The Exchange managers are:

Lisa Bewley, President - Regional West Medical Center (CIO)
Kim Engel - Panhandle Public Health District (Executive Director)
Danielle Gearhart - Memorial Health Center (CEO)
Dan Griess - Box Butte General Hospital (CEO)
David Griffiths - Regional West Medical Center (CFO)
Jeff Tracy, Vice President - Panhandle Community Services Health Clinic (Director)
Sharyn Wohlers, Secretary-Treasurer - Panhandle Mental Health Center (Regional Administrator)

Kim Woods is the Project Manager to the Western Nebraska Health Information Exchange. Her background is as a Registered Nurse and previous CEO/President of Kimball Health Services for 6 years. During her tenure at Kimball Health Services, the Rural Health Clinic successfully implemented a clinic-wide electronic health records system and designed and constructed a new main hospital. She is immediate past President of the Panhandle Public Health District and was a member of the Nebraska Health Information Initiative Governance Committee. She has served as a voting member of the Rural Nebraska Healthcare Network, the Nebraska Critical Access Hospital Steering Committee, District 3 Hospital Chair for the Nebraska Hospital Association, High Plains Rural Network representative for western Nebraska, Steering Committee member for the AHRQ Planning Grant, and is currently serving on the Nebraska Center for Nursing Excellence Board. In her consulting practice, she has also facilitated emergency preparedness planning for hospital readiness templates, and dispatch radio installations and Medical Reserve Corp development. Ms. Woods is responsible for the overall development and implementation of the Exchange will serve as the primary point of contact for the Panhandle Public Health District for this grant's progress.

Additional advisory committees have been, or are being, chartered to provide recommendations to the Exchange. These advisory committees include:

- **Information Technology**– for lead Information Technology specialists from each partnering organization.
- **Partnering Organization**– for all organizations who are a subscribing/contributing member of the Exchange.
- **Clinical**– for providers who have authorized access to the Exchange data.
- **Privacy and Security**– for health records managers in participating organizations.
- **Administrative Transactions**– for business office representatives who are using the Exchange's revenue cycle management product.

The project is sponsored by numerous partners, including:

Panhandle Community Services Health Center is a program of Panhandle Community Services, a non-profit community based organization which has, since 1965, served low income, underserved, and disadvantaged individuals in Nebraska's westernmost counties and surrounding area. The Panhandle Community Services Health Center has been a Federally Qualified Health Center since 1993. The Center provides primary medical care, dental care, migrant health care, behavioral health, and Health Disparities Collaborative services (diabetes, cardiovascular and depression) to its target population. Additional services provided at the Center include radiology, laboratory, immunization, reproductive health, HIV/HEP C testing and counseling, medication assistance and a 340B program via a contracted pharmacy arrangement, medically handicapped program, nutritional counseling/education, and diabetes education. Supporting programs within the Center include WIC, Minority Health Program, and Ryan White Part C Program. The Center offers all of its services to all individuals in the eleven counties of the Panhandle, and its migrant health care services to the eight counties in southwest Nebraska. **Jeff Tracy** has

been Director of the Center since 2005. Prior to taking the position of Director, Jeff was the coordinator for the Ryan White Title III program in western Nebraska. Jeff was previously with the Center for Conflict Resolution, where he worked as a mediator and facilitator. Jeff has been an active member of the Exchange planning process and currently serves as Vice President on the Exchange LLC.

The **Panhandle Public Health District** was created in 2002. Its creation was a direct result of regional community planning that identified the lack of coordinated public health services. The Health District was formed through inter-local agreements of county governments and is governed by one Commissioner and one community representative from each member county and a physician and a dentist. In 2001, a comprehensive public health assessment and plan based on Healthy People 2010 was developed. To maximize limited resources and assure locally available services, the Health District does not itself provide direct services but rather directs its resources to existing providers to fulfill the public health function. **Kim Engel**, Director, Panhandle Public Health District will: identify specific requirements for Healthy People 2010 and public health surveillance that will be achieved by Regional Health Records sharing; ensure linkages with data needs and systems identified through regional emergency preparedness plans; maintain direct communication with local governments; ensure linkages with direct services and their participation in the planning process; and assist in identifying duplicative software systems being required of service providers by state and federal funders and programs. Under Ms. Engel's leadership, Nebraska Information Technology grant funds will be directed to the activities of the Exchange to support its goals. She will serve the prime fiduciary, management, and reporting functions for all expenditures, reporting, and other grant-related activities. Engel has served as Public Health Director for the past 5 years and prior to that was Chief Operations Officer at Chadron Community Hospital She has 15 years of project and grant management. She is the current President of the Panhandle Partnership for Health and Human Services and the President Elect of the Nebraska Rural Health Association.

Region I Behavior Health and Substance Abuse has been actively participating in the planning process. **Dr. Pamela Richardson**, Clinical Director of the Panhandle Mental Health Center, has participated throughout the planning process, including playing central roles on the Clinical Team and Selection Team. Dr. Richardson brings professional experience with implementing and promoting electronic clinical health information systems in her former position at a VA hospital in Arizona.

The **Rural Nebraska Healthcare Network** comprises all eight Critical Access Hospitals, the System hospital, and their related services. The Network plans and implements improvements to the systems of care, develops and provides training opportunities, plans for trauma and emergency preparedness, and addresses state policy issues and impacts. In recognition of its innovative work, the Network has been awarded the National Rural Health Association's 2005 Outstanding Organization of the Year award. The Network has been incorporated for over ten years. Its members are:

- Box Butte General Hospital, Alliance
- Chadron Community Hospital, Chadron
- Garden County Health Services, Oshkosh
- Gordon Memorial Hospital, Gordon
- Kimball Health Services, Kimball
- Memorial Health Center, Sidney
- Morrill County Community Hospital, Bridgeport
- Perkins County Health Services, Grant
- Regional West Medical Center, Scottsbluff

Boni Carrell, Executive Director of the Rural Nebraska Healthcare Network, has a Bachelors Degree in Nursing and is a Paramedic. She has 25 years experience in clinical nursing and 10 years experience in out of hospital care with a focus on emergency and

flight nursing. In addition Boni has 9 years of experience in project and grant management. Her project/grant management experience includes Health Resources and Services Administration state level cooperative agreements for Emergency Medical Services for Children, Trauma Systems Improvement, and Hospital Bioterrorism Preparedness. Her combined clinical care and project/grant management experience has provided her with a unique understanding and vision for Regional Systems of care. The Rural Nebraska Healthcare Network contracts with consultants to manage its work. Its consultants for this project include:

The **University of Nebraska Public Policy Center** has demonstrated expertise in achieving objectives that are complex and require the active participation of numerous groups with a diversity of backgrounds and interests. Center faculty have been principal investigators on federally-funded projects with national implications (e.g., US HHS projects creating new infrastructures for statewide behavioral health systems change; FEMA projects in hospital-preparedness and critical incidence stress management; a U.S. Dept. of Commerce project that has created nationally-adopted database interoperability standards). Public Policy Center staff have extensive experience working with the Panhandle partners for: systems design and change; capacity-building; and evaluation. The Center provides expertise in evaluation, project vision and development, linkages to state and national efforts, and administrative processes. **Nancy Shank**, Associate Director of the University of Nebraska Public Policy Center is an experienced grants and program administrator. She has designed and managed projects throughout Nebraska that require participation from disparate public and private organizations and individuals to seek common solutions, and has long experience in implementing projects that intersect health and human services with information technology. Nancy's work has focused on information technology and health and human services delivery systems. She is currently the principal investigator for a three-year (2005-08) Transforming Healthcare Quality Through Information Technology-Implementation Grant through the Agency for Healthcare Research and Quality and had previously served as an AHRQ THQTIT Planning Grant (2004-05) principal investigator. That AHRQ grant was awarded to the Western Nebraska Health Information Exchange. She also participates as a researcher on a U.S. HHS Health Resources and Services Administration Rural Health Network Development grant (2006-09) that supports the expansion of the health information exchange. Ms. Shank was previously the principal investigator for a 3-year U.S. Department of Commerce Technologies Opportunities Program grant (2003-06) that brought partners together across the U.S. to develop the technological link between propriety software and XML standards to enable interoperable information and referral resource sharing. She serves on the Nebraska Information Technology Commission eHealth Council, the National Human Services Data Consortium Board, and is an active member of the Alliance of Information and Referral Services XML Technology Subcommittee and the Human Services XML Workgroup. She has also been active with the Nebraska Health Information Initiative and the Nebraska Health Information Security and Privacy Committee.

Steven S. Lazarus, PhD, FHIMSS, is President and Co-Founder of Boundary Information Group, and former Chair of the Workgroup for Electronic Data Interchange (WEDI) Board of Directors. Lazarus collaborates with health care information and technology consulting firms to address the information needs of the health care community. He received the National HIPAA Summit (2002) Extraordinary Achievement Award for his contribution to the healthcare community by facilitating the development and implementation of the HIPAA law and regulations. Lazarus co-authored the books, Handbook for HIPAA Security Implementation for the AMA Press (2003) and Complete Guide to HIPAA Security Risk Analysis for Brownstone Publishing (2004). Lazarus is providing advice and professional evaluation of approaches, assists partners and the group as a whole identify opportunities for shared resource, provides trainings, assists in

creating the vendor evaluation and selection process, and provides consultation during implementation phases.

Paul Smith, partner Davis Wright Tremaine, represents hospitals, hospital associations, medical groups, and a variety of provider network organizations in corporate formation and governance, joint ventures, financing, reimbursement, and regulation. He is co-chair of the firm's e-Health/HIPAA task force, which advises clients on the requirements of the Health Insurance Portability and Accountability Act of 1996. Mr. Smith has authored several articles on HIPAA, and is co-author of the California Healthcare Association's HIPAA Compliance Manual. Smith is providing legal expertise in creating charters, users' agreements, technology agreements, policies and procedures, and an appropriate legal entity.

