

Advancement of Telehealth of the Health Resources and Services Administration awarded \$1 million in federal funds for creating the research partnership.

The partnership, known as the Midwest Alliance for Telehealth and Technology Resources, also will conduct telehealth research **and** coordinate evaluation activities with three other resource centers. In addition to Purdue, partnership members are Michigan State University, the University of Kansas and Marquette General Hospital in Marquette, Michigan. A key part of this grant will be to support innovation in the areas of telemedicine, which has been proven to meet the health-care needs of those in rural and underserved areas of Indiana.

The allied institutions offer a combination of individual expertise, and each will provide a distinct component of technical assistance, training and support to health-care providers in these markets. Michigan State University will lead the partnership's evaluation ~~arm~~. Dr. Pam Whitten, a Regenstrief Center Faculty Scholar who now leads Michigan State University's telemedicine initiatives, said the project's goal is to enable health organizations across the three states to implement communication technologies that increase access to care and improve its quality. Per Dr. Whitten, the plan is to facilitate the creation of broad interweaving networks across the state and region that enable people to access all types of health-care services through communication technologies no matter where they live. Telehealth networks use technology such as videoconferencing, streaming media and wireless communications so specialists can share information and provide patient care over long distances. Marquette General Hospital, located in Michigan's Upper Peninsula, has become a leader in telehealth through its commitment to meet the needs of rural and underserved residents.

The research done with this program will also take a broad view of telemedicine and the role that information, communication and technology can play in using this delivery method to improve our health-care system and make it more efficient and effective. Purdue Regenstrief plans to help Indiana key stakeholders connect resources and expertise with state and regional initiatives.

Each alliance partner has a defined role, with Marquette General Hospital taking the lead in grant administration, overall alliance coordination and technical assistance in program development. The group is leveraging the expertise of four telehealth and information technology providers:

- The Purdue Regenstrief Center: a health engineering facility
- Marquette General Hospital: a rural regional telehealth hub
- Kansas University's Center for Telemedicine and Telehealth: an academic statewide telehealth hub
- Michigan State University's Telehealth Research Facility

Dr. Whitten's plan is to address health-care delivery issues in the three states, including the limited access to care for rural and underserved populations, lack of tele-health programming to address health-care access, and financial constraints of health care organizations that limit educational opportunities. These issues often result in delayed treatment or less than optimal health care for residents, unsuccessful and unsustainable deployment of tele-health programming.

11. Development of the Indiana Statewide Rural Health Network: The Indiana Rural Health Association is also currently implementing a Network Planning Grant from HRSA’s Office of Rural Health Policy to develop the Indiana Statewide Rural Health Network, a network comprised of 21 health care organizations. The participating organizations include the Indiana Hospital & Health Association, Health Care Excel, Indiana’s Quality Improvement Organization; Union Hospital’s Richard G. Lugar Center for Rural Health; 14 rural hospitals of which 11 are Critical Access Hospital (rural hospitals with 25 beds or less); and six federally designated Rural Health Clinics.

The primary problems being addressed by the participants in the current Network Planning Grant include:

1. The need for increased financial viability and sustainability among Indiana’s rural health care providers that will insure access, to care by rural residents.
2. The need for increased access and use of Health Information Technology among Indiana’s rural health care providers.
3. The need for increased connectivity among Indiana’s rural health care providers that will enable the sharing of resources, services, implementation and participation in education programs, and others as deemed appropriate.
4. The need for increases in quality improvement activities among Indiana’s rural health care providers.

As demonstrated in the list above, the objectives of this federally funded project will be directly impacted by establishing connectivity among participating health care providers that would be made possible via the Indiana Health Network.

12. Healthy People 2010 Objectives Addressed by the Network: The goals, strategies, activities, outcome, and process measures adopted by the *Indiana Health Network* support the following Healthy People 2010 Objectives:

HP 2010 17-2	Increase use of linked, automated systems to share information.
HP 2010 17-2a	Increase use of linked, automated systems to share information by health care providers in hospitals and comprehensive, integrated health care systems.
HP 2010 1 - 6	Reduce the proportion of families that experience difficulties or delays in obtaining health care or do not receive needed care for one or more members.

Objectives/Strategy 3: To increase broadband access to and connectivity among Indiana’s health care providers; and Objective/Strategy 4: To increase utilization of telehealth technology addresses HP 2010 goals 17 – 2, and 17 – 2a, which call for the utilization of technology that increases the sharing of information among health professionals within integrated health systems. These HP 2010 goals are addressed by the network by implementing a dedicated broadband network through education and training opportunities that would encourage and assist participating hospitals and other health care providers to adopt and utilize Health Information Technology. The types of Health Information Technology that could be utilized over the Indiana Health Network are numerous and could include telemedicine, public health surveillance, teleradiology, decision support system; portal; patient portal; prescribing; e-referral

system; and health information exchange just to name a few. The benefits of adopting these HIT tools include well-documented reductions in adverse drug reactions, redundant testing, and medical errors’.

A body of research describing the problem of medication errors began to emerge in the early 1990s with landmark research conducted by Lucian Leape, MD, and David Bates, MD supported by the Agency for Healthcare Research and Quality (AHRQ). The majority of medical errors are preventable. The Harvard Medical Practice Study, a landmark study on medical vs. medication errors, indicated 70% of adverse events found in a review of 1,133 medical records were preventable, 6% were potentially preventable, and 24% were not preventable. Most medical errors are systems related and not attributable to individual negligence or misconduct. The key to reducing medical and medication errors is to focus on improving the systems of delivering care and not to blame individuals. Research has shown system improvements can reduce error rates and preserve limited financial resources. Accordingly, the activities of the network will improve systems of care among the network providers via utilization of HIT that will improve patient safety and quality of care and improve the health status of local residents.

In addition, Network Objective/Strategy 4: *To increase the utilization of telehealth applications*, addresses HP 2010 goal 1-6, that calls for a reduction in the number of families that experience difficulties or delays in obtaining health care or do not receive needed care for one or more family members. It is difficult to recruit and retain high quality medical providers to rural communities. The activities of the network will provide a conduit for the utilization of Health Information Technology that provides professional resources that improve the quality of patient care, ease practice burden, and improve communication with outside providers, all which increase the attractiveness of rural practices when attempting to recruit and retain health care professionals in rural areas. This is supported by the IOM report *Quality Through Collaboration: The Future of Rural Health*, which states that “a multifaceted approach to the recruitment and retention of health professionals in rural areas is needed, including interventions at every point along the rural workforce pipeline . . . (including) a variety of strong incentives for health professionals to seek and retain employment in rural communities⁹.”

Impact of Network Activities on Existing Partners:

As early as 2006, representatives from the Indiana Rural Hospital industry and the Indiana Telecommunications Association initiated meetings to better understand each of their industry’s positions on critical issues being discussed in the 2006 State Legislature. The Indiana Rural Health Association was invited to speak at the Indiana Telecommunication Association Annual

⁸ Bates DW, Cohen M, Leape LL, Overhage JM, Shabot MM and Sheridan T. Reducing the frequency of errors in medicine using information technology. *J Am Med Inform Assoc* 2001;8(4):299-308.

Frankel A, Gandhi TK and Bates DW. Improving patient safety across a large integrated health care delivery system. *Int J Qual Health Care* 2003;15 Suppl 1:i31-40

Gurwitz JH, Field TS and Harrold LR, et al. Incidence and preventability of adverse drug events among older persons in the ambulatory setting. *JAMA* 2003;289(9):1107-1116.

Poon EG, Wang SJ, Gandhi TK, Bates DW and Kuperman GJ. Design and implementation of a comprehensive outpatient Results Manager. *J Biomed Inform* 2003;36(1-2):80-91.

