STATE AND REGIONAL EXPERIENCE IN
HEALTH INFORMATION COLLECTION, SHARING & REPORTING

A Review of National and Regional Demonstration Projects

Resources

Innovations and Opportunities

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Many envision a health care industry that is consumer centric and information-rich, in which medical information follows the consumer, and information tools guide medical decisions... This new way will result in fewer medical errors, fewer unnecessary treatments or wasteful care, and fewer variations in care, and will ultimately improve care for all Americans. Care will be centered around the consumer and will be delivered electronically as well as in person. Clinicians can spend more time on patient care, and employers will gain productivity and competitive benefits from health care spending.¹

-National Coordinator for Health Information Technology

The Institute of Medicine reports that “[i]n the 20th Century, bricks and mortar constituted the basic infrastructure of the healthcare delivery system. To deliver care in the 21st century, the system must have a health information and communications technology infrastructure that is accessible to all patients and providers.”²

Public and private sector entities in Wisconsin and nationally have risen to this challenge, devising innovations in data collection. They are designed variously to improve the quality, safety, and efficiency of patient care, and enable health care purchasers and consumers to make more informed decisions on the quality and cost of care.

These trends have fostered substantial investments in health information technology. Leaders in government, health care, public health, and industry are working together to consider how to forge well-integrated information infrastructures at the local, regional, and statewide levels that achieve the goals set out by IOM and demanded by today’s health care purchasers.

The Vision

The National Health Information Infrastructure (NHII) concept envisions providing electronically the information necessary for decision-making at the time it is needed, in the place where it is needed, and by the people who need it. It would connect physicians, hospitals, health care purchasers and payers, researchers, public health professionals, and consumers.


The federal Agency for Healthcare Research and Quality (AHRQ) has identified five goals for the adoption of health information technology:

1. Improve patient safety by reducing medical errors.
2. Increase health information sharing between providers, laboratories, pharmacies, and patients.
3. Help patients transition between health care settings.
4. Reduce duplicative and unnecessary testing.
5. Increase our knowledge and understanding of the clinical safety, quality, financial, and organizational value and benefits of health information technology.

Promoters of electronic health information technology cite wide-ranging potential benefits: Improved speed and quality of information, reduced interface costs, and increased data accuracy, timeliness, and efficiency; Improved patient safety, quality, and health outcomes; Enhanced performance reporting; Better ability to address public health and improve access to care.

But many challenges and issues remain. Among them:

- Organization and governance: Who will participate? What will the legal structure be? Who will have control?
- Lack of upfront funding and sustainable business models.
- Technical issues including those related to architecture, accurately linking patient data, applications, standards and security.
- Effectively engaging practicing clinicians and supporting clinical process change.
- Assuring patient privacy.
- Legal issues such as fraud and abuse, anti-trust concerns, and HIPAA compliance.

The technological barriers alone are daunting:

- Linking data requires accurate patient identification.
- Aggregating one patient’s data from disparate sources requires compatible files.
- Provider identification is necessary so the source of data is known.
- Certification and qualifications are necessary before participation in a project.
- The overall architectural model. For example, how will participants communicate? Will data be stored in a central repository or will it stay with its source and be accessed by others from the outside?
- How will technological standards be selected?
- Semantic interoperability – all participants must be using the same words to describe the same things.
- Data elements, structures, messages, wrappers – how will data be transferred?
- Secure connectivity and transport.
- Encryption, Authentication, Integrity, Non-repudiation.
Innovations and Opportunities

This paper reviews initiatives throughout the country in the arena of statewide and regional health care data repositories, regional health information organizations, and other efforts toward electronic integration of health data. A separate paper, prepared by the Bureau of Health Information and Policy in the Wisconsin Department of Health and Family Services, catalogues the variety of initiatives here in Wisconsin.

But as background for this paper, we recognize the advances of two of Wisconsin’s larger health care quality organizations, which have recently agreed to work together to make the information they report easier for patients to use.3

Checkpoint, a Wisconsin Hospital Association (WHA) initiative, collects and reports data from 122 hospitals statewide. It provides 14 measurements on heart attack, congestive heart failure, and pneumonia treatments. It also measures hospitals’ efforts to prevent errors, including the use of standardized abbreviations, acronyms, and symbols. CheckPoint has been preparing to collect and report data on prices and cost.