The U.S. Department of Health and Human Services **Agency for Healthcare Research and Quality** has made two grants for the planning and implementation of the Exchange:

> Transforming Healthcare Quality Through Health Information Technology Implementation Grant
> Health Information Exchange: A Frontier Model
> #1 UC1 HS 16143-01 (2005-2008)
>
> Transforming Healthcare Quality Through Health Information Technology Planning Grant
> Regional Health Records for Frontier Communities
> #1 P20 HS015365-01 (2004-2005)

The U.S. **Health Resources and Services Administration** has awarded a grant for implementation:

> Rural Health Network Development Program
> Western Nebraska Health Information Exchange Network
> #D06RH06884-01-00 (2006-2009)

9. List the major milestones and/or deliverables and provide a timeline for completing each.

	2008		2009		
Major Milestones	**July-September**	**October-December**	**January-March**	**April-June**	**2009-10**
Select Vendor	X				
Finalize Fee Structure and Initial Partners	X				
Execute Organizational User Agreements	X				
Roll Out Public Relations Campaign	X	X			
Final Documentation of System Interfaces		X			
Negotiate and Finalize Vendor Contract		X			
Implement Exchange					
Phase One			X	X	
Regional West Medical Center					
Box Butte General Hospital					
Memorial Health Center					
Kimball Health Services Clinic					
Panhandle Mental Health Center					
Physician practice (2)					
Pharmacies (3)					

PBM (2)		
Commercial medical labs (2)		
Morrill County Community Hospital Lab		
Phase Two	**X**	**X**
Chadron Community Hospital		
Gordon Memorial Hospital		
Kimball Health Services		
Perkins County Health Services		
Morrill County Community Hospital		
Panhandle Community Services Clinic		
Garden County Health Services		
Pharmacies (5)		
PBM (1)		
Physician practice (2)		
Phase Three		**X**
Panhandle Mental Health Center		
Pharmacies (10)		
PBM (1)		
Great Plains Regional Medical Center		
Poudre Valley Consultants		
Physician practice		
Other partners as they join the partnership		

10. Describe the training and staff development requirements.

The Western Nebraska Health Information Exchange has already engaged in capacity-building for over one-hundred persons involved in the effort. Over the last several years training and workshops have focused on:

- Overall vision and components: CPEHR, CPHIT
- Workflow Change and Processes: Change Management, Facilitation, Project Management
- EMRs: Vendor Selection
- Computer Skills: Windows, Excel, User-training
- HIE: Portal Training
- Local Consultations: Migration Path Planning And Project Planning

A number of our partners are experienced in implementing disruptive technologies (fundamentally change workflow practices and policies) into their organizations. Based on their experiences and past region wide technology implementation (e.g., Hospital Performance Improvement Network; Regional West Medical Center Portal; ServicePoint for homeless management information), we will deliver training to users of the Exchange through:

- Train-the-trainers will ensure that experienced trainers are available throughout the Panhandle to provide one-on-one and group training exercises;
- Super-Users at facilities will be identified so there is at least one on-site individual at each organization to provide more unstructured and informal assistance to users;
- On-line Documentation/Manuals will be required of vendors so that users may access information for self-learning and trouble-shooting;
- Initial Group Trainings will be conducted for each facility as they implement the system;
- Help Desk/Support will be provided by the vendor for telephone support of users;

- Administrator Training will be provided by the vendor for the high-level coordination and administration performed by the Exchange.

11. Describe the ongoing support requirements.

There are a number of types of support that will be required for project implementation:

Initial implementation as the system is phased for the first set of partner organizations will require both troubleshooting the overall implementation, as well as equipping the first users of the system. As described above this will be accomplished through onsite training of users, with backup support including: facility Super-Users, documentation, and telephone help desk.

New partners will continue to be phased in during Phases Two and Three. Although, by this time the overall implementation will likely be quite solid, local support must continue to be in-depth to ensure adoption of the technology. As with Phase One users, on-site training will be conducted, complemented by facility Super-Users, documentation, and telephone help desk.

Staff turnover/role changes will dictate that training for the system be on-going. Trainings will be conducted periodically by the trained trainers to ensure that only those with training have access to the system and all those who need access to the system are trained.

Vendor versions will require training. The vendor will ensure all documentation is made available and will provide training of our trained trainers, as necessary. Those trainers will work with SuperUsers and all partners to ensure users are equipped to use new versions of the product.

Section 7: Risk Assessment (10 Points)

12. Describe possible barriers and risks related to the project and the relative importance of each.

There are three major barriers to the implementation of this project:

1. **Funding.** The most significant challenge for the Western Nebraska Health Information Exchange is the same challenge faced by other exchanges across the United States: that is, the capital costs to implement the system. From their beginning, health information exchanges have struggled with the misalignment of incentives to implement systems. Most savings achieved through exchanges benefit payers (i.e., insurers and individuals), yet costs are borne by providers.

2. **Lack of adoption by clinicians.** Providers' adoption of the Exchange is the key to success or failure. The history of health information technology is littered with good ideas that providers did not choose to adopt. Without provider use, the Exchange will fall short of its promise.

3. **Reluctance of patients.** There are conflicting ideas about whether patients are receptive to having their information included in health information exchanges. On one hand, patients want their doctors to have access to information about them. On the other hand, patients are concerned about security and privacy of information. In general, there remains confusion, misunderstandings, high-profile breeches, and poor practices that have all contributed to an unclear picture of what health information exchange are and can do.

13. Identify strategies which have been developed to minimize risks.

1. **Funding.** We have developed a business plan for the Exchange that is self-supporting in operating costs by Year 2 and that has a very positive operating cash position at the end of 5 years. The Exchange, however, is currently seeking assistance to offset some of the capital implementation costs and "gap funding" of those costs and consultant expenditures needed to implement the system.

2. **Lack of adoption by clinicians.** We believe that the Exchange is in an excellent position to ensure acceptance of the technology:
    a. *Pre-existing Use of IT Systems Within Organizations* – we have partnering organizations that have very effectively implemented related information technologies (e.g., EMRs). Within these organizations, there are physician champions who understand and actively promote why health information exchange will benefit patients and physicians.
    b. *Piloting Information Sharing* – over the past year, Regional West Medical Center has credentialed and provided access to providers throughout the Panhandle. This first step in information sharing has provided both the workflow practice of using electronic systems to access information from another Panhandle organization and also established relationships and trust upon which the Exchange will build.
    c. *Superior Products and Demonstrations* – we have demonstrated each vendor finalist product at hospitals throughout the Panhandle in order to maximize physician exposure to the products and capabilities. We have received enthusiastic reviews from many of the physicians who attended the demonstrations. Providers have also participated in the site visits to active installations of both our vendor finalists' products.
    d. *Hospital Leadership* – from the beginning of this Exchange project, the hospital CEOs have set the vision for the importance of sharing information. Physicians in many of the smaller communities are employees of the local hospitals. Thus, CEO support is beneficial.
    e. *Organizational Support* – even interested potential users will lose interest if they cannot figure out how get the information they want when they want it. We have two finalist vendors with extremely good products that are able to perform the functions needed. However, even after training, users may forget how to access information, or forget that it is even available. Super Users within each facility will be available to discreetly assist physicians in using the product.
    f. *Seminars and Trainings* – Dr. William Braithwaite, one of the nationally-known leaders in health information exchange, led a physician-only seminar in Scottsbluff to explore issues, concerns, and benefits. Other Panhandle trainings, previously mentioned, have also been open to and attended by providers.
    g. *Promotional Materials* – we have already developed physician-focused information that describes how the Exchange will assist providers. This information was well received and featured a positive quote about the Exchange by a respected Panhandle physician.

3. **Reluctance of patients.** Based on the experience of other exchanges, that have kept the concerns of their patients to the forefront, we believe we will have only a very, very small percentage of patients who choose to opt-out of the Exchange. We are working to create information materials that providers may use to inform their patients about the Exchange and the security and privacy of their information in the Exchange.

Section 8: Financial Analysis and Budget (20 Points)

14. Financial Information

	Estimated Prior Expended	Request for FY2007-08 (Year 1)	Request for FY2008-09 (Year 2)	Total
1. Personnel Costs				$ -
2.1 Design				$ -
2.2 Programming				$ -
2.3 Project Management				$ -
2.4 Other				$ -
3. Supplies and Materials				$ -
4. Telecommunications				$ -
5. Training				$ -
6. Travel				$ -
7. Other Operating Costs				$ -
8.1 Hardware				$ -
8.2 Software				$ -
8.3 Network				$ -
8.4 Other		$ 100,000.00		$ 100,000.00
TOTAL COSTS	$ -	$ 100,000.00	$ -	$ 100,000.00
General Funds				$ -
Cash Funds				$ -
Federal Funds				$ -
Revolving Funds				$ -
Other Funds				$ -
TOTAL FUNDS	$ -	$ -	$ -	$ -

Financial and budget information can be provided in either of the following ways:

(1) If the information is available in some other format, either cut and paste the information into this document or transmit the information with this form; or

(2) Provide the information by completing the spreadsheet provided below.

Instructions: Double click on the Microsoft Excel icon below. An imbedded Excel spreadsheet will be launched. Input the appropriate financial information. Close the spreadsheet. The information you entered will automatically be saved with this document. If you want to review or revise the financial information, repeat the process just described.

15. Provide a detailed description of the budget items listed above. Include:
    - An itemized list of hardware and software.
    - If new FTE positions are included in the request, please provide a breakdown by position, including separate totals for salary and fringe benefits.
    - Provide any on-going operation and replacement costs not included above, including funding source if known.
    - Provide a breakdown of all non-state funding sources and funds provided per source.