Wang SJ, Middleton B and Prosser LA, et al. A cost-benefit analysis of electronic medical records in primary care. *Am J Med* 2003;114(5):397-403.

⁹ *Quality Through Collaboration: The Future of Rural Health*. Institute of Medicine. November 2004.

meeting in 2006 in Louisville, and again at their Annual Meeting in 2007 at Swan Lake, Indiana on the subjects of telemedicine program development, business development partnerships in rural communities, and the FCC rural telemedicine demonstration program recently announced. Therefore, several of the collaborative parties in this grant have been working together for nearly two (2) years laying a foundation for this Indiana Health Network project.

This project will obviously have a very positive impact on the telecommunications industry, and a positive impact on rural communities with a rural hospital in this program. In our judgment, the rural hospitals will provide a central hub where fiber connections for a community can be centralized. The rural hospitals will then play a pivotal role in attracting and collaborating with many other community leaders in bringing business, industry, and high speed communications demand to the table.

In hospitals, the *Indiana Health Network* will have a positive impact on health care utilization and outcomes of patients throughout the State of Indiana. This project will help to improve the quality of health care provided by these organizations given the fact that it will provide an avenue for improved communication between the network members. It is also believed that the network will have a positive impact on health care providers across the State of Indiana given the fact that the network will provide a platform for utilizing advanced telehealth applications. Specifically, as cited in a recent telemedicine survey of health care providers across Indiana, several rural hospitals have severe shortages of bandwidth for Radiology Services in their Emergency Departments. Improved access to bandwidth will improve response times by Radiologists, will improve imaging quality in the emergency rooms, and will improve physician and patient satisfaction greatly due to improved service levels. Shortage time to diagnosis also will lead to reduced mortality as well.

Identification and Description of Applicant & Co-Applicants Capabilities and Experience:

The *Indiana Health Network* has the support of numerous statewide organizations, as well as commitments from these organizations to participate in the activities necessary to insure the successful implementation of this statewide, dedicated, health network. For the purposes of the *Indiana Health Network*, four categories of network members have been identified, which include the lead applicant, co-applicants, statewide partner organizations, and health care providers. A listing of the organizations within each of these categories has been provided, which includes information regarding organizations' capabilities and areas of expertise.

◆ **IDENTIFY THE ORGANIZATION THAT WILL BE LEGALLY AND FINANCIALLY RESPONSIBLE FOR THE CONDUCT OF ACTIVITIES SUPPORTED BY THE FUND** (Requirement 1).**

For the purposes of the FCC Rural Health Care Pilot Program the lead applicant is the Indiana Rural Health Association, which will be the organization that is legally and financially responsible for the conduct of activities as described in this application. A description of the lead and co-applicants and their roles and responsibilities in regards to the *Indiana Health Network* are listed below. A Memorandum of Agreement has been signed by a representative from each of these organizations and is included in Appendix D on pages 106-108.

¹⁰ Federal Communications Commission. Rural Health Care Support Mechanism. WC Docket No. 02-60 September 2006. page 6.

Indiana Rural Health Association (Lead Applicant)

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The Indiana Rural Health Association (IRHA) is a not-for-profit corporation developed for the purpose of providing leadership to improve the health of all Indiana's citizens in rural settings. IRHA is a member-driven organization composed of a diverse membership of rural health providers, health educators, citizens of rural communities, and those interested in public health policy. IRHA's membership is comprised of Critical Access Hospitals, other rural hospitals, Rural Health Clinics, and other private rural health providers. The membership of IRHA is approximately 1150, making the Association one of the largest in the United States.

IRHA contracts with the Indiana State Department of Health's State Office of Rural Health (ISDH/SORH) to manage projects related to the Rural Hospital Flexibility Program (FLEX Program), including the Critical Access Hospital Benchmarking Program, Congestive Heart Failure Quality Improvement Pilot Project, and the Rural Indiana Bioterrorism Training Project.

◆ EXPERIENCE IN DEVELOPING AND MANAGING TELEMEDICINE PROGRAMS AND NETWORKS (Requirement 8).**

IRHA is currently implementing a Network Planning Grant from HRSA's Office of Rural Health Policy to develop the Indiana Statewide Rural Health Network, a network comprised of 21 health care organizations. The participating organizations include the Indiana Hospital & Health Association, Health Care Excel, Indiana's Quality Improvement Organization; Union Hospital's Richard G. Lugar Center for Rural Health; 14 rural hospitals of which 11 are Critical Access Hospital (rural hospitals with 25 beds or less); and six federally designated Rural Health Clinics.

The primary problems being addressed by the participants in this planning grant include:

1. The need for increased financial viability and sustainability among Indiana's rural health care providers that will insure access to care by rural residents.
2. The need for increased access and use of Health Information Technology among Indiana's rural health care providers.
3. The need for increased connectivity among Indiana's rural health care providers that will enable the sharing of resources, services, implementation and participation in education programs, and others as deemed appropriate.
4. The need for increases in quality improvement activities among rural health care providers.

The Indiana Rural Health Association is a statewide organization that has members that span across the entire state. The Indiana Rural Health Association is the ideal organization to serve as the lead applicant for the FCC Rural Health Care Pilot Program Grant given the fact that the goal

¹¹ Federal Communications Commission. Rural Health Care Support Mechanism. WC Docket No. 02-60 September 2006. page 6.

of this program is closely matched to the mission of the association, and the absence of partiality toward any single health care provider or system of providers given the organizations diverse membership. The co-applicants have been selected as a result of their extensive experience providing health care in rural areas of the State of Indiana, previous successful experience in developing health networks, and/or utilizing telehealth applications, having the ability to train/educate other health care providers regarding telehealth applications, and having a history of working collaboratively with the Association to implement successful projects.

Given the fact that the Indiana Rural Health Association has a longstanding relationship with Indiana's rural health care providers, and the collaborative relationships that have been formalized to develop this proposal, the fact that the Association is committed to addressing the HIT and connectivity needs of rural health care providers, has vast experience and knowledge of rural health care in Indiana, and the organization's history of managing multiple projects, it is evident that the Indiana Rural Health Association is capable of carrying out the activities as described in this application to successfully implement the *Indiana Health Network*.

The roles and responsibilities of the Indiana Rural Health Association in the *Indiana Health Network* are to:

1. Coordinate and facilitate: constant communication among the Partners, health care providers/network members:, and statewide partner organizations
2. Convene meetings of the *Indiana Health Network* advisory board and committees
3. Commitment of time from staff necessary to implement network activities
4. Hiring of staff as needed to insure successful implementation of network activities
5. Implementation of strategies; identified to insure sustainability of the network
6. Oversight of network activities that are completed by other organizations, including private providers that are awarded bids for network design studies, construction of fiber connections, management of the network, provision of technical assistance to participating health care providers/network members, etc.
7. Insure compliance with FCC standards and achievement of the program goals and objectives as designed in the grant application
8. Collaborate with outside organizations as appropriate to implement evaluation activities
9. Develop a process to coordinate and submit reports as required by the FCC
10. Attendance at state and national meetings

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In 1997 Methodist, Indiana University and Riley hospitals united to form Clarian Health a non-profit health system with 1,384 staffed beds. Committed to excellence in patient care, education and research, Clarian Health hospitals are considered by many to be the premier health care

facilities in Indiana and the Midwest. The values of Clarian Health Partners determine our mission, vision and services. We value: A patient's total care, including mind, body and spirit

- Excellence in education for healthcare providers
- Quality of care and respect for life
- Charity, equality and justice in health care
- Leadership in health promotion and wellness
- Excellence in research
- An internal community of mutual trust and respect

Clarian's mission is to improve the health of our patients and community through innovation and excellence in care, education, research and service. Clarian has 57 community health and wellness programs and over \$400 million dollars was invested in 2006 in community outreach and benefit programs.