The Wisconsin Collaborative on Healthcare Quality is an organization of 41 hospitals, physician groups, clinics and health plans in southeast and eastern Wisconsin, which tracks its own 64 measurements in 12 categories. It published its results in a “Performance and Progress Report” in October 2003 and has a second report due in spring 2005 with quarterly updates to follow.

The two organizations have now agreed to work together to make data easier to access and interpret. The cooperative effort will begin in March with the development of a web site portal with links to both groups’ existing web sites. The two groups will then go on to develop one combined site to include all the provider data and other consumer support information. Checkpoint and the Quality Collaborative also plan to work together to develop new measures of health care quality and efficiency, including cost data.

Looking Ahead

Such initiatives in the private sector have advanced in parallel to a number of public sector developments. Wisconsin now faces a critical challenge and an opportunity: to integrate its public and private sector data, allowing consumers access to more seamless health information in support of their purchasing decisions – data on outpatient and ambulatory care providers and inpatient measures; data that measures quality and safety; and valid, consistent data across providers and systems on prices and cost. And finally, data that integrates health care data with public health surveillance, in order to allow genuine evaluation and tracking, on both determinants and outcomes, of the health of the Wisconsin’s population.

National and Regional Demonstration Projects: A Review

More than 100 local and regional demonstration projects are currently underway, but very few are fully functioning. The federal Agency for Healthcare Research and Quality in October 2004 awarded five multi-year grants to create statewide health information networks. These projects, newly underway, are in Colorado, Indiana, Rhode Island, Tennessee, and Utah. Representative examples of statewide and regional projects are described below.

Maine Health Data Organization (MHDO)
http://mhdo.maine.gov/inhdo

The MHDO is an independent state agency charged with collecting clinical and financial healthcare information and making it available to the public for research and analysis. The MHDO Board of Directors include representatives of consumers, employers, healthcare buyers, hospitals, physicians, home-health providers, federally qualified health centers, pharmacists, and mental health providers.

The MHDO collects hospital inpatient data, hospital financial data, non-hospital data on ambulatory surgeries and diagnostic services, hospital outpatient data, and emergency department data. Legislative mandates drive the collection of data from payers statewide.

All payer/all provider claims data database: The MHDO partners with the Maine Health Information Center (www.mhic.org) to provide an all payer/all provider claims database. Every licensed health insurer and third-party administrator must submit a copy of all claims paid on behalf of Maine residents. The claims database is administered by the Maine Health Data Processing Center, a public-private non-profit entity funded jointly by the two sponsoring organizations.

The Maine Health Data Processing Center contains data on medical, pharmacy, and dental claims, as well as patient demographics. The Center’s computer technology allows for the electronic submission of more than 400 monthly data sets from more than 150 submitters, loading into relational tables, and quality assurance for the integrity of the data.

Indiana Health Information Exchange (IHIE)
http://www.ihie.org/default.htm or http://www.regenstrief.org/

The non-profit IHIE was established in February 2004 to improve health information efforts among thirteen institutions representing hospitals, providers, university researchers, public health organizations, state government, and economic development groups.

This effort was initiated by the Regenstrief Institute, an independent firm closely affiliated with the University of Indiana and the Health and Hospital Corporation of
Marion County, IN. The Regenstrief Institute established a standardized electronic health record for use in Indianapolis area hospitals. In addition, emergency departments were connected to patient care records compiled from local hospitals and stored in a central database.

More recently, the IHIE has established a clinical messaging system that allows providers to access laboratory results, medical images, and EKG results through a secure system. Approximately 2,500 providers were participating at the end of 2004 and IHIE expects that 3,500 providers will use the system by mid-2005. This system also allows the sharing of patient electronic medical records between providers, when a patient gives permission. This eases the transition from one health care setting to another and/or transitions between providers.

The Indiana Health Information Exchange is a public/private collaborative, developed using financing from the Indiana State Department of Health, the City of Indianapolis, and private funders. Initial funding also came from the federal Agency for Healthcare Research and Quality and the eHealth Initiative, a non-profit group with an affiliated private foundation, both dedicated to improving healthcare through the use of technology. Finally, the IHIE has begun to charge users for services in order to recuperate costs of network maintenance and expansion of services through tailored software to meet user needs. Laboratories and other data sending organizations are responsible for funding the network and pay for the convenience of transmitting results electronically.