The Western Nebraska Health Information Exchange requests $100,000 to supplement implementation resources. The funds will be combined with other revenues to offset implementation of the Exchange. The Exchange will select one of the two vendor finalists to implement the system. Both vendors have products already in use in other locations and thus will not require funding for product development. Vendor fees will cover implementing the interfaces to partner organization systems (many of which either selected vendor will have experience interfacing with), implementing the global (community) patient index and record locator index systems and infrastructure, licensing the client systems, populating and testing the system, providing train-the-trainer and administrator training, and beginning to troubleshoot and assist users via a telephone help line. Within the construct of vendor-delivered service, there is no additional funding requested for hardware or software. No FTEs are requested as funding from other sources provides the project management, IT services, evaluation, legal, and other needed services. The on-going operation and replacement costs are budgeted as a part of on-going operational costs and will be covered by subscription and usage fees paid by participating organizations.

Other funding to support the Exchange over the next five years is projected to include:

- $2,000,000 subscription and usage fees
- $230,000 HRSA grant
- $350,000 AHRQ grant
- $1,475,000 revenue cycle management services
- $200,000 contributions
- $ 50,000 BIG partnership

16. Describe how any ongoing costs will be sustained after the grant funds are expended.

After Year Two of implementation, the Exchange's business plan projects positive cash flow that will sustain the operations into the future. We have modeled our Exchange after Cincinnati's Exchange that emphasizes delivering products that are self-sustaining and address the needs of users.

Nebraska Information Technology Commission

Community Technology Fund

Standard Application Form

For projects which meet all of the following characteristics:

- Moderate to high budget (over $40,000)
- Moderately difficult to complex implementation of technology
- Moderate to high risk
- Type of projects: Projects involving health IT

Project Title:
Public Input on Sharing Electronic Health Records: The Views of Nebraskans

Submitting Entity:
Board of Regents, University of Nebraska on behalf of the University of Nebraska Public Policy Center

Grant Amount Requested:
$39,777

Project Contact Information (Name, address, telephone, fax, and e-mail address):
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Executive Summary

The overall goal of the proposed project is to obtain the perspectives of Nebraskans regarding electronic data sharing. The funds provided by the grant will support our activities to document Nebraskans' baseline knowledge of and attitudes towards sharing electronic health records; determine whether Nebraskans' knowledge and attitudes change as they are educated about the issues as part of the project; and analyze the policy opportunities and barriers related to sharing electronic health records from the public's perspectives, including identifying whether there are consensus positions, whether there are areas of divisiveness, and so on. The project will assess Nebraskans' general thinking as well as Nebraskan's more nuanced positions on sharing electronic health records using two public input methods, 1) traditional public opinion polls/surveys, and 2) deliberative discussions. Participants in the project will be randomly selected residents from three Nebraska communities, Kearney, Lincoln, and Omaha. We expect to find the following outcomes: Nebraskans will not initially be favorable about sharing electronic health records, as documented by the initial surveys we administer, because of fears related to security and privacy. However, we expect the participants will become more favorable once they learn about the benefits of sharing electronic health records as part of the briefing materials and the deliberative discussions in which they participate. We also expect the participants to point out concerns not previously emphasized as problems by others but also to identify ways to address the problems.

Goals, Objectives, and Projected Outcomes (15 points)

1. Describe the project, including:
   - Specific goals and objectives;
   - Expected beneficiaries of the project; and
   - Expected outcomes.

Consistent with bipartisan policy initiatives meant to improve health care and supported by the past two Presidential administrations and many in Congress, states are developing rules and practices that will allow sharing of electronic health data, specifically patients' personal health information. However, the idea that individuals' electronic health records will be shared raises in the minds of many in the public privacy and other concerns.[1] There is concern by some that public opposition could alter, delay, or even thwart sharing altogether. Thus, it will be helpful to understand the public's views on data sharing.[2] Understanding the public's views can help in fashioning effective policies and practices that are compatible with social beliefs and expectations. Understanding the public's view also can provide guidance about the need to educate the public about pertinent issues if it is found there are general misunderstandings that can be altered via appropriate information.

Public perceptions about policy issues like sharing electronic health records are especially critical to understand. Many public policies debates are influenced, if not ultimately determined, by the views of the public. Given that all members of the public are – or will be – health care consumers, the public's "voice" (or voices) will weigh in on the electronic data sharing. Indeed, given there will be a new Administration in January 2009, it is unclear whether the federal leadership will remain as it has been or change.[3] It is possible that the public policy debate about electronic record sharing will inevitably turn, to some degree, on the perspectives of the public and the extent to which they are supportive or not of electronic health data sharing. There is some information about the public's views, and the information we have seems to indicate Americans are concerned about sharing electronic health records. For example, in a telephone poll conducted in February 2005, it was found that the American public is about equally split between feeling that the benefits of electronic health records outweigh the risks (48% believe benefits outweigh risks, 47% believe risks outweigh benefits).[4] A study in the UK also found concerns among patients surveyed in their doctor's office.[5]

As they weigh the risks and benefits to electronic health records, data sharing, privacy and security issues, and the rules and options that might regulate electronic health records and data sharing, the public will have to consider complex arguments. Little more than public polls or convenience sample studies have provided insight into how the public reflexively reacts to these

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[1] *E.g.*, Shreema Mehta. (2006, July 25). Electronic patient data system raises privacy concerns. *The New Standard*. Available on –line at http://newstandardnews.net/content/index.cfm/items/3456; Alan F. Westin. (2005, February). Public attitudes toward electronic health records. *Privacy and American Business*, 12(2), pp. 1-5.

[2] *E.g.*, Remarks of Dan Rode, vice president of policy and government relations, American Health Information Management Association, at the 2003 meeting of the National Health Information Infrastructure, US Health & Human Services, Privacy Track, Slide 14. Available at http://aspe.hhs.gov/sp/NHII/Conference03/PrivacyAB.pdf.

[3] As of this writing, there is a chance that the Senate will consider an electronic health record bill, S. 1693 ("Wired for Health Care Quality Act"). As an example of the policy flux of the policy initiative, the American Psychological Association, a potent professional organization with effective lobbying influence, has encouraged its members to oppose the bill, arguing the proposed "legislation lacks adequate privacy and security provisions that are necessary to protect the confidentiality of patient records."

[4] Westin, note 1.

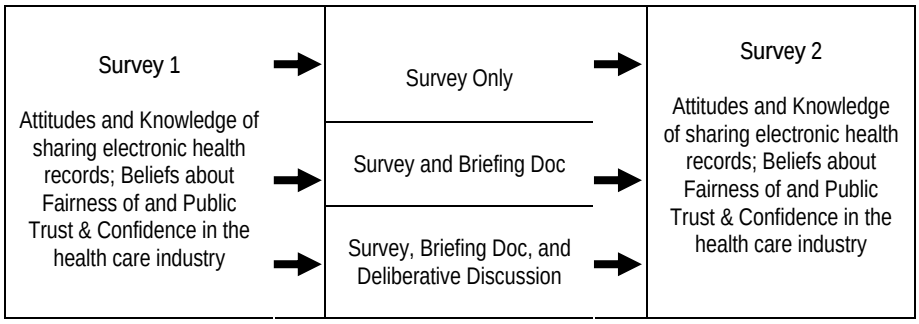
[5] John Powell, Richard Fitton, & Caroline Fitton. (2006). Sharing electronic health records: The patient view. *Informatics in Primary Care, 14*, 55-57.

issues,[6] and virtually nothing is known about how an *informed public* feels about sharing electronic health records.[7]

What are the optimal methods to ascertain the public's thinking on this type of matter? Usually, the perspectives of the public are obtained by conducting opinion polls. Polls are useful ways to gauge the public's perspectives on policy matters, but it has been increasingly recognized that public opinion polls can be usefully supplemented by other public input techniques that allow for more in-depth and nuanced consideration of complex policy issues. Specifically, it has been demonstrated the deliberative discussion technique advocated by Stanford University Professor James Fishkin[8] has shown itself especially well-suited to allow nuanced considerations of complex health care issues such as vaccine prioritization preferences in the event of a pandemic flu outbreak.[9]

The overall goal of the proposed project is to obtain the perspectives of Nebraskans regarding electronic data sharing. As shown in Figure 1, we propose to assess Nebraskans' general thinking as well the public's more nuanced positions on sharing electronic health records. We will use two methods – 1) traditional public opinion polls/surveys, and 2) deliberative discussions – and collect data in three Nebraska communities, Kearney, Lincoln, and Omaha. These three communities represent jurisdictions of different types, sizes, and locations, and ensure that a diversity of public input is obtained while managing project costs.

Figure 1. *Assessing Public Views of Sharing Electronic Health Records in Kearney, Lincoln, & Omaha*



The two public input techniques, surveying a sample of Nebraskans (with some of those surveyed receiving briefing materials after the first survey) and surveying a sample of Nebraskans as well as having them participate in deliberative discussions, will provide both quantitative and qualitative data. (See "Methods" section, below, for more details.) We will

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[6] *See, e.g.*, Powell et al., note 5; Westin, note 1.

[7] For an example of a project that attempted to get more than simple survey reactions from the public, *see* Jane Horowitz. (n.d.). Consumer perspectives: Privacy and sharing data. Louisiana focus groups. National Alliance for Health Information Technology. Available at www.nmis.info/nmis//download?filename=53&savename=Jane%20Herwehe%20NMIS%20Presentation%20091307.pdf. *See also* eHealth Care Quality and Patient Safety Board, Consumer Interests Workgroup. (2006, August 16). Working document – not final. Available at http://ehealthboard.dhfs.wisconsin.gov/workgroups/consumer/3-timeline8-16-2006.pdf (plans for obtaining public input through statewide listening sessions in Wisconsin).

[8] *See* http://cdd.stanford.edu/. *See generally*, James F. Fishkin, (1991). Democracy and deliberation. New Haven: Yale University Press.

[9] Report of the Public Engagement Pilot Project on Pandemic Influenza. (2005, December). *Citizen voices on pandemic flu choices.* Available at http://ppc.nebraska.edu/publications/documents/PEPPPI_FINALREPORT_DEC_2005.pdf. This project, coordinated by the Keystone Center and evaluated by the Public Policy Center, is discussed more below.