The vision that guides Clarian is as follows: "Clarian Health Partners is an acknowledged leader in quality: clinical care, education and research. Excellence is measured by objective evidence and established best practices. Exemplary levels of respect and dignity are given to patients and their families, while professionalism and collegiality mark relationships among all employees and physicians. Clarian and the IU School of Medicine collaborate to allocate effectively scarce resources in ways to maximize this vision."¹²

In addition Clarian is a technology leader having been ranked as one of the nations most wired hospitals and health systems for 5 consecutive years.

◆ **EXPERIENCE IN DEVELOPING AND MANAGING TELEMEDICINE PROGRAMS AND NETWORKS¹³**
(Requirement#8).

Clarian Telemedicine started in 2003 as Riley Connections, a program of Riley Hospital for Children and Clarian Health Partners. Riley Connections was funded by The Department of Health and Human Services and administered by The Office for the Advancement of Telehealth (OAT), a division within the Health Resources and Services Administration (HRSA). This grant ended in June 2006. Clarian has made this program a permanent department of Clarian Health. Clarian Telemedicine is a hub based out of three downtown Indianapolis hospitals and consists of three staff members: a program director, coordinator, and specialist. In addition, a multi disciplinary team consisting of an information services technician, IS customer relationship manager, legal counsel, and medical director also assist the telemedicine department.

Clarian Telemedicine offers three types of telemedicine applications: live and interactive consults, distance learning, and file transfer connected to 7 spoke sites via T-1 lines and secure business to business internet tunnels. Clarian also utilizes technology in our e-icu and for home tele-monitoring.

¹² Clarian Health Website: www.clarian.org

¹³ Federal Communications Commission. Rural Health Care Support Mechanism. WC Docket No. 02-60. September 2006. page 6.

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St. Vincent Health (SVH) is a Catholic, non-profit healthcare system sponsored nationally by Ascension Health. As the largest non-academic medical system in Indiana, the mission of St. Vincent Health is to, “improve the lives and health status of residents of the communities it serves through the provision of a continuum of holistic and high quality healthcare services, *with special concern for the sick and poor.*” With a practice-driven approach, its five core values include *service of the poor, reverence, integrity, wisdom, creativity, and dedication.* SVH provides over \$50.1 million worth of charity care each year.

SVH was established in 1998 by St. Vincent Indianapolis (St. Vincent) and St. Joseph Hospital and Health Center in Kokomo (St. Joseph). Since then, it has grown into one of the state’s largest healthcare employers, with a healthcare system of 16 hospitals serving 45 counties in Indiana, including one tertiary care facility, three secondary care hospitals, and six Critical Access Hospitals . The Critical Access locations operate 11 rural health clinics and employ over 40 physicians and physician extenders and has set high standards for primary care delivery.

St. Vincent also operates a system of community-based group homes, two mental health and chemical dependency centers that operate over 100 beds, and several other joint ventures and affiliations. Specialty hospitals include St. Vincent Orthopedics Hospital, St. Vincent Children’s Hospital, Indiana Heart Center, Indiana Neuroscience Institute, and St. Vincent Rehabilitation Hospital. St. Vincent is a member of the Suburban Health Organization, a group of seven central Indiana hospitals that surround Indianapolis. The Suburban Hospitals collectively share managed care strategies, clinical services integration, patient safety and quality initiatives, and to collectively share resources to support physician recruitment, physician practice support services, and managed care contracting.

St. Vincent Hospital’s primary care clinic handles over 75,000 patient visits per year. The patient population primarily has low literacy, especially healthcare literacy. Over 50 percent of the patient population is Hispanic,, approximately 29% are African American. The minority population across the MICI-AHEC region is expected to continue to expand, thus requiring special attention to cultural competency among all SVH staff. SVH is committed to enabling access to care for all residents in the communities in which it operates. Efforts are made to accommodate language and cultural differences in all locations. SVH employs Health Access Workers to serve rural populations as part of the Rural Underserved Access to Health program. In 2006, St. Vincent Health had:

- 58,600 admissions
- 17,899 inpatient surgical visits
- 41,521 outpatient surgical visits
- Care of persons who are poor and community benefit: \$155,434,242

◆ **EXPERIENCE IN DEVELOPING AND MANAGING TELEMEDICINE PROGRAMS AND NETWORKS¹⁴ (Requirement 8).**

St. Vincent Health System has a web-based medical education tool that allows health care professionals to remotely log in from any location with a DSL or higher broadband connection. St. Vincent also delivers medical education to partners across the state. Telemedicine applications that are being implemented by St. Vincent Health include the provision of behavioral health consultations, home health services, a pilot project for the treatment of Congestive Heart Failure, and a pilot project that includes the utilization of telemedicine in obstetrical care. To support the previously listed types of education, video-conferencing, and telemedicine applications, St. Vincent hospitals utilizes **DS3** lines at each of their partner hospitals, which provides the infrastructure needed to successfully implement their own dedicated health network. Accordingly, St. Vincent has extensive experience in the development and implementation of health networks in addition to their use of telehealth applications.

Union Hospital's Richard G. Lugar Center for Rural Health (Co-Applicant)

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The Richard G. Lugar Center for Rural Health (Lugar Center) is a State and regional organization that works to prepare and train primary care physicians for successful rural practice and to expose individuals not yet decided on a career to the rewards of delivering health care services in a rural area. The Richard G. Lugar Center for Rural Health, through Union Hospital, is located in Terre Haute, Indiana; owns and operates the Clay City Rural Health Clinic and is a network member of the Network Planning Project that is working to implement the Indiana Statewide Rural Health Network.

◆ **EXPERIENCE IN DEVELOPING AND MANAGING TELEMEDICINE PROGRAMS AND NETWORKS¹⁵ (Requirement 8).**

“The Lugar Center has operated a store and forward telemedicine program call RuralConsult.com for several years. This unique program allows physicians from anywhere in the state to post clinical questions, including digital pictures if appropriate, and have remote specialists reply with informal consultation¹⁶”. Specialists that have been utilized through

¹⁴ Federal Communications Commission. Rural Health Care Support Mechanism. WC Docket No. 02-60. September 2006. page 6.

¹⁵ Federal Communications Commission. Rural Health Care Support Mechanism. WC Docket No. 02-60. September 2006. page 6.

¹⁶ Beck'n Call, Bridging the Life Span: 'Technology in the Future of Indiana's Rural healthcare Providers. April 2007. page 15.

RuralConsult include dermatology, obstetrics, gynecology, neurology, gastroenterology, geriatrics, clinical toxicology, endocrinology, pediatric neurology, pediatric endocrinology, and pediatric cardiology. The Lugar Center is also working to implement a tele-mental health program in collaboration with West Central Community Hospital in rural Clinton, Indiana; the Hamilton Center and Vigo County Jail.

Bloomington Hospital/Bloomington E-Health Collaborative (Co-Applicant)

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As a regional health care provider, Bloomington Hospital provides comprehensive, high-quality and cost-effective care to nine counties in south central Indiana. The Bloomington Hospital is committed to advancing medicine and enhancing health in the communities that it serves. The commitment of this healthcare system is evident given its 100 years of service. During 2005, Bloomington Hospital added new and innovative technologies including a third cardiac catheterization lab for patients with heart conditions, and Indiana's first Clinic IX at the Radiation Oncology Center—a linear accelerator with IMRT and IGRT capabilities for intense targeting of tumors.