Massachusetts – Simplifying Healthcare Among Regional Entities (MA-SHARE)
http://www.mahealthdata.org/index.html

The Massachusetts Health Data Consortium initiated MA-SHARE in March 2003 with the goal of establishing a network for community clinical connectivity.

The Massachusetts Health Data Consortium is a public/private organization of that serves as a neutral entity in the collection and dissemination of healthcare-related data and a forum for the exchange of ideas between health care organizations. The group is funded by membership fees from government agencies, private companies, the eHealth Initiative, and grants from member healthcare organizations.

The current primary activity of MA-SHARE is implementing an information exchange system that allows emergency room physicians to access patient prescription medication histories compiled from multiple sources and presented at the point-of-care. Necessary parts of the project are writing computer software, building the network infrastructure, and developing a decentralized data storage system.

A decentralized system allows a user to query all other connected databases regarding information specific to a particular patient, identify where information is being stored, and collect the information at the point-of-care. (A simple comparison might be music file-sharing technology like Napster or Kazaa.) Initial feasibility demonstrations began in
October 2003 when three hospitals were linked to patient prescription drug histories provided by Blue Cross Blue Shield of Massachusetts, Massachusetts Group Insurance Commission, Harvard Pilgrim Health Care, MassHealth, Neighborhood Health Plan, and Tufts Health Plan.

The MA-SHARE program is also funding several other projects. These include:

- **Electronic Health Records Project**, which aims to expand the use of electronic records to internal medicine office practices.
- **Electronic Patient Centered Communication Project**, to educate the public and health care professionals about the appropriate and safe use of electronic transmission of protected health information.
- **Bioterrorism Syndromic Surveillance**, a health data exchange that alerts public health officials of possible health and safety threats.
- **Pathology Database Query** to ease tracking of cancer patients as they transition between different providers.

**Santa Barbara County Care Data Exchange (SBCCDE)**

http://ccbh.ehealthinitiative.org/profiles/SBCCDE.mspx  

The Santa Barbara County Care Data Exchange runs as a partnership between public and private health care organizations within Santa Barbara County, California and CareScience, a national provider of online care management services to hospitals, health systems, and pharmaceutical and biotechnology companies. These parties include providers, payers, hospitals, clinics, laboratories, pharmacies, and the University of California – Santa Barbara.

Participating organizations began by identifying the information sharing needs of each organization and dividing into four Care Data Alliances based upon mutual data sharing goals. Each Alliance was represented on the two advising committees, the Technical Advisory Committee and the Clinical Advisory Committee, as well as the project’s governing body, the Care Data Exchange Council.

The SBCCDE project has successfully linked more than 75% of Santa Barbara County health care providers, allowing them to share patient information and obtain a more complete health record at the point-of-care. The information sharing system is a web based peer-to-peer system that allows the health care organization that generated the data to maintain control of protected health information while granting access to authorized users for viewing purposes. Providers requesting patient information sign in and perform a search of a master patient index to identify where patient data is stored. The software then generates a list of hypertext links to the patient information that the provider may follow to access the patient’s health care records including laboratory results, radiology images, and medical histories.
The SBCCDE is now in the process of evaluating the financial benefits and improvements in patient safety that are expected as a result of health information exchange.

The SBCCDE project was funded by a three year, $10 million grant from the California HealthCare Foundation and a grant from the eHealth Initiative and later became a not-for-profit corporation.

**Tri-Cities TN-VA Care Data Exchange**

www.ehealthinitiative.org/assets/documents/CHIPBehringer106.ppt

The Tri-Cities Care Data Exchange operates in the Kingsport, Tennessee region, with participants located in fourteen sprawling counties in both Tennessee and Virginia. It is a public-private project involving the two major health systems in the region, the veterans’ hospital, a group representing over 85% of the behavioral care providers, the largest physician (general and specialist) practice group in the region, the largest employer, the two major insurance providers, several of the region's local health departments, and the area's college of medicine.

The goal of this project is to create a health information exchange that will allow multiple users with various electronic record systems to exchange information in a multi-jurisdictional environment. The Care Data Exchange will be a peer to peer network allowing holders of electronic medical records to retain and maintain data while a search interface handles security, record identification, and distribution.

If successful, the Care Data Exchange will offer insights for rural health information exchange initiatives that face the organizational, legal, financial, technical, and clinical challenges of delivering care across vast distances and state boundaries.