- Administer a **survey** to measure knowledge of and attitudes towards electronic health records;
- Convene **deliberative discussions** about electronic data sharing during which Nebraskans will have an opportunity to share their concerns and perspectives with each other;
- Conduct an **issues analysis** identifying specific policy areas of concern to Nebraskans about sharing electronic health records that warrant further attention by policymakers and health care officials.

Methods: A random sample of 450 residents in Kearney, Lincoln, and Omaha (150 for each community) will be asked to complete an online **survey** (or, if preferred, a hard copy of the survey will be mailed with a self-addressed, postage-paid envelope for survey return). Based on previous surveys, we expect a 30% response rate, though our use of the Dillman[10] survey response technique may increase the response rate somewhat higher. The survey will include questions that will assess:

- Knowledge levels of the public about matters related to electronic data sharing.
- Attitudes related to electronic record sharing, concerns about confidentiality issues, and so on.
- Beliefs about the fairness of and trust/confidence in the health care industry that are associated with attitudes towards sharing electronic health records.

As part of the survey, respondents will be solicited, on a random basis, to participate in a **deliberative discussion** on the issue of electronic health records. The discussion will take the public input process a step further than the survey by providing the discussion participants with a *briefing document* before bringing them together to deliberate about electronic health records sharing. The briefing document will provide user friendly information that fairly and neutrally presents the pros and cons of record sharing. (We routinely obtain input from funders and experts in preparing our briefing document, and provide funders and experts with an opportunity to see it before disseminating it to ensure accuracy and quality of the information.)

Twenty to 25 residents in each community will participate in the deliberative discussions. They will be held on a Saturday morning to allow more people to participate than if they were held at other times during the week.

To control for the influence of the briefing document versus the discussion itself, we will send the same briefing document to half those who respond to the survey but who are not invited to participate in the deliberative discussion.

For all those who respond to the first survey, we will resurvey them again to determine changes in their knowledge of and attitudes towards sharing electronic health records. We also will again assess beliefs about fairness of and trust/confidence in the health industry. The resurvey for the deliberative participants will be at the discussion session; for the others, the second survey request will be made in the week preceding the deliberative discussion (to control for the timing of the information we collect).

The specific objectives of our proposed public input initiative are to:

- Document Nebraskans' baseline knowledge of and attitudes towards sharing electronic health records.
    - Determine whether Nebraskans' knowledge and attitudes change over time, as they learn more about the issues.
- Document Nebraskans' baseline beliefs about the health care industry in the state;

[10] Don A. Dillman. (2007). *Mail and internet surveys: The tailored design method*. Hoboken, NJ: Wiley.

    - Determine whether Nebraskans' beliefs change over time, as they learn more about the issues.
- Determine whether knowledge interacts with attitudes and beliefs, and, if so, the nature of the interaction(s).
- Analyze the policy opportunities and barriers related to sharing electronic health records from the public's perspectives, including identifying whether there are consensus positions, whether there are areas of divisiveness, and so on.
    - Specify areas of concern, with a focus whether the areas of concern are addressable by policymakers and/or health care industry officials.

The **outcomes** expected from the proposed project are to show that Nebraskans are not initially favorable about sharing electronic health records. Their reluctance, we expect, will mirror the hesitations of other Americans: Nebraskans will indicate concerns related to security and privacy. However, we also expect the participants will become more favorable as they learn about the benefits of sharing electronic health records from the briefing materials. Although the briefing materials will present the pros and the cons of sharing electronic health records, we believe the benefits associated with efficiencies, increases in patient safety, public health surveillance opportunities, and so on provided by sharing electronic health records will outweigh the downsides of sharing electronic health records. Related, we expect the participants to point out concerns not previously identified as major problems. This has been our experience with the deliberative discussions we have convened in the past, a finding similar to others who use the deliberative discussion technique to obtain public input on policy issues. For example, we may learn whether Nebraskans prefer an opt-in versus an opt-out policy (should the policy be to obtain explicit consent to share electronic records or should patients have to opt out of sharing?). We also expect the participants will emphasize solutions that will address their concerns related to sharing electronic health records.

The **primary product** from the project will be a participation report that synthesizes the results from the public's participation and an **issues analysis** that integrates policy assessments. The issues analysis will become part of the Final Report. The Final Report will be issued to the funders, and made available to policymakers and the public via the Public Policy Center's website. The **beneficiaries** of the project will be those with interests in electronic health records: The public, health care and information technology professionals, and policymakers. They will obtain a nuanced understanding of Nebraskans' opinions about sharing of electronic health records that will enhance their understanding of the public's perceptions and concerns, and identify strategies for further education about these issues.

2. Describe the measurement and assessment methods that will verify that the project outcomes have been achieved.

As discussed above, pre-activity and post-activity surveys will document changes in public opinion, knowledge, and beliefs relevant to the sharing of electronic health records and data sharing, and public trust and confidence in the medical profession and government. We will also audio-record and transcribe portions of the discussion sessions to obtain more nuanced qualitative information not amenable to collection via survey.

Project Justification / Business Case (25 points)

3. Provide the project justification in terms of tangible benefits (i.e. economic return on investment) and/or intangible benefits (e.g. additional services for customers).

Although national and state medical professionals and policymakers have determined the benefits of electronic health records and data sharing outweigh the disadvantages on medical, economic, and other grounds, the public continues to express reservations. (It is the case that

there continue to be those in the medical and policy communities who also express grave reservations about electronic health records and data sharing, but these audiences are not the targets of this project.)

The public's objections tend to focus on privacy issues. The problem for jurisdictions like Nebraska is that comparatively few people can drive the policy debate. Thus, understanding the concerns of Nebraskans will allow the medical and policy communities to better prepare themselves should there be a negative public response to data sharing of electronic health records.

The benefits of engaging the public in policy debates are not simply tactical, however. It has been shown in a variety of contexts that governmental and institutional promotion of the democratic process, involving the public in policy decisionmaking, enhances the public's trust and confidence in the sponsoring institutions. In addition, people tend to respond more favorably when they think that the processes used in decisionmaking are fair. One mark of fairness is providing people with a chance to express their reservations as well as their support of proposed policies. Interestingly, it has been repeatedly shown that people are more satisfied about outcomes or decisions they do not favor when they have been actively involved in the decisionmaking process.

Finally, the public's involvement in the policy decisionmaking process presents an opportunity to include views and ideas that may not have been considered or weighted as highly. This can result in useful information for policymakers and industry representatives.

A germane example was including the public in the discussion about vaccine prioritization in the event of a pandemic. It is feared the next pandemic (pandemics occur about once every 30 years) could cause as many as two million deaths in the U.S. because vaccine production takes at least 6 months. The amount of vaccine produced will be less than needed – perhaps only enough to vaccinate 1 in 100 persons each month. Which groups should receive priority for limited supplies of influenza vaccine? The U.S. Centers for Disease Control and Prevention (CDC) decided policy development should take into account values of citizens and stakeholders as well as input from experts (expert decision making is the typical approach to planning for pandemics as well as other critical incidents). Consultation with the public took place in four cities in four different states across the country. The CDC's Public Engagement Pilot Project on Pandemic Influenza (http://ppc.nebraska.edu/program_areas/documents/PEPPPI.htm) identified public priorities that supplemented the priorities determined by health experts and governmental officials. The public process sponsored by the CDC, it should be noted, received an award from the International Association for Public Participation as the 2007 Core Values Award Winner.

4. Describe other solutions that were evaluated, including their strengths and weaknesses, and why they were rejected. Explain the implications of doing nothing and why this option is not acceptable.

Public input is not mandated for policy. However, it is becoming increasingly recognized by public officials and others that when the public's voice is solicited, it adds legitimacy to the policy making process. It helps shape policy, and it often creates the public's buy-in to the officials' policy preferences. To present a parochial example, in Lancaster County a bond issue to fund a new jail was defeated by a great margin. County officials were criticized for not consulting with the public beforehand. Is it possible that involving the public would have identified alternative ways of presenting the bond request so that the electorate would have been supportive? Might a public engagement process resulted in an educational opportunity that would have garnered support? What if, before the jail option was decided on by the County, the public had been actively involved in the consideration of what to do about overcrowding in existing penal facilities? Might the County be closer to a successful resolution of the issue than it currently is? Of course we don't know the answers. We do know the Mayor of Lincoln has been courting the public's input on the upcoming budget, and we know that the public reaction has been extremely positive, the press

has been positive, and the Mayor and his department heads have been pleased that they have engaged the public. Indeed, they indicate they have changed their positions based on some of the public input they have received.[11]

To do nothing opens the risk to a) not having the benefit of positive ideas the public might offer (for a relatively small amount of money – much less than if a consultant were to be hired!), and b) the public not being supportive of sharing electronic health records when simply consulting them would have been the difference between being supportive and rejecting health record sharing.

Technical Impact (20 Points)

6. Describe how the project enhances, changes or replaces present technology systems, or implements a new technology system. Describe the technical elements of the project, including hardware, software, and communications requirements. Describe the strengths and weaknesses of the proposed solution.

Some of the information requested for Technical Impact has been previously provided. We will provide additional information here.

The public participation effort is intended to shed light on Nebraskans' reactions to sharing electronic health records and indicate policy their preferences towards sharing. The proposed public input project is a one-time set of activities to be conducted to better understand the public's thoughts about electronic health records. It is nonetheless the case that the processes used in the proposed project will be useful for the NITC when it confronts policy questions in the future that benefit from the public's input. In that sense, the proposed project can be seen as a proof of concept, and once the benefits of the public input approaches proposed here are demonstrated to the NITC, these techniques can be used – either by the Commission itself or by a group hired by the Commission – whenever the need arises.

The strength of the model is its systematic approach to collecting public input data and perceptions. It also provides additional, baseline information that will be of use to the NITC in the future: The questions we ask will document the extent to which the public sees Nebraska's health industry as fair and the extent to which the public has trust/confidence in it. This baseline information will be useful as the Commission undertakes other efforts, and it arms the Commission with information that could be useful in other projects and to use when exploring other opportunities.