◆ EXPERIENCE IN DEVELOPING AND MANAGING TELEMEDICINE PROGRAMS AND NETWORKS” (Requirement 8).

This healthcare system is working in partnership with the McKesson Corporation and is implementing new integrated information technology throughout the system that includes activities of the *South Central Indiana Regional Health Care Network*, a project funded by HRSA's Office of Rural Health Policy to promote the activities of an integrated health network in southern Indiana that includes Bloomington Hospital of Orange County, a rural Critical Access Hospital; a Community Mental Health Center; and a private physician practice.

In addition, the Bloomington Hospital works with health care providers in the service area to implement the Bloomington E-Health Collaborative, which is a community-based organization leading the health information exchange (HIE) efforts on behalf of health care stakeholders in Monroe and surrounding counties in South Central Indiana. The key responsibilities of the E-Health Collaborative are to 1) Establish a shared vision, direction, and goals for the Health Information Exchange, 2) Represent community-wide stakeholder interests to ensure that the requisite infrastructure is developed and maintained to support a fully integrated electronic health care delivery system and Health Information Exchange, and 3) Interface with other communities, granting agencies, and regional and national electronic organizations.

¹⁷ Federal Communications Commission. Rural Health Care Support Mechanism. WC Docket No. 02-60 September 2006. page 6.

The roles and responsibilities of Clarian Health Partners, St. Vincent Health, Bloomington Hospital/Bloomington E-Health Collaborative, and Union Hospital's Richard G. Lugar Center for Rural Health as co-applicant organizations are to:

1. Provide assistance and support to the lead applicant as needed to insure successful implementation of the activities of the Indiana Health Network
2. Participation in the Indiana's Health Network advisory board and committees as appropriate
3. Provide technical assistance and expertise necessary to educate and train participating health care providers/network members regarding successful implementation of telehealth applications, as appropriate, that are made possible through participation in the Indiana Health Network

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The Indiana Telecommunications Association (ITA) is a non-profit trade association representing Indiana's telecommunications industry. Our members include 40 local competitive wireline and wireless companies and over 125 companies that supply goods and services to telecommunications companies. A list of the current ITA members has been included in Appendix E on page 109. The mission of Indiana Telecommunications Association (ITA) is to advance mutual interests, facilitate communications and advocate the positions of telecommunications companies in their role of providing service.

The roles and responsibilities of the Indiana Telecommunications Association are to 1)

1. Provide assistance and support to the lead applicant as needed to insure successful implementation of the activities of the Indiana Health Network
2. Participation in the Indiana's Health Network advisory board and committees as appropriate
3. Provide technical assistance and expertise necessary to guide the development of the Indiana Health Network.

Description of Statewide Partner Organizations:

Several organizations have participated in meetings and information gathering during the grant application process. Members of these organizations have participated in conference calls, face-to-face meetings, and have provided invaluable information that has aided in development of the grant application. These organizations have been identified for participation in the *Indiana Health Network* and include:

Indiana Chamber of Commerce!: The mission of the Indiana Chamber of Commerce is to work proactively on behalf of its members and constituents. The Chamber recognizes that this can best be achieved by providing a world-competitive business climate throughout the state in order to maximize opportunity for meaningful employment of all Indiana citizens. The Chamber does this by advancing

thoughtful legislation and public policy, and serving as the convenient source of reliable business information for our members and constituents.

Indiana Higher Education Telecommunication System (IHETS): IHETS is an organization that is capable of providing network support for telehealth applications. IHETS uses advanced technologies to increase educational access, enhance instruction, facilitate training, and meet the needs for economic and workforce development. Last year IHETS provided bridging services for 35,000 hours of video conferences. These bridging services allow persons providing educational materials to disseminate the information to multiple end-user sites. IHETS also allows sites that utilize different video protocols, such as IP and ISDN, to communicate with one another. IHETS provides video webcasting in real time or can encode and archive programming for on-demand viewing by users around the world. IHETS also offers a managed firewall network service for small health care providers who lack the network security expertise or personnel to ensure safe video transmission.

Indiana Hospital and Health Association (IHHA): A State and regional organization representing 166 Hoosier hospitals and health systems, IHHA works to provide leadership, representation, and services in the common best interests of its members as they promote the improvement of community health status. IHHA is a network member of the Indiana Statewide Rural Health Network development process and is instrumental in working with the Indiana Rural Health Association.

Indiana Office of Community & Rural Affairs (OCRA): Initiated by Lieutenant Governor Becky Skillman in 2005 and led by David Terrell, OCRA seeks to improve the quality of life in rural areas. OCRA serves Indiana's rural communities through technical, financial and community assistance by helping Indiana's residents, community leaders, and grant writers use state and federal resources to meet their goals. OCRA also supports community development efforts in rural Indiana.

Indiana Health Information Exchange (IHIE): IHIE is a non-profit company incorporated in the state of Indiana on February 24, 2004. It was founded by a unique collaboration of 13 institutions representing hospitals, providers, researchers, public health organizations, and economic development groups, including: BioCrossroads, the Central Indiana Corporate Partnership, the City of Indianapolis, Clarian Health Partners, Community Health Network, Health and Hospital Corporation of Marion County, Indiana State Department of Health, Indiana State Medical Association, Indiana University School of Medicine, Indianapolis Medical Society, Marion County Health Department, Regenstrief Institute, St. Francis Hospital and Health Centers, and St. Vincent Health. The vision of IHIE is to use information technology and shared clinical information to:

- Improve the quality, safety, and efficiency of health care in the state of Indiana,
- Create unparalleled research capabilities for health researchers,
- Exhibit a successful model of health information exchange for the rest of the country.

IHIE is working to first connect health care facilities in Central Indiana and eventually across the entire state— by creating a common, secure, electronic infrastructure that expands communication and information-sharing among participating providers, hospitals, public health

organizations, and other health care (entities). Ultimately, this secure clinical messaging system will give providers better information for treatment purposes at the point-of-care, and it will give researchers a richer pool of data to guide more far-reaching treatment improvements over the longer run.

Indiana State Department of Health/Indiana State Office of Rural Health (ISDH): ISDH is a state government agency located in Indianapolis, Indiana. ISDH supports Indiana's economic prosperity and quality of life by promoting, protecting and providing for the health of Hoosiers in their communities. To achieve a healthier Indiana, the ISDH will focus on data-driven policy to determine appropriate evidence-based activities; evaluate activities to ensure measurable results; engage its partners and include appropriate intra-agency programs in policy-making and programming; view its essential partners to include local health departments, physicians, hospitals and other health care providers, other state agencies and officials as well as local and federal agencies and officials, community leaders, businesses, health insurance companies, Medicaid, health and economic interest groups, and other groups outside the traditional public health mode; and actively facilitate the integration of public health and health care activities to improve Hoosiers' health.

The State Office of Rural Health (SORH), housed within the Partner Relations Division of the Indiana State Department of Health, serves Indiana's rural populations based on the following five objectives: collect and disseminate rural health information; coordinate resources and activities statewide; provide technical assistance to meet rural community health needs; encourage recruitment and retention of health professionals in rural areas; strengthen state and federal partnerships. The programs within SORH support the ISDH mission, vision, and values noted above. The SORH works to integrate medical care and public health particularly through work with health information technology professionals in developing a telemedicine program which targets access to care for underserved Hoosiers. The SORH is also tasked with completing an assessment of Indiana's current telehealth programs and propose potential network opportunities by October 2007.