The Care Data Exchange is governed by a broad-based committee with representatives from all the institutions listed above. The Care Data Exchange is funded by contributions from participant organizations and a grant from the eHealth Initiative.

**Connecting Communities Colorado eHealth Initiative (CCCeHI)**

http://ccbh.ehealthinitiative.org/Awardee_ConnectingColorado.mspx

The Connecting Colorado eHealth Initiative is a collaborative effort of four principal health care delivery systems: the Denver Health integrated hospital and community clinic system, the Children’s Hospital, the University of Colorado Hospital, and the Kaiser Permanente of Colorado health plan.

Connecting Communities is in the planning stage of a project to establish a sustainable business model and the necessary network and security to comply with state and federal regulations regarding the exchange of protected health information. The project will try
to allow providers to access patient electronic health records generated by other providers. To achieve interconnectivity, the Initiative has proposed creating a Master Patient Index and a peer-to-peer network for providing secure access to health information.

Connecting Communities is currently funded by a grant from the eHealth Initiative and an AHRQ grant given to support expansion of the initial demonstration project to a statewide health information exchange.

**MD/DC Collaborative for Healthcare IT**

[http://ccbh.ehealthinitiative.org/Awardee_MDandDC.mspx](http://ccbh.ehealthinitiative.org/Awardee_MDandDC.mspx)


Baltimore and Washington D.C. area private practice physicians established the Maryland/DC Collaborative for Healthcare IT in 2001. The Collaborative has since been joined by community hospitals, health care systems, and academic medical centers, including Johns Hopkins Medicine, University of Maryland Medicine, and MedStar Health, and has set a long term goal of “wiring” a community care data exchange infrastructure to allow for the appropriate exchange of health information among all parties involved in the delivery of health care in the region. The Collaborative has enlisted involvement of payers, employers, ancillary centers, and the federal and state government in planning and implementation.

The Collaborative is establishing a statewide Beta testing project that will demonstrate the feasibility and legality of exchanging protected health information across the region and an Alpha testing project that allows providers to obtain patient health records at the point of care. Both of these demonstration projects were initiated in September 2004. The Alpha project involves the participation of two primary care physician practices that currently use electronic health records, two specialty care practices using standardized EHRs, a community hospital, two imaging centers, and two commercial laboratories.

The Collaborative’s project is unique to other proposed health information exchange initiatives in that the project plan includes specific assessment criteria for the reduction in tests ordered in emergency departments and other indicators of improved efficiency of care to evaluate its Alpha and Beta projects.

The MD/DC Collaborative has formed a non-profit corporation and is currently funded by membership dues and by a grant from the eHealth Initiative. The governance structure of the Collaborative is based on a triumvirate of represented parties. Members are divided into Class A, B, or C based upon their professional affiliations. Class A is comprised of DC or Maryland licensed physicians, class B is made up of health systems that include a primary teaching hospital for a school of medicine, and class C consists of other health systems or independent hospital corporations. Each class elects six representatives to the board of directors and each director has one vote in conducting corporate business.
Taconic Health Information Network and Community (THINC)

http://ccbh.ehealthinitiative.org/Awardee_Taconic.mspx
http://www.taconicipa.com/info/press.cfm

The Taconic Health Information Network and Community (THINC) is a health information exchange connecting community physicians, hospitals, reference laboratories, pharmacies, payers, employers, and consumers within New York’s Hudson Valley. THINC was established in 2001 through the efforts of Taconic IPA, Inc., Benedictine Hospital, Kingston Hospital, LabCorp, MVP Healthcare, and Vassar Brothers Medical Center.

A unique part of THINC is support and user training provided to clinicians and their staffs. These aids encourage adoption of health information technology.

THINC allows providers to access patient records generated by other participating organizations and compile the patient EMR at the point of care, giving a complete medical record.

THINC is working to expand its health information exchange to the remainder of the region and to create incentives for the adoption of a standardized electronic medical record system throughout the Hudson Valley. Such incentives include pay-for-performance programs within its network of 2,300 physicians in over 500 practices. THINC has solicited the participation of health insurance organizations to expand the use of such incentives.

The THINC project is currently funded by charitable donations to the Taconic Education and Research Fund and a grant from the eHealth Initiative.