A major disadvantage is the cost outlay necessitated by the proposed approach. Because the Public Policy Center has random samples from Kearney, Lincoln, and Omaha to draw from in hand, it saves significant monies that otherwise would need to be expended. In addition, although we will have some of the public's participation in exploring issues related to sharing electronic health records, we cannot guarantee that other Nebraskans will go along with the positions taken by the participants in the proposed project. We expect to show the NITC that when the public deliberates, it results in the greatest knowledge status (compared to those who do not, regardless of whether they are primed by being surveyed or whether they are sent the educational briefing materials). This means that if we show what we expect to, the NITC will be put in the position of knowing it has to expend considerable time and effort to fully inform members of the public about complex health care policy issues. While this is useful to demonstrate, it is not likely feasible the Commission can take the time and expense to do this on a routine basis for all the complex policy issues with which it must deal.

[11] *E.g.*, Lincoln's city bus services to make changes. (2008, May 8). Available at http://journalstar.com/articles/2008/05/08/news/local/doc4823302e9d2c6621505750.txt.

7. Address the following issues with respect to the proposed technology:
    - Describe the reliability, security and scalability (future needs for growth or adaptation) of the technology.
    - Address conformity with applicable NITC technical standards and guidelines (available at http://www.nitc.state.ne.us/standards/) and generally accepted industry standards.
    - Address the compatibility with existing institutional and/or statewide infrastructure.

As discussed above, the public input "technology" is scalable but may be expensive to do so. It is, however, quite adaptable to new policy matters. Thus, once the processes and techniques for systematically obtaining public input, the Commission or others will be able to undertake such endeavors as frequently as they are warranted. Indeed, the Commission need not be limited to the face-to-face deliberative approach that will be used in this project. For example, consistent with the Commission's technological mission, online deliberations could be used, as they have been used elsewhere. Should the Commission decide to make deliberative discussions a routine way to obtain public input, the Commission might decide to set-up a system for using the internet for regular input. Such an approach would be compatible with the Commission's promotion of "E-Government Architecture" (Section 4) and the interest in Education, Training, and Awareness (see http://www.nitc.ne.gov/standards/).

Finally, for this proposal there are no security issues, nor is there an issue regarding compatibility with existing institutional and/or statewide infrastructure.

Section 6: Preliminary Plan for Implementation (10 Points)

8. Describe the preliminary plans for implementing the project. Identify project sponsor(s) and examine stakeholder acceptance. Describe the project team, including their roles, responsibilities, and experience.

The Public Policy Center is well-equipped to implement this assessment of public opinion and knowledge. Public participation is one of the Center's five strategic areas of research. Since 2004, the Center has convened eight deliberative discussions – primarily in partnership with NETV and PBS's McNeil/Lehrer Productions – in communities across Nebraska on topics ranging from public perceptions of genetically modified foods to K-12 public education in rural areas. Most recently, the Center coordinated the City of Lincoln's five-prong public participation initiative regarding budget priorities for 2008-09 that involved collecting a variety of input from Lincoln residents: 1) a telephone survey of 600+ randomly-selected sample of residents; 2) a deliberative discussion involving 51 residents; 3) a non-random sample survey, available online and in hard copy, that was taken by over 1,500 residents; 4) four town hall meetings (convened and coordinated by Leadership Lincoln); and, 5) a focus group discussion.

The Policy Center will identify a working group of representatives from the Nebraska Information Technology Commission, the healthcare industry, consumer advocates, and University of Nebraska academics to serve as project consultants. Development of our survey instruments and background educational document will be facilitated by active consultation with this working group.

The Policy center will utilize lists of randomly selected residents from a six county area around Kearney, Lincoln, and Omaha to recruit participants for our surveys and policy discussions.

Alan Tomkins is the co-PI for the project. He will be responsible for project visioning and will serve as the project's liaison with the working group described above. He has directed the University of Nebraska Public Policy Center for 10 years. Prior to being selected as the Center's founding director in 1998, Tomkins was a professor in the Law-Psychology Program at the University of Nebraska-Lincoln. From August 2005-July 2006, he was one of two inaugural

William J. Clinton Distinguished Fellows at the University of Arkansas School of Public Service. He is a Fellow of the American-Psychology Law Society (Division 41 of the American Psychological Association) and the Society for the Psychological Study of Social Issues (Division 9 of the American Psychological Association). Tomkins serves Co-Editor of *Court Review: The Journal of the American Judges Association*, working with Editor Judge Steve Leben of the Kansas Court of Appeals. Tomkins is first non-judge to serve as an editor of *Court Review*. His primary research interests include public participation and its implications for democracy in policymaking, and public trust and confidence in government and other institutions.

Tarik Abdel-Monem is the co-PI for the project. He will be responsible for daily management of the project and specific project tasks including development of survey materials and background documents, recruitment of participants, and management of deliberative discussions. Abdel-Monem has coordinated or co-coordinated eight deliberative discussions in Nebraska on a wide range of topics, including foreign policy (2004), globalization (2004), future community development of Lincoln (2005), consumption and labeling of genetically modified foods (2005), K-12 education in Nebraska (2005), water management in Nebraska (2006), immigration issues (2007), and outcomes-based budgeting for the City of Lincoln (2008). These deliberative forums have been based on the Deliberative Polling format developed by Professor James Fishkin (*see* note 8). Abdel-Monem's responsibilities have included managing recruitment of participants, training project staff, developing educational materials and survey tools, administering deliberative activities, coordinating with community and academic partners, and serving as a liaison with affiliated media partners.

Both Tomkins and Abdel-Monem were part of the Center's team that evaluated the CDC's Public Engagement Pilot Project on Pandemic Influenza that included public input from residents in four cities in four different states across the country (see http://ppc.nebraska.edu/publications/documents/PEPPPI_FINALREPORT_DEC_2005.pdf, Attachment L, pages 69-94). The triangulation of quantitative and qualitative data revealed that the public felt pleased about their involvement and increased their knowledge about pandemics and vaccination policies during the process. As one stakeholder noted, "I still have the same opinions, but it clarified them a bit about why I feel this way." Anecdotal evidence indicates that US HHS Secretary Leavitt was aware of the project and its results, and used the information from the project as part of his input when President G.W. Bush held a table-top exercise on pandemic influenza for his Cabinet. As mentioned previously, the project was a 2007 Core Values Award Winner, awarded by the International Association for Public Participation.

9. List the major milestones and/or deliverables and provide a timeline for completing each.

Month 1: Preparation (identification of working group and other stakeholders)
- NITC and PPC agree on working group membership

Months 2-3: Development of survey instruments and briefing document
- Surveys and briefing document approved by working group

Month 4: Implementation of survey 1 in Kearney, Lincoln, and Omaha
- Dates for deliberation determined; final plans for deliberation approved

Months 5-6: Hold deliberation discussions and implement survey 2
- Hold debriefing session with working group after deliberation and finalize dissemination strategies

Months 7-8: Analyze findings
- Review results and implications with working group

Month 9: Issue final report
- Implement report distribution plan and other dissemination strategies

10. Describe the training and staff development requirements.

Not applicable.

11. Describe the ongoing support requirements.

As indicated, we will want NITC involvement in the working group. Other than that, no major support requirements other than feedback as the project evolves.

Section 7: Risk Assessment (10 Points)

12. Describe possible barriers and risks related to the project and the relative importance of each.

In terms of risks to participants, there are none. In terms of risks to the successful completion of the project, the primary risk is insufficient public participation. In other words, if residents are not willing to answer the surveys or participate in the deliberation discussions, this will undermine the successful completion of the project. This is a major risk related to the project.

13. Identify strategies which have been developed to minimize risks.

In the past, we have addressed insufficient participation rates by purchasing additional samples and redoubling our efforts to recruit sufficient participation. To date, over 10 projects, we have not had an insurmountable problem. In the most recent Lincoln budget priority project, we had more participation than we had warranted to our funders. Further, as an indication of the Center's "we will get the job done" posture, when the Lincoln Journal Star pulled out of the sponsorship of the online, non-random survey, the Center took over the survey process and worked with the Mayor's office to ensure adequate participation by identifying publicity options and discussing other options with our clients. As discussed above, we received over 1,500 surveys, far exceeding all expectations.

Section 8: Financial Analysis and Budget (20 Points)

14. Financial Information

Category	**Description**	**Request for FY2008-09**
1. Personnel Costs		
Co-PI Tomkins	74 hours project oversight and visioning	$8,416
Co-PI Abdel-Monem	268 hours project mgmt. and survey/delib. development	$13,078
Research Specialists	22 hours for survey development and data analysis	$1,074
Administrative Assistance	96 hours for logistics and deliberation support	$4,199
Undergrad Research Assistants	197 hours for briefing docs, delib. support, data entry	$4,841
	Personnel Subtotal	*$31,608*
2. Contractual Services	N/A	$0
3. Supplies & Materials	paper, envelopes, labels, nametags, signage, etc.	$453
4. Telecommunications	N/A	$0
5. Training	N/A	$0
6. Travel	Mileage (Kearney, Omaha) $.505/mi x 380 mi x 2 vehicles	$384

7. Other Costs		
Survey Incentives	$5 x 450 surveys	$2,250
Deliberation Incentives	$15 x 25 participants x 3 deliberations	$1,125
Copying/Printing	postcards, surveys, briefing docs, correspondence, etc.	$1,415
Postage	postcards, surveys, briefing docs, correspondence, etc.	$893
Facilities	$250 x 3 deliberations	$750
Catering	$300 x 3 deliberations	$900
	Other Costs subtotal	*$7,332*
8. Capital Expenditures	N/A	$0
TOTAL COSTS		**$39,777**
General Funds		$0
Cash Funds		$0
Federal Funds		$0
Revolving Funds		$0
Other Funds		$0
TOTAL FUNDS		**$0**

15. Provide a detailed description of the budget items listed above. Include:
    - An itemized list of hardware and software.
    - If new FTE positions are included in the request, please provide a breakdown by position, including separate totals for salary and fringe benefits.
    - Provide any on-going operation and replacement costs not included above, including funding source if known.
    - Provide a breakdown of all non-state funding sources and funds provided per source.