The State Office of Rural Health **and** Indiana Rural Health Association have built and maintained a strong partnership since the establishment of IRHA in 1997. The SORH fully supports the mission of **IRHA**, which is "*to enhance the health and well-being of rural populations in Indiana through leadership, education, advocacy, and collaboration.*" Several programs the SORH and **IRHA** have jointly supported include a critical access hospital benchmarking program, annual rural health conference, chronic disease management programs, critical access hospital quality improvement meetings, et cetera.

Indiana Office of Technology's (IOT): The IOT's mission is to provide cost-effective, secure, consistent, reliable enterprise technology services to its partner agencies so they can better serve Hoosier taxpayers. The Indiana Code, Article 13.1 established IOT as a state agency in July 2005 to:

1. Establish standards for the technology infrastructure of the state,
2. Focus state information technology services to improve service levels to citizens and lower costs of providing information technology services,

3. Bring the best and most appropriate technology solutions to bear on state technology applications,
4. Improve and expand government services provided electronically, and
5. Provide the technology and procedures for the state to do business with the greatest security possible.

Indiana Primary Health Care Association: The Indiana Primary Health Care Association (IPHCA) is a statewide, not-for-profit membership organization whose mission is promoting access to primary care in areas of need and ensuring the optimal development of Community Health Centers (CHCs) in Indiana. IPHCA's 23 organizational members – including 15 FQHCs – currently serve roughly 330,000 medically under-served patients in both rural and urban areas. IPHCA membership includes Community Health Centers, Migrant Health Centers, WIC facilities, and school-based programs; these organizations provide a full range of comprehensive primary care services, as well as numerous “whole-person” ancillary services.

IPHCA has a long history of working with its membership to facilitate the development of Information Technology (IT) infrastructure and applications in order to make its members' operations more effective, efficient, and quality-focused. In 1999, IPHCA convened the membership to begin discussing development of common practice management systems that could communicate with one another; among other issues, participants addressed the potentials of a data warehouse to enable sharing of common data and facilitate the submission of required reports to State and Federal funders.

In 2000, the Indiana State Department of Health (ISDH) awarded IPHCA the first year of Tobacco Settlement funding to help implement the initial phase of an electronic network model; this first phase established / upgraded electronic practice management systems within Indiana's CHCs. An RFP was submitted to 18 commercial vendors. As a result, nearly half of IPHCA's CHC members purchased HealthPro and a significant number of other CHCs selected Medical Manager, creating the beginnings of network data-sharing capability.

In 2003, IPHCA began receiving Federal funding to develop a Shared Integrated Management Information Services (SIMIS) network among its member Centers. These monies were to build on the first networking phase described above; the initial task carried out was an in-depth inventory of current IT capabilities within IPHCA's membership, in order to develop a baseline for future development options.

Following completion of this IT inventory, IPHCA initiated discussions on creation of a robust data warehousing capability, to foster sharing of data and resulting “best practices” benchmarking among and between the state's CHCs. A sequential multi-phase approach was conceived, as follows:

- Create the ability of CHCs to electronically produce ongoing reports required by State and Federal fund sources;
- Generate the ability to compare /benchmark productivity and cost data across CHCs;

- Create the ability of CHCs to evaluate chronic disease management practices and pathways (CHF, Diabetes, etc.), in cooperation with the regional Health Disparities Collaborative (now housed at IPHCA);
- Generate the ability to evaluate Pediatric and Adult clinical performance; and
- Ultimately create an ability to measure the economic and health impact of CHCs within their communities.

Soon this new initiative had a name – “*Cockpit*”, to crystallize the concept of multiple simultaneous data readouts that would help CHCs steer an ever-improving course toward optimal quality (of both organizational performance and patient care). In its initial years, *Cockpit* focused on developing the needed technological infrastructure and flexible interfaces that would enable subscribers to feed individualized information into a common database for comparison and benchmarking.

As part of this effort, six CHCs served as pilot sites for beta testing. In addition, a CHC Advisory Committee was created to help develop the program design and generate specific features that would be most useful to CHC CEOs, Medical Directors, CFOs, COOs, and Community Boards.

Cockpit has now been publicly rolled out and is actively generating subscriptions and processing subscriber data. It currently has nine subscribing CHCs in Indiana; the program’s eventual goal is to enroll virtually all Indiana CHCs, and as many subscriber organizations outside the state as possible. Clearly, the more subscribers that submit ongoing practice data, the more useful the resulting comparative statistics will be and the more robust “best practices” benchmarking will become.

The Indiana Rural Development Council (IRDC): The IRDC is a partnership of local, state, federal, profit and not-for-profit stakeholders that serve Indiana communities. The IRDC’s purpose is to coordinate efforts of citizens and governments to meet the economic and social needs of rural Indiana. In Indiana, 33% of our 6 million residents live in rural areas. Rural residents expect similar services from local government as urban areas, but these communities generally lack the tax base, staff and full-time leadership to support them. Therefore, many small towns lack the resources to provide the quality of life their residents deserve. Since its inception in 1993, the concept of the Indiana Rural Development Council is based on partnerships. Our mission states that we are a partnership of local, state, federal, profit and not-for-profit stakeholders that support Indiana communities. The IRDC’s purpose is to coordinate efforts of citizens and governments to meet the economic and social needs of rural Indiana. The objectives of IRDC are to:

- Provides a collaborative forum for addressing rural issues;
- Seeks community input to identify barriers and find solutions;
- Establishes partnerships to support innovative approaches to, and the more effective resolution of, rural development issues at all levels;
- Assists member agencies **and** organizations in structuring and implementing a problem solving process at the agency and/or organization level; and
- Serves as a voice on common issues of rural concerns.

Indiana Telehealth Advisory Consortium: This organization was formed in May of 2005 and is run solely on volunteer effort. TAC's mission is to look for ways to leverage and expand the use of telehealth technologies in Indiana, so that more Hoosiers are able to realize the benefits.

Specifically, we have identified three objectives: (1) Collaborate with state and local organizations to pool resources that may be used to facilitate telehealth and telemedicine applications, (2) Advance telehealth policy in the state of Indiana as well as help develop statewide telehealth initiatives, and (3) Provide educational resources to help others implement telehealth programs.

We hope you can utilize this site as a resource to better understand this technology and the potential it holds for future healthcare delivery. We also have provided links to local **and** national telehealth programs so you can see what is already being done. Please feel free to contact us for additional information.

Indiana University School of Medicine (IUSM): The IUSM was founded in 1903 – only the fourth medical school in the United States, after Johns Hopkins, Harvard, and Western Reserve, to require two or more years of collegiate work for admission. The school awarded the Doctor of Medicine (M.D.) degree to its first class of 25 in 1907. Currently the IUSM educates the second largest medical student body in the U.S. and the IUSM student body represents 52 of the 92 Indiana counties and 77 different colleges and universities.

The IUSM is located at nine sites throughout Indiana. The main campus is in Indianapolis and the other eight are located in Bloomington, Evansville, Fort Wayne, Gary, Muncie, South Bend, Terre Haute, and West Lafayette. The Indianapolis campus includes the IUSM, School of Health and Rehabilitation Sciences, School of Dentistry, School of Nursing, Riley Hospital for Children, and the IU Hospital of Clarian Health Partners, Wishard Memorial Hospital, and the Roudebush VA Medical Center.

The Indiana University Telecommunications/Global Research Network Operations Center (GRNOC): The GRNOC is a premier provider of highly responsive network coordination, engineering, and installation services that support the advancement of R&E networking. From its support of Internet2's Network, to National LambdaRail's FrameNet and PacketNet, to the IPGrid optical network, the Global NOC has become an unrivaled provider of 24x7x365 expert support for the most advanced research networks in the country.