Inland Northwest Health Services: Spokane, Washington (INHS)

http://www.inhs.org/newsite/about/html/about.html

The INHS makes extensive use of health information technology. Utilizations include the following:

- Electronic medical records. Thirty-two facilities are connected through a private network and utilize a standard information system. All patient records for facilities are stored using a unique Master Patient Index. The integrated database contains all data associated with hospital inpatient and emergency room visits, including physician orders, medication information, laboratory data and radiological images.

- Immediate availability. Electronic medical records can be obtained from the database and securely delivered to a doctor’s personal digital assistant prior to going on rounds.
Remote access. The electronic medical record system is also a source of information for physicians and health care providers in the community. Providers outside a hospital setting are able to view hospital, laboratory and imaging data through a user-friendly web-based interface.

Computerized Physician Order Entry (CPOE) and nursing documentation systems. Both CPOE and nursing documentation ensure that clinical decisions and treatment outcomes are entered immediately into the patient record, without the risk of transcription errors.

Secure and private records. Patient information is available on a “need-to-know” basis. Physicians and care providers assigned to a patient’s care are able to access individual electronic records. To grant access to consulting physicians or tertiary care providers, a request for a consult must be placed in the computer system. A series of checks and balances limits access to only authorized personnel. Periodic audits of the records provide an internal review of who is accessing records.

Informatics Section, Dept. of Emergency Medicine, Northwestern University

http://nwu.asatte.org/informatics_projects.htm

The Northwestern University Memorial Hospital Informatics Section has undertaken a number of demonstration projects in the provision of care. These include the following:

- An alliance with the Northwestern Memorial Hospital for live data feeds into the hospital’s data center. This data updates a comprehensive data repository created by the Emergency Department, making possible a real-time assessment of Department and Hospital status reports to facilitate operations and patient care.

- The installation of a patient tracking system for the Emergency Department and its Observation Unit. The tracking system makes possible the automated printing of past visit and past medical histories, access to private physician information and patient contact information, as well as triggers and alerts to drive patient flow and patient satisfaction.

- Real-time monitoring and reporting of data related to overcrowding, bio-surveillance, the Hospital’s bed status, service quality indicators, and safety measures.

- Design of a prototype voice-in/voice-out wireless system to provide real-time patient data and decision support to Emergency Department clinicians.
Whatcom County e-Prescribing Project

ccbh.ehealthinitiative.org/Awardee_Whatcom.mspx

The Whatcom County e-Prescribing Project is located in Bellingham, Washington. The project’s participants include the Whatcom Health Information Network, LLC, St. Joseph Hospital, Madrona Medical Group, Family Care Network, three specialty practices, and hospital-based and retail pharmacists.

The goal of the project is to improve prescription information exchanges between providers and pharmacists. Specifically, the project aims to:

- Provide an electronic prescribing system for providers who currently do not use electronic health records.
- Support electronic prescribing for those who do have electronic health records.
- Test electronic prescribing at four pilot sites with a product that: (1) provides formulary information at the point of prescription, and (2) supports further development of a single accurate medication list for a patient across organizational boundaries.

The intent is to reduce medication errors based on incomplete information and illegible handwriting, automatically check for duplicate or incompatible prescriptions and allergies, and create a single medication list to ensure that providers have complete medication information regarding their patients at the time of prescription.

Partial funding for the e-Prescribing Project comes from the eHealth Initiative.

Wisconsin Health Information Exchange (WHIE)

http://ccbh.ehealthinitiative.org/Awardee_WHIE.mspx

The Wisconsin Health Information Exchange project (WHIE) is a regional collaborative that aims to create a single easy-to-use portal for three existing health information networks: the EMSystem network for emergency care, the state Public Health Information Network, and the state Immunization Registry. Creators of the Health Information Exchange argue that separately these networks are underused, but joined together, they contain the building blocks of a successful health information exchange: a patient index, standards-based data storage/transmission, and security.

The Health Information Exchange was established in the Fall 2004 through a grant from the eHealth Foundation. Its initial goals are to:

- Establish governance for a nine-county health information exchange (covering Sheboygan, Fond du Lac, Washington, Ozaukee, Milwaukee, Waukesha, Racine, Kenosha and Walworth counties).
- Develop a pilot secure portal for the three existing networks named above.
- Create a sustainable business plan, including development of a membership structure and stable funding.

The three information networks to which access will be provided by the Health Information Exchange have different characteristics.

- The Wisconsin Immunization Registry (WIR) receives and displays vaccination records.
- Wisconsin’s Health Alert