Personnel costs are included at the Center's expected hourly rate for the project period, inclusive of salary and benefits. Rates are established using University of Nebraska-Lincoln service center costing guidelines. No new FTE positions are anticipated for this project. If additional time is needed to complete the project, it will be provided and funded by general Public Policy Center operating funds.

Costs are included to conduct a survey of 450 residents in Kearney, Lincoln, and Omaha (150 in each community) and convene deliberative discussions with approximately 25 participants in each of those communities. While the survey will be conducted on-line, it is anticipated that hardcopy surveys will be printed and mailed to 20% of participants, on their request. Supplies and materials for the project, such as paper, envelopes, postcards, mailing labels, name tags, etc. will cost approximately $453. Small incentives will be provided to those taking the surveys and participating in the discussions ($5 and $15, respectively). Printing costs totaling $1,415 are included for postcards ($90), hardcopy surveys ($50), briefing documents ($1,200), and correspondence/other project copying ($75). Postage costs of $893 is budgeted to mail postcards to invite 450 people to participate in the on-line survey; mailing hardcopy surveys and providing pre-paid return postage envelopes; and mailing briefing documents and correspondence to deliberation participants. Deliberation costs for hosting three events include facilities for meeting room rent and A/V costs ($250 per event) and light refreshments ($300 per event).

No hardware or software will be purchased for the project. No on-going operation or replacement costs are anticipated for the project.

Nebraska Information Technology Commission

Community Technology Fund

Simple Application Form

Project Title: Behavioral Health Information Exchange Network Development

Submitting Entity (Must be a public entity): Region V Services

Grant Amount Requested: $40,000

Project Contact Information (Name, address, telephone, and e-mail address):

Wende Baker, SNBHIN Network Director

Region V Systems

1645 N St. Suite A

Lincoln, NE 68508

(402)441-8144

wbaker@lincoln.ne.gov

Executive Summary

Provide a one or two paragraph summary of the proposed project, clearly and succinctly describing the project goals, expected outcomes, the information technology required, and what the grant will fund.

The Southeast Nebraska Behavioral Health Information Network is currently developing a Health Information Exchange to create timely access to behavioral health patient information between and among behavioral health providers in the Region V Service area. An integrated management information system will be designed with internal and external computerized communication systems offered to Network participants. The system will promote consistency in data entry for patient demographic and clinical information. This will provide seamless patient care and access from multiple locations.

System specifications have been detailed in an RFP that was issued in fall of 2006. Generally, the hardware quoted was specific to the applications selected by the vendors. The proposed system had as a line item $40,561 in hardware costs for the server. Although a Rural Health Network Development (RHND) grant was secured to implement the rural portion of the network, a larger effort, including the Lincoln based “urban” providers is needed for the entire system to be implemented effectively. The funding contributed by the Community Technology Fund will help provide the match needed for the RHND grant and will purchase the server component of the system. Although this investment represents a small portion of the total implementation cost, it will make it possible for data to be shared among all of the network participant organizations listed below: Blue Valley Behavioral Health Center, BryanLGH Medical Center, CenterPointe, Child Guidance Center, Community Mental Health Center, Cornhusker Place, Family Services, Heartland Health Alliance, Houses of Hope, Lincoln Council on Alcoholism and Drugs, Lancaster County Medical Society, Lincoln Medical Education Partnership, Lutheran Family Services, Mental Health Association, Region V Systems, Southeast Rural Physician’s Alliance and St. Monica’s Home.

1. Describe the project and project goals. (10 points)

There are three overarching goals for the project:

1) Improve access to quality behavioral health care by creating and implementing a Health Information Exchange in the Southeast Nebraska service area.

2) The project will develop a 3 year sustainability business plan to promote the vision and secure the Network’s future

3) Strengthen the viability and infrastructure of the Network and its members through a health information technology system designed to integrate care.

The health information technology system will consist of three major components: a global database, patient index and standardized referral system. The components will be integrated together into an interfaced system for access to all three functionalities. The global database will give providers the ability to view, track and report self-determined indicators, including clinical, performance quality assurance indicators. The patient index gives providers the ability to identify patients and coupled with the database, the ability

to utilize a single point of data entry for all patient billing, electronic behavioral health record, and demographic information. The standardized referral system will include a standard electronic format, viewing of all facilities available to meet a need for service, electronic communication of the referral, notification systems once the referral has been made and viewing/management of waiting lists for more regular updating.

2. Describe the project team and project activities. (10 points)

SNBHIN is a newly incorporated Regional Health Information Organization that has responsibility for the overall management of the project. Region V Systems is represented on the Board of Directors. The Network Director, Wende Baker, has primary responsibility for the implementation of the project and reports to the Board of Directors. In the first year, a Technology Consultant will be hired to design the database and develop the RFP for the purchase of the system and plan the training requirements for implementation in the field. In the second phase of the project, a Network Administrator and Project Director will be hired to administer the database system and to provide training for adoption in the field. Phase three of the project will involve implementation of the system on a small scale, with the plan to move adoption forward as time and capacity allow. It is intended these three phases will be completed by April of 2011.

3. Describe the expected outcomes and benefits. (30 points)

The SNBHIN will benefit the residents of Southeast Nebraska by improving patient access to quality behavioral health care and increasing the viability of behavioral health providers through cost savings and enhanced productivity.

The global database will offer opportunities for practitioners to view clinical documents such as progress notes, admission/discharge data, and safety plans of shared patients. The standard referral system will include electronic processes for notifying facilities when a referral is being made and establishing an electronic follow-up method for the referring facility after the patient has entered care. This capacity will allow providers to determine what behavioral health facility offers the services needed, determine patient eligibility criteria, and make an electronic referral. Through this enhanced capability, patients will experience more timely entrance into the most appropriate level of behavioral health care. Increased integration of care will result in increased quality of care and decreased use of the emergency system of care, which will in turn result in decreased use of rural law enforcement in the transport of individuals to the Lincoln-based emergency care system and subsequent longer term hospitalizations at the State hospital or other community based hospitals.

The Health Information Exchange will also increase the viability of behavioral health providers in Southeast Nebraska. Internal and external computerized communication systems will be improved and updated so that there will be a single point of data entry for all patient billing, electronic behavioral health record and demographic information. It will allow users to pre-populate local patient registration forms with data from a common shared source. These processes will decrease the amount of paperwork completed manually as well as decrease duplication of effort. Patient intake and discharge processes will be more efficient as a result, leading to increased productivity and cost

savings by decreasing the time and effort needed to locate a referral source and determine eligibility.

The Health Information Exchange will allow organizations to view, track and report self determined indicators, including clinical, performance and quality assurance indicators. This process will make it possible for health care providers and facilities to evaluate the quality of care they are providing, patient satisfaction levels, and provider knowledge. Raising awareness and effectively evaluating all of these indicators will increase the quality of care, patient satisfaction and patient safety. Moreover, this process will enhance the efficiency with which new knowledge can be generated, analyzed and integrated into behavioral health care, education and delivery. This also creates a more cost-effective method for the monitoring of patients and optimal targeting of specific population sectors for education, screening and early treatment when necessary.

4 List the major activities (or milestones) and a timeline for completing each activity or milestone. (10 points)

Within the first three months of the project, the administrative responsibilities of the Board and staff will be defined and assigned, with a technology consultant hired to adapt the existing system RFP to the current environment. The Technology Consultant, working with the Board and Network Director will select the application vendor and purchase the required hardware within the first 12 months. For the second phase of the project, a Systems Administrator will be hired as well as a Project Manager to equip and train all offices in the field over the remaining 24 months of the project. Within the first six months of the project, the Board of Directors will participate in sustainability planning for the organization with a business plan for long term financial viability of the Network as a product of this work. Another significant component of the work consists of the development of policies and procedures governing confidentiality and security. These practices must be in place before the system implementation is completed in the third year of the project.

5. Describe how the project will be sustained. (10 points)

A Rural Health Network Development grant has been received for the rural portion of project implementation. Although specific funding sources are not yet committed for sustaining the project long term (beyond three years), some of the financing strategies the group will explore include user/maintenance fees from participating organizations, billing fees for reimbursement services, grants and state and local funding.

6. Describe the project's evaluation plan, including measurement and assessment methods that will verify project outcomes. (10 points)

The Network has secured the services of Joyce Schmeeckle, Ph.D. of Schmeeckle research, Inc in Lincoln, Nebraska to ensure the evaluation plan is implemented amd documentation of the project measures occurs with each of the partners. The project evaluation is designed to answer the following questions:

1. To what extent has implementation adhered to the work plan and achieved the goals and outcomes of the project?
2. Did the project and individual organizations achieve its organizational and technological deliverables as outlined in the work plan?
3. What is the level of participation and collaboration among the stakeholder organizations in the project?
4. Did the project result in implementation of a high quality Health Information Technology system?

The evaluation will provide formative information to project participants for the purposes of continuing improvement of the implementation. It will allow the Board to track the progress of the project in relation to the plan, identify issues and gaps as they arise, and provide the inputs to keep the project on track. An evaluation report will be prepared and presented to the leadership group every quarter.

The evaluation will be developed more fully as the project progresses. One component of the outcome evaluation will be to compare the Health Information Technology system with National standards. The evaluator will develop a template that will measure compliance with these standards and with best practices in the filed. This template will guide the evaluation team in developing data collection instruments.

7. Describe the hardware, software, and communications needed for this project and explain why these choices were made. (10 points)

A lengthy Request For Proposals (RFP) including equipment specifications and capabilities was developed as part of a previous grant received from the Agency for Health Care Research and Quality planning grant for Health Information Technology. The RFP was issued and three vendor responses evaluated. The equipment chosen was based on the current needs of the providers as well an assessment of their current systems. The equipment requested is specific to one of the vendors, however, based on the costs presented among the other proposals, we believe it is representative of the anticipated costs for this component of the system. The vendor is the UNI/Care Pro-filer system that employs a comprehensive set of applications that use server technology. The specific equipment is a configurable HP ProLiant DL580 G5 Rack Server.

Financial Analysis and Budget (10 points)

The budget will be scored on reasonableness (up to 5 points) and mathematical accuracy (up to 5 points).

Provide the following financial information:

	CTF Grant Funding	Cash Match (5)	In-Kind Match (6)	Other Funding Sources (7)	Total
Personnel Costs(1)				117,105	117,105
Contractual Services (2)				135,350	135,350
Capital Expenditures (3) (Hardware, software, etc.)	40,000			120,000	160,000
Supplies and Materials				4,120	4,120
Telecommunications					
Training					
Travel				8,000	8,000
Other costs (4)				26,210	26,210
TOTAL	37,400			413,385	450,785

Personnel: The server will be purchased and put into service in the first year of a three year budget. In that first year, project staff will consist of:

Network Director (1.0 FTE) $60,255

Administrative Aide (0.5 FTE) $16,380

Taxes and Benefits: $19,375

The Executive Directors for the Blue Valley Behavioral Health Center (Rural) and Community Mental Health Center (Urban) are provided on an in-kind basis at .1 FTE each for a total contributed value of $22,850. This contribution will be documented through participation in meetings.

Contractural:

Evaluation 8% of grant total in the first year $14,400

Technology Consultant: Database development and project implementation planning $100,000

Strategic Planning: In-kind services valued @ $10,000

Accounting Services: Payroll, Tax Reporting, Financial Statements and Audits $5,000

Legal Fees: Consulting on participant agreements, confidentiality & compliance $5,000

Equipment:

Web Server $40,561

Application Development Software: $10,000

Storage: $112,600

Other Operating Expenses:

Supplies: $4,120

Travel: $8,000

Insurance: $3,410

Occupancy: $22,800

External Funding Sources:

In the first year of the project, the Rural Health Network Grant will provide for $180,000 in operating costs. Region V Services will contribute $184,455 and the Community Mental Health Center will contribute $29,075.

Nebraska Information Technology Commission

Community Technology Fund

Simple Application Form

Project Title: Health Information Security and Privacy Consumer Education

Submitting Entity (Must be a public entity): State of Nebraska, Office of the CIO

Grant Amount Requested: $8,037

Project Contact Information (Name, address, telephone, and e-mail address):

Anne Byers
Nebraska Information Technology Commission/Office of the CIO
501 South 14th Street
P.O. Box 95045
Lincoln, NE 68509-5045
402-471-3805
anne.byers@nebraska.gov

Executive Summary

Consumer involvement is commonly identified as a key element in the development of health information exchange. Through this project, the Education Work Group of the Nebraska Health Information Security and Privacy Committee (HISPC) will work with representatives of Nebraska's health information exchanges to develop educational resources which will help consumers better understand health information exchange and related security and privacy concerns. The resources developed will include a brochure, a card promoting a health information security Web site, and additional resources which will be made available from the Web site. In order better leverage limited resources, this project will utilize the Web site being proposed by the Nebraska HISPC's Legal Work Group.

1. Describe the project and project goals. (10 points)

This project will develop educational materials for consumers regarding health information exchange as well as related privacy and security concerns. Consumer involvement is commonly identified as a key element in the development of health information exchange. The eHealth Initiative has identified focusing on consumers as one of six common principles for effective health information exchanges. The eHealth Initiative recommends that health information exchanges enable consumers to make informed choices and address health information security and privacy needs of consumers. The Nebraska eHealth Council has also identified consumer education as one of its priorities.

Consumers are generally supportive of health information exchange, although they often know little about health information exchange. A 2007 survey by the eHealth Initiative found that 70 percent of respondents supported health information exchange. As consumers learn more about health information exchange they tend to become more supportive. Most concerns about health information exchange center on security and privacy. A small 2007 survey of Nebraska consumers by the Creighton Health Services Research Program confirmed that Nebraska consumers are generally supportive about health information exchange, but have concerns about privacy and security. Consumers also exhibit limit knowledge about health information exchange.

Through this project, the Education Work Group of the Nebraska Health Information Security and Privacy Committee (HISPC) will work with representatives of Nebraska's health information exchanges to develop educational resources which will help consumers better understand health information exchange and related security and privacy issues. The resources developed will include a brochure, a card promoting a related health information security Web site, and additional resources which will be made available from the Web site. In order better leverage limited resources, this project will utilize the Web site being proposed by the Nebraska HISPC's Legal Work Group.

The goals of this project are:

- To facilitate the exchange of health information by addressing the educational needs of consumers related to health information exchange and security and privacy issues.

- To increase consumer knowledge of health information exchange.

- To increase consumer support of health information exchange.

2. Describe the project team and project activities. (10 points)

The project team will consist of members of the Education Work Group of the Nebraska Health Information Security and Privacy Committee (HISPC) and representatives of Nebraska's health information exchanges. Discussions with representatives of NeHII, the Southeast Nebraska Behavioral Health Network (SNBHIN), Western Nebraska Health Information Exchange (WNHIE), and the Southeast Nebraska Health Information Exchange (SENHIE) indicate that there is interest in consumer education. However, each health information exchange also has other more pressing demands, and time is at a premium.

By pooling expertise from Nebraska's health information exchanges and the Education Committee and drawing upon resources developed by Nebraska's eHealth initiatives, other states, and national organizations, educational resources can be developed in a manner that minimizes the time commitment of individuals from Nebraska's health information exchanges.

Project Team

Anne Byers, Community IT Manager, Nebraska Information Technology Commission and Co-Chair of the Nebraska HISPC Education Work Group, will lead the effort. Ms. Byers has a bachelor's degree in journalism and a master's degree in human resource education.

Karen A. Paschal, Associate Professor, Creighton University and Co-Chair of the Nebraska HISPC Education Work Group, will also provide leadership for this project. Dr. Paschal earned her bachelors degree in biology from the University of South Dakota ('72),a master's degree in physical therapy from Duke University ('74)and a Doctor of Physical Therapy degree from Creighton University ('06).

Additional Education Committee members include:

- Dr. James Harper
- September Stone, Nebraska Health Care Association
- Steve Hartman, State of Nebraska, Office of the CIO
- Renee Rowell, Bellevue University
- Dr. David Filipi

The following representatives of health information exchanges have expressed interest:

- Nancy Shank, University of Nebraska Policy Center
- Kim Woods, Western Nebraska Health Information Exchange
- Deb Bass, NeHII
- Wende Baker, Southeast Nebraska Behavioral Health Information Network
- Joyce Beck, Southeast Nebraska Health Information Exchange

Project Activities

Project activities will include:

- Identifying and prioritizing one or two educational pieces that should be developed.*
- Providing input into the design of a health information security and privacy Web site.
- Identifying educational pieces and resources from Nebraska eHealth initiatives, other states, and national organizations that could be used.
- Evaluating existing educational pieces and resources.*
- Developing a resource library of educational materials which will be made available from the Health Information Security and Privacy Web site.
- Drafting educational pieces.
- Reviewing and evaluating educational pieces.*
- Finalizing educational pieces.
- Developing preliminary consumer marketing plan.*
- Distributing educational pieces to consumers.*

*Indicates activities in which health information exchange representatives will be involved. Representatives are welcome to participate in other activities. However, since many representatives of the health information exchanges have limited time, their participation is not expected.

3. Describe the expected outcomes and benefits.

The expected outcomes of this project are:

- The exchange of health information will be facilitated by addressing the educational needs of consumers related to health information exchange and security and privacy concerns.

- Consumer knowledge of health information exchange will increase.

- Consumer support of health information exchange will increase.

- Consumers will begin to become more involved in health management.

Facilitating the exchange of health information will have many benefits including:

- **Reducing medication errors.** More than 2 million adverse drug events could be prevented through e-prescribing, saving 4.5 billion annually and 190,000 hospitalizations per year.
- **Reducing health care waste.** Health IT adoption is estimated to save an average of 42 billion annually during a 15-year adoption period.
- **Empowering consumer involvement in health management.** Having access to medical histories as well as customized health education and guidance could increase consumer participation in their health maintenance and care.

4. List the major activities (or milestones) and a timeline for completing each activity or milestone. (10 points)

July-September

- Identifying and prioritizing one or two educational pieces that should be developed.*
- Providing input into the design of a health information security and privacy Web site.
- Identifying educational pieces and resources from Nebraska eHealth initiatives, other states, and national organizations that could be used.
- Evaluating existing educational pieces and resources.*

October

- Developing a resource library of educational materials which will be made available from the Health Information Security and Privacy Web site.
- Drafting educational pieces.

November-December

- Reviewing and evaluating educational pieces.*
- Finalizing educational pieces.

January-April

- Developing preliminary consumer marketing plan.*
- Distributing educational pieces to consumers.*
- Develop consumer evaluation survey instrument.

May

- Evaluation

5. Describe how the project will be sustained. (10 points)

This project is a cooperative effort of the Nebraska HISPC Education Work Group and Nebraska's health information exchanges. The bulk of this project is being done with in-kind contributions, not grant funding, making it relatively easy to continue the project. The Nebraska Information Technology Commission will continue to maintain the Web site. The Nebraska HISPC Education Group will continue to facilitate the cooperative development of educational materials. If additional grant funding is not available for printing brochures, individual health information exchanges can print their own.

6. Describe the project's evaluation plan, including measurement and assessment methods that will verify project outcomes. (10 points)

Due to time constraints and many other conflicting demands upon health information exchanges, a conscious decision was made to keep the evaluation simple. Visitors to the Web site will be asked to fill out a short survey. Consumers will be asked to indicate the usefulness of materials and if reading/viewing the materials has led to an increase in knowledge about health information exchange and if it has led to changes in their attitudes. Consumers will also be asked if they will be more likely to be involved in managing their health care.

Representatives of the health information exchanges will also be asked to report feedback from providers on the value of the materials.