The GRNOC works with partners and clients to develop custom-tailored, responsive, expert support. The services that the GRNOC provides include:

- **24x7x365 Service Desk and Ticket Coordination:** The Global NOC Service Desk is fully staffed at all times. It offers proactive network health monitoring; immediate professional, personal customer service; and trouble ticket creation/coordination.
- **Expert Network Engineering:** Once an issue has been created with the Global NOC Service Desk, an engineer from the Global NOC Engineering team handles that issue from start to finish, eliminating handoffs. Global NOC engineers provide Tier1, Tier2,

and Tier3 support for virtually any type or scope of network, from a regional DWDM network to a national IP network.

- **Network Design:** The Global NOC has proven expertise in collaborating with network owners on network design, specifically with an eye on the operational needs of networks.
- **Network Installation:** As networks grow and evolve, the Global NOC provides installation services as needed. We have a history of highly qualified installations in carrier-class facilities. This service includes everything from staging to shipping, final installation, and documentation and turn-up.

Midwest Alliance for Telehealth and Technology Resources (MATTeR): MATTeR leverages the combined expertise of four unique telehealth and health information organizations. We support existing and developing telehealth networks to meet the needs of rural and underserved residents. Our services are available across the nation, with special initiatives within the tri-state area of Michigan, Kansas and Indiana.

MATTeR's services and resources include:

- Creating strategic/business plans
- Network structure and best practice models
- Locating and assessing funding sources
- Developing vendor request for proposals (RFPs)
- Technology assessment
- Operations and program management
- Processes for clinical applications
- Distance educational programming for health care providers
- Evaluation design and metrics to help show that your program is making a difference
- Advocacy for telehealth and technology policy issues
- Speakers Bureau

Office of Governor Mitch Daniels: Mitchell E. Daniels, Jr. is the 49th Governor of the State of Indiana. He was elected on November 2, 2004, and sworn into office on January 10, 2005. Prior to running for public office for the first time in his life, Mitch Daniels served in top leadership positions in business and government. Today he is using this experience to focus on strengthening Indiana's economy, reforming state government, and restoring the fiscal integrity of the State.

Indiana is on an economic hot *streak*, thanks to Governor Daniels' strong leadership and the pro-active business-minded skills he brought to state government from his experience as President of Eli Lilly and Company's North American Pharmaceutical Operations and CEO of the Hudson Institute. Daniels created the public-private Indiana Economic Development Corporation (IEDC), became Chairman of its board, and ordered it to act at the speed of business, not the speed of government, to attract new jobs. During its first year, the IEDC closed more transactions than in the previous two years combined. In 2006, the IEDC topped its 2005 results in only ten months. Indiana became the only state in the nation to land three high profile automotive investments - Toyota, Honda, and Cummins. The Governor's focus on renewing

Indiana's agricultural sector and strengthening our rural communities moved Indiana to the forefront in the biofuel and clean energy areas.

Governor Daniels has called not only upon his experience in business, but also on his past service as Chief of Staff to Senator Richard Lugar, Senior Advisor to President Ronald Reagan, and Director of the Office of Management and Budget (OMB) under President George W. Bush. Governor Daniels created Indiana's first Office of Management and Budget to look for efficiencies and cost savings across state government. In 2005, Governor Daniels led the state to its first balanced budget in eight years and, without a tax increase, turned the \$600 million deficit he inherited into a \$300 million surplus in a single year. Governor Daniels used this surplus to repay hundreds of millions of dollars the state had borrowed from Indiana's public schools in previous administrations.

Regenstrief Center for Healthcare Engineering (<http://www.purdue.edu/rche/>): The role of the Regenstrief Center for Healthcare Engineering (RCHE) at Purdue University is to improve the efficiency, quality and accessibility of healthcare by tapping into expertise in engineering, science, management and social sciences. Launched in 2005 with a gift from the Regenstrief Foundation, the center is the only integrated university-wide effort in healthcare engineering in the nation. As such, RCHE has several unique features:

- Catalyst for improvement. RCHE functions as a catalyst for researchers, policy makers and providers to improve the efficiency, quality, and accessibility of health care through research characterized by creativity and adaptability.
- Systems-analysis approach. RCHE uses systems analysis to structure and study complex issues in healthcare, providing a basis to engineer new solutions in the delivery system.
- Interdisciplinary research. RCHE adopts an interdisciplinary approach that includes all professions and disciplines involved in healthcare research.
- Supply chain orientation. RCHE views healthcare delivery as the result of actions among interdependent parties; from raw inputs to services provided to those in need. The center adopts the supply chain model to describe the relationships among the interdependent parties at four levels: patient, care team, organization, and environment.
- Recognition of diverse expectations. RCHE recognizes that individuals, families, groups, communities, populations and systems are beneficiaries of the healthcare system and represent different expectations and needs of the healthcare system.
- Healthcare partnerships. RCHE Partners with representatives of major components of the supply chain as research collaborators and "living laboratories," providing sites for research, implementation of research findings, and assessment of relevance.
- Commitment to results. RCHE evaluates whether research recommendations achieve sustainable and desirable operational results.
- Knowledge dissemination. RCHE contributes to the body of knowledge pertaining to healthcare delivery and engineering by citing relevant reported research and publicly disseminating research findings through industry partners.
- Discipline development. RCHE assumes an active role in the development of healthcare engineering as a discipline.

Because of these features, RCHE is in an ideal position to collaborate with Indiana healthcare providers in the development of research protocols associated with the expansion of telemedicine and telehealth initiatives resulting from increased broadband access, provide evaluation frameworks for assessing the impact of telemedicine initiatives on healthcare, and to provide consultative expertise in the design of pilot programs relying on broadband expansion.

Riley Hospital Child Development Center – LENDlinks:

LENDlinks is a division of Riley Hospital’s Child Development Center and the IU School of Medicine. LENDlinks is a title V training consortium for creating distance learning modules on bright futures in practice: Mental Health Issues in Infants and Children (birth-age 6). The seven Maternal and Child Health Bureau (MCHB) LEND programs in Regions V and VIII currently serve as distance learning sites in the LENDlinks consortium to provide: “A Leadership Connection for Communication, Collaboration and Continuing Education”.

One of the greatest needs for continuing education exists at the community level in rural, underserved areas. LENDlinks helps to bridge that knowledge gap by developing and disseminating videoconferences and distance learning modules targeted for state Title V personnel and related agencies in HHS Regions V and VIII to improve systems of care for CSHCN with mental health problems. The project is funded by the Health Resources and Services Administration. Maternal and Child Health Bureau.

United States Department of Agriculture, Rural Development - Indiana State Office: Rural Development is a mission area under USDA and includes the Rural Utilities Service, Rural Housing Service and Rural Business Service. We work with many agencies and groups to help provide a starting point to address business, community or housing needs. Our mission is to enhance the ability of rural people: in Indiana to create, build and sustain ventures within communities by building partnerships and investing financial and technical resources in areas where there is the greatest need.

USDA Rural Development operates direct and guaranteed loan and grant programs designed to strengthen rural businesses, finance new and improved rural housing, build or improve water and waste water systems, develop community facilities, and maintain and create rural employment. The USDA Rural Development Vision Statement: Partners in helping people of rural America develop sustainable communities.

The roles and responsibilities of the previously listed statewide partner organizations in the development of the Indiana Health Network are to:

1. Participate in the *Indiana Health Network* advisory board and committees
2. Provide technical assistance and expertise as appropriate regarding issues to be addressed by the network.

Participating Health Care Providers:

CAHs are located in rural areas, have 25 beds or less, provide general acute care services, and many are located in Health Professional Shortage Areas. CAHs continue to experience tenuous financial bottom lines and often lack the dollars necessary to make investments in needed

infrastructure. In addition, these small rural hospitals often lack the ability to attract and retain health care providers, and particularly specialty care providers. Accordingly, patients are forced to travel long distances to receive health care services, which is both time consuming and costly for rural residents. Given these facts, CAHs comprise the majority of hospitals that are identified in this proposal for inclusion in the network during year one and year two. It is the intention of the network to provide broadband connectivity to the remaining rural hospitals in subsequent years. Final decisions regarding the utilization of funding to provide connections to the network will be dependent upon the results of the completed network design study, recommendations from the technology/network design committee, and approval from the advisory board.

Indiana's rural hospitals would comprise Tier 1 of the network given the fact that each hospital would serve as a node or hub for connectivity. Once the fiber backbone of the network is constructed by connecting the nodes or hubs at each rural hospital, providing high-speed connectivity to the surrounding rural clinics would be more feasible. This rationale is substantiated by the fact that the majority of Indiana's Rural Health Clinics are located in close proximity to a rural hospital, which serves as a patient referral site. Accordingly, the network members anticipate adding the 57¹⁸ federally designated Rural Health Clinics to the network in subsequent years, all of which are located in Health Professional Shortage Areas, as well as other health care providers (i.e. Federally Qualified Health Centers; state funded Community Health Centers, private physician practices, etc.), which would establish Tier 2 of the network. A list of Indiana's federally qualified Rural Health Clinics has been included in Appendix f on pages 110 - 112. These clinics are also indicated on the map located in Appendix C on page 105.

In a recent study completed by Weck'n Call for the Indiana State Department of Health's State Office of Rural Health titled *Bridging the Life Span: Technology In the Future of Indiana's Rural Healthcare Providers*, the authors states that "All hospitals, including rural hospitals, are recommended to obtain connectivity of 30 Mbps or more, capable of supporting multiple simultaneous clinical applications. In addition, Rural Health Clinics are recommended to obtain at a minimum a T1 level connection (1.5 Mbps), capable of supporting commodity videoconferencing, clinical messaging and more efficient small data file transfers"¹⁸ For the purposes of this project, the co-applicants are recommending a minimum of 100 megabyte connectivity for rural hospitals in order to adequately prepare for future applications/bandwidth needs and to supply the bandwidth necessary to insure that the hospital can serve as an "anchor tenant" in small rural communities, thereby bring broadband connectivity to entire rural communities. By adopting these standards, Indiana will be better able to become "adequately connected" and better utilize health technology-enhanced health care.

◆ **THE HEALTH CARE FACILITIES THAT WILL BE INCLUDED IN THE NETWORK WITH THE ORGANIZATION NAME, ADDRESS, TELEPHONE NUMBER, AND RUCA CODE (REQUIREMENT 6 & 7).**

The complete contact information including the name of the facility, address, phone number, and RUCA code, has been included in Appendix G on pages 113 - 116 for all of Indiana's rural hospitals that have been identified for inclusion in the network. The identified facilities were

¹⁸ Beck'n Call. *Bridging the Life Span: Technology in the Future of Indiana's Rural healthcare Providers*. April 2007. page 30.

evaluated based upon the Health Professional Shortage Area (HPSA) designations of the county and surrounding counties; ruralness of the area (RUCA score); and geographic distribution of hospitals across the state. A chart showing each of the hospitals with the corresponding HPSA designation, RUCA score, and region of the state has been included in Appendix H on pages 117 - 118. It should be noted that although this criteria has been utilized, the final decision regarding the laying of fiber and connecting of individual hospitals to the network will be at the discretion of the Advisory Board and will not be finalized until a network design study has been completed and recommendations from that study have been made. Lastly, the number of hospitals that can be connected to the network will be dependent upon the amount of funding awarded by the FCC.

In future years the network members would add the remaining rural hospitals and clinics to the network. In addition, the members will work to solicit the participation of urban and suburban hospitals in the network in order to create an inclusive statewide network. These activities have already begun through discussions with many of the parent organizations that own and operate several of the identified Critical Access Hospital's that are listed in this proposal.

◆ **HEALTH CARE FACILITIES TO BE INCLUDED IN THE NETWORK (REQUIREMENT 6).**

Proposed Health Care Providers to be Included in the *Indiana Health Network*:

Adams Memorial Hospital	Perry County Memorial Hospital
Bedford Regional Medical Center	Pulaski Memorial Hospital
Blackford Co. Hospital	Putnam County Hospital
Bloomington Hospital of Orange County	Rush Memorial Hospital
Cameron Memorial Community Hospital	Saint Joseph Regional Medical Center
Community Hospital of Bremen	Schneck Medical Center
Daviess Community Hospital	Scott County Memorial Hospital
Decatur County Memorial Hospital	St. Clare medical Center
Dukes Memorial Hospital	St. Mary's Warrick
Dunn Memorial Hospital	St. Vincent Clay
Gibson General	St. Vincent Frankfort Hospital
Good Samaritan Hospital	St. Vincent Jennings
Greene County General Hospital	St. Vincent Mercy
Harrison County Hospital	St. Vincent Randolph
Henry County Hospital	St. Vincent Williamsport
Jasper County Hospital	Sullivan County Community Hospital
Jay County Hospital	The King's Daughters Hospital
Kosciusko Community Hospital	Tipton Hospital
LaGrange Community Hospital (Parkview)	Wabash County Hospital
Logansport Memorial Hospital	Washington County Memorial
Margaret Mary Community Hospital	West Central Community
Marion General Hospital	White County Memorial Hospital
Memorial Hospital and Health Care Center	Woodlawn Hospital

The Indiana Environment for FCC Application Development:

Diverse Partnerships: As early as 2006, representatives from the Indiana Rural Health Association and the Indiana Telecommunications Association initiated meetings to better understand each of their industry's positions on critical issues being discussed in the 2006 State Legislature. The Indiana Rural Health Association was invited to speak at the Indiana Telecommunication Association Annual meeting in 2006 in Louisville, and again at their Spring Meeting in 2007 at Swan Lake, Indiana on the subjects of telemedicine program development, business development partnerships in rural communities, and the FCC Rural Health Care Pilot Program. Therefore, several of the collaborative parties in this grant have been working together for nearly two (2) years laying a foundation for this Indiana Health Network project.

From this foundation, the co-applicants and writer's of this application have been able to assemble a diverse group of individuals and organizations from multiple sectors that include state and local government, private business, non-profit organizations, institutions of higher learning, as well as others, to create a multi-disciplinary approach for the development and implementation of the FCC's Rural Health Care Pilot Program. Given the multi-disciplinary nature of the grant application development and the true spirit of collaboration that has been displayed to this point, it is the belief of the applicant(s) that this project if awarded funding would be successful in implementing the *Indiana Health Network*.

This project will obviously have a very positive impact on the telecommunications industry, and a positive impact on rural communities with a rural hospital. It is our belief that the rural hospitals will serve as an anchor-tenant in many of Indiana's rural communities and will provide the ability of both smaller health care providers and rural communities to access broadband connectivity. The rural hospitals will then play a pivotal role in attracting and collaborating with community leaders to bring business, industry, and high speed communications to the rural areas of the state.

Senate Bill 489: Indiana Senate Bill 489: Funding for rural health care program, establishes the rural health care pilot program support fund to provide grants to Indiana health care providers who participate in the federal rural health care pilot program. The Indiana Senate unanimously passed SB 489 and on February 13, 2007 SB 489 was unopposed in the House with 46 yeas. On February 27, 2007 the bill was referred to the Committee on Public Health and was approved. Additional information regarding SB 489 can be found on-line at www.in.gov/legislative/bills/2007/SE/SE0489.1.html.