7. Describe the hardware, software, and communications needed for this project and explain why these choices were made. (10 points)

The only technology needed for this project is a Web site, which has been proposed by the HISPC Legal Work Group. There have been suggestions to develop a separate Web site. However, developing two Web sites was deemed duplicative. The front page of the Web site will be carefully designed to make it easy for both consumers and providers to find the information that is most relevant to them.

If the companion proposal from the HISPC Legal Work Group is not funded, an additional $6,600 is requested.

Financial Analysis and Budget (10 points)

The budget will be scored on reasonableness (up to 5 points) and mathematical accuracy (up to 5 points).

Provide the following financial information:

	CTF Grant Funding	Cash Match (5)	In-Kind Match (6)	Other Funding Sources (7)	Total
Personnel Costs(1)			$6,000		
Contractual Services (2)	$200				
Capital Expenditures (3) (Hardware, software, etc.)					
Supplies and Materials	$7,837				
Telecommunications					
Training					
Travel					
Other costs (4)					
TOTAL	$8,037				

Financial Narrative Notes

Personnel—In-kind

Anne Byers—160 hours @ $25/hour	$4,000
Karen Paschal—20 hours@ $25/hour	500
5 HIE representatives X 6 hours @ $25/hour	750
HISPC Education Work Group— 5 members X 6 hours @ $25/hour	750
Total	$6,000

Contractual Services

$200 for annual subscription to Survey Monkey

Supplies

Printing Estimates

50,000 cards	$1,500
50,000 brochures	$5,905
4 hours of artwork	$432
Total printing	$7,837

Web Site Promo Cards

1,000 cards…..$73.00 5,000 cards…..$175.00 10,000 cards…..$300.00

Prices are based on printing one side in full color on 100# white matte cover, trimming to 2" x 3.5" and boxing. A minimum graphics charge is included in each price.

Brochures

1,000 Brochures…..$425.00

5,000 brochures…..$827.00

10,000 Brochures…..$1,181.00

These prices reflect a minimum of graphics work on our end. We charge $40.13 for each ½ hour our graphics staff works with your job. If additional work is needed, final cost will be determined by the time it takes to satisfy your needs and wishes on this project. I should be able to give you a more specific dollar amount when I know exactly what the revisions will be.

Nebraska Information Technology Commission

Community Technology Fund

Simple Application Form

For projects which meet all of the following characteristics:

- Low budget (under $40,000)
- No or simple implementation of technology (By simple implementation of technology, we mean standard, plug and play technology.)
- Very low risk
- Type of projects: Training projects, HISPC legal review

Project Title: Health Information Privacy and Security Website

Submitting Entity (Must be a public entity): EHealth Council-HISPC#2 Workgroup

Grant Amount Requested: $8,600

Project Contact Information (Name, address, telephone, and e-mail address):

Anne Byers, David Lawton, Dennis Berens

Executive Summary

The project will be coordinated by the Legal Subcommittee of the Nebraska Health Information and Privacy Workgroup.

The "knowledge age" requires a flow of qualified information, research, pilot project efforts and educational activities to help citizens understand the issues that they are currently facing or will face in the near future. Health information technology advances will continue to create a need for both the citizens and the health professionals to have a source for unbiased information and a place to ask questions about the sharing of health information in a private and secure manner.

The Health Information Privacy and Security website is envisioned as the beginning models that can link the present knowledge and questions. The knowledge can be expanded as it becomes available and qualified by those who have the expertise. The question feature will allow website visitors to see what others are questioning and respond as needed. This site could link to other health Web sites and also focus on health information privacy and security.

1. Describe the project and project goals. (10 points)

   The initial design of the website will link to the present eHealth Council web found inside the NITC. This governmental site is desired because this information will need to be vetted, liability issues will be easier to address and because the underlying focus of this proposal is to have a sustainable delivery model.

   Goals:

   A. The initial information on the site will come from the research done by and collected by the HISPC#1 and #2 Workgroups. The information on state laws and regulations about health information privacy and security will have been vetted by the workgroup and most likely by an outside legal review (this is being addressed this April).

   B. Funding will be needed to develop a user friendly website, gather all pertinent information, enter it in the site, create a management and vetting model, created an information transfer model, and develop a sustainability plan for this website. (These funds will be needed to cover labor, consultant help, capacity support and website promotional modeling.)

   C. The site will allow the blending of the legal research that has presently been completed and the need to clarify what is state privacy and security issues and what are HIPAA/federal issues that citizens and professionals need to be aware of and to address. It can provide access to educational materials for citizens and professionals as well as a place to ask questions that need to be answered.

2. Describe the project team and project activities. (10 points)

   The project team will consist of members of the Nebraska Health Information Security and Privacy (HISPC) Committee's Legal Work Group and representatives of the NITC, CIO office and IMServices Web Development Team and other stakeholders as identified by the project team.

   It is envisioned that the IMServices Web Development Team can create a Web Design that can meet the goals of this project and link this web site to the existing NITC site. The Legal WorkGroup will document the privacy and security information that has been vetted and place that information on the prepared website for usage by providers and citizens within our state.

   Project Team:

   Sheila Wrobel, David Lawton and Dennis Berens, in collaboration with Anne Byers will lead this team effort.

   Other members of the team include:

   Charlene Dunbar, David Lawton, Dennis Berens, Joseph Acierno, Kimberly Galt, Roger Brink, Ron Hoffman, Jr., Sheila Wrobel

These will include:

a. Working with the CIO personnel and the web designers to get quotes for this website model.

b. Collect vetted health privacy and security information that can be placed on the website.

c. Complete the review of Nebraska state laws and regulations affecting electronic transfer of information and place that vetted information on the website.

d. Collect HIPAA/Federal information pertinent to our website development goals.

e. Work with health provider stakeholders and consumer stakeholder groups to identify health privacy and security information questions to be placed on the website

3. Describe the expected outcomes and benefits. (30 points)

The expected outcomes of this project will be:

a. Health information privacy and security information will be all gathered and available on one website for our state's providers and citizens.

b. Providers and citizens will have a single site to send questions about electronic health information exchange

c. The workgroup's research on state privacy and security issues will have a "home" for others to utilize and build on for the future

d. The NITC website will become the respected site for health information exchange information

4 List the major activities (or milestones) and a timeline for completing each activity or milestone. (10 points)

July-September

a. finalize web design quote and contract

b. finalize HISPC#2 Legal team review of state health information privacy and security laws,regulations

c. share reviewed information with other stakeholders before placing on the website

October

a. research other health information and privacy sites, especially governmental for information.

b. most frequently asked questions should be placed on the website.

November

a. identify other stakeholders to provide information or vetting of information for the website

b. evaluation survey sent out to website users.

December

a. review of process, customer satisfaction and utilization

b. redesign site and information on sites based on evaluations

5. Describe how the project will be sustained. (10 points)

This project is a cooperative effort with the Office of the CIO, NITC and the HISPC#2 Workgroup. The information to gathered and shared will be vital to the discussions and decisions that will be made about electronic transfer of patient health information. Providers and citizens will now have a one stop shop to find the answers to their privacy and security questions and also a place to send their questions.

Sustainability will come from its creation and linkage to an existing governmental model and office. In addition, the one time creation cost will give us a model that existing IT personnel can service for little additional cost.

If the customer demand is strong the groups providing the information will have motivation to continue addressing the questions/answers. In turn that demand should generate funding thru the eHealth Council, the NITC, DHHS or the Office of the CIO.

6. Describe the project's evaluation plan, including measurement and assessment methods that will verify project outcomes. (10 points)

Due to the newness of this model, the team envisions the use of the "survey monkey" tool that would ask Web Site visitors to fill out a short survey. Consumers will be asked to indicate the usefulness of the materials and usability of the website.

This information will be shared with the stakeholders to ensure transparency and appropriate planning for sustainability.

7. Describe the hardware, software, and communications needed for this project and explain why these choices were made. (10 points)

   See the estimate given by the IMServices Web Development Team dated 4/28/08

Financial Analysis and Budget (10 points)

The budget will be scored on reasonableness (up to 5 points) and mathematical accuracy (up to 5 points).

Provide the following financial information:

Budgets:

Estimate Web Design for Communities
http://www.ehrtoday.org/home/

	Per Item Hours	Total Items	Expected Total Hours
Client Meetings	1	1	**1**
Gathering Required Information	1	3	**3**
JavaScript			
Pop-up menus	3	2	**6**
Graphics			
Logo / Page header	6	2	**12**
Rotating images	1	6	**6**
Navigational buttons	2	8	**16**
Misc.	2	10	**20**
Pages			
New	1.5	24	**36**
Cascading Style Sheets			
Creation	3	3	**9**
Testing	1	1	**1**
		Totals	**110**
	Cost Estimate @ $60 per hour		***$6,600.00***

Prepared by IMServices Web Development Team 04/28/08

	CTF Grant Funding	Cash Match (5)	In-Kind Match (6)	Other Funding Sources (7)	Total
Personnel Costs(1)					
Contractual Services (2)					
Capital Expenditures (3) (Hardware, software, etc.)					
Supplies and Materials					
Telecommunications					
Training					
Estimated web design costs	$6,600				
Other costs (4) Coordination meetings with stakeholders, information transfer costs, etc.	$2,000				
TOTAL	$8,220				

Financial Narrative Notes and Instructions

Several categories (see below) **require** further itemization.

1. Please include estimated number of hours or full-time equivalent (FTE) by position. Include separate totals for salary and fringe benefits. If it is necessary to itemize on a separate sheet, include only the subtotal in this table.
2. Please itemize other contractual expenses on separate sheet.
3. Please itemize capital expenditures by categories (hardware, software, network, and other) on a separate sheet.
4. Please itemize other operating expenses on a separate sheet.
5. Please indicate the source of any cash match.
6. Please indicate the source of any in-kind match and how it will be documented.
7. Please provide a breakdown of any other external funding sources. Sources of external funds may include grants from federal agencies or private foundations.

Please keep supporting documentation to a minimum. For example, rather than including a printout of a quotation from Dell for a new computer, include all relevant information in the budget narrative.