RESPONSE TO THE IDENTIFIED NEEDS

◆ **IDENTIFY THE GOALS AND OBJECTIVES OF THE PROPOSED NETWORK¹⁹ (REQUIREMENT 2)**

Goals, Objectives, Strategies, Activities, Responsible Agents, and Completion Milestones:

The network members have created a workplan that identifies the goals, objectives, strategies and activities of the network, which are listed in the Table I located on pages 47 - 51. A timeline of program activities has also been included on page 52.

¹⁹ Federal Communications Commission. Rural Health Care Support Mechanism. WC Docket No. 02-60 September 2006. page 6.

Table I: Indiana Health Network (InHN) FCC Rural Health Care Pilot Program Grant Workplan Overview

Vision: To establish a high speed health telecommunication information system capable of erasing distance as a barrier to accessing high quality health care for all people in Indiana.					
Goal	Objectives/Strategies	Activities	Responsible Organization	Time Period	Outcome & Process Measures
<p>1) To improve the health and well-being of Indiana residents, particularly those in rural areas, through the utilization of a dedicated broadband health network to deliver telehealth applications including but not limited to telemedicine, health information exchange, distance education and training, public health surveillance, emergency preparedness, and trauma system development</p>	<p>1) To implement the management structure necessary to support the successful development & implementation of the InHN.</p>	<p>1a) Convene initial meeting of the InHN Advisory Board to begin implementation of the project workplan.</p> <p>1b) Appoint chairs of InHN Committees</p> <p>1c) Recruit additional committee and advisory board members.</p> <p>1d) Hire InHN Project Director and Project Assistant.</p> <p>1e) InHN advisory board and committees will convene meetings as needed to facilitate implementation of the workplan.</p> <p>1f) Develop a comprehensive communication plan</p>	<p>1a) IRHA and co-applicant organizations with participation by identified network members</p> <p>1b) InHN Advisory Board</p> <p>1c) InHN Advisory Board and committee chairs</p> <p>1d) IRHA with input from co-applicants and advisory board members</p> <p>1e) IRHA Project Director and committee chairs</p> <p>1f) IRHA and the Project Director</p>	<p>1a) Within 60 days of grant award</p> <p>1b) By Quarter 1</p> <p>1c) Begin by Quarter 1 and continue as needed</p> <p>1d) By Quarter 2</p> <p>1e) Begin advisory board meetings during Quarter 1 and committee begin meeting by Quarter 2 and ongoing as needed throughout the project</p> <p>1f) Complete by the end of Quarter 1</p>	<p>1) Outcome Measures: By the end of Quarter 1 the management structure and staff necessary to support the successful development and implementation of the InHN will be in place.</p> <p>2) Process Measures: Development of advisory board and committees and commencement of meetings by the end of Quarter 1 Distribution of minutes and other network information via website by the end of Quarter 1 Recruitment of additional network members as needed that will begin during Quarter 1 Hiring of the Indiana Health Network Project Director and Project Assistant by Quarter 2 Development of Communications Plan that will be distributed to key stakeholders by the end of Quarter 1 Implementation of the network communication plan will begin by Quarter 2.</p>

Goal	Objectives/ Strategies	Activities	Responsible Organization/Agent	Time Period	Outcome & Process Measures
	<p>1) Construct a dedicated broadband network that will support the nHN.</p>	<p>2a) Secure a vendor to implement a network design study</p> <p>2b) Initiate a network design study to determine how best to deploy the In ** .</p> <p>2c) Develop regional technology plans to be used in RFP process</p> <p>2d) Communicate network design requirements to USAC.</p> <p>2e) Review of bids submitted to FCC in response to RFP(s).</p> <p>2f) Notify providers regarding bid selection.</p> <p>2g) Complete work prescribed in RFPs</p>	<p>2a) Advisory Board with direction from Technology/ Network Design Committee</p> <p>2b) IRHA with direction from Technology/ Network Design Committee</p> <p>2c) Technology/Network Design Committee, Project Director, USAC</p> <p>2d) Project Director</p> <p>2e) Project Director & Technology/Network Design Committee</p> <p>2f) In ** Advisory Board and IRHA Project Director</p> <p>2g) Telecom Providers with oversight from advisory board and Project Director</p>	<p>2a) Within the first 30 – 45 days of notice of grant award</p> <p>2b) During Quarter 1</p> <p>2c) During Quarter 2</p> <p>2d) By the end of Quarter 2</p> <p>2e) During Quarter 3</p> <p>2f) Anticipate by Quarter 3, dependent on USAC code processing</p> <p>2g) Begin by Quarter 3/ Complete by Quarter 4 (dependent upon USAC Code Processing and weather)</p>	<p>2) Outcome Objectives: By the end of the project, the necessary high-speed connections will be in place to fully support the In ** .</p> <p>Process Measures:</p> <ul style="list-style-type: none"> ● Network design study initiated within the first 30 – 45 days of notice of award ● Network design study completed by the beginning of Quarter 2 ● Communication plan developed during Quarter 1 ● Website development completed to facilitate communication among network members during Quarter 1 ● RFPs for network development and implementation completed by USAC (anticipate during Quarter 2) ● Bids submitted in response to Indiana Health Network RFPs during Quarter 3 ● Network development activities (i.e. management of the network, technical assistance/support, etc.) initiated as prescribed in the year one RFP(s) begins during Quarter 3 ■ Network development activities successfully implemented/completed as prescribed in the year one RFP(s) by the end of Quarter 4 ■ Completion of tasks as identified in the workplan by rural hospitals and telecom vendors is monitored to ensure timelines and to insure that goals and objectives are reached. ● Preparation of year two FCC Rural Health Care Pilot Program grant for continued network development will begin during Quarter 3

Goal	Objectives/ Strategies	Activities	Responsible Organization	Time Period	Outcome & Process Measures
	<p>3) Increase broadband access to and connectivity among Indiana’s health care providers.</p> <p>4) To increase the utilization of telehealth applications</p>	<p>3a) Participating health care providers connect to the InHN.</p> <p>3b) Participating health care providers receive technical assistance and support.</p> <p>3c) Additional health care providers will be recruited and join the InHN.</p> <p>3d) Determine ways to include the Indiana Office of Technology into the project</p> <p>4a) Convene InHN committees to address implementation and coordination of telehealth applications.</p>	<p>3a) Health Care Providers/ Network Members with assistance from InHN</p> <p>3b) Technical assistance and support provider contracted with by InHN</p> <p>3c) Health care providers, committee members, advisory board members, partnering organizations, and the IRHA Project Director</p> <p>3d) Network members, Project Director, and other network members</p> <p>4a) The Telehealth Applications Committee with participation by the IRHA Project Director</p>	<p>3a) Begin by Quarter 3</p> <p>3b) Begin by Quarter 3 and throughout the project</p> <p>3c) Begin during Quarter 1 and throughout the project</p> <p>3d) Begin during Quarter 1</p> <p>4a) Begin Quarter 1 and throughout the project</p>	<p>3) Outcome Objectives: By the end of year 2, 100% of Indian’s rural hospitals will have adequate high-speed access as a result of the activities of the Indiana Health Network.</p> <p>Process Measures:</p> <ul style="list-style-type: none"> • The hospitals that will connect to the network in year one, as identified in the network design study, will connect by the end of Quarter 4 • The provision of Technical assistance is available beginning during Quarter 3 and will be available throughout the project • Additional health care providers will be recruited to participate in network planning and implementation activities at the onset of the project. <p>4) Outcome Objectives: By the end of year two, the utilization of telehealth applications will have increased by 50% among participating health care providers/network members.</p> <p>By the end of year two, the utilization of coordinated telehealth applications will have increased by 100% among participating health care providers in network members.</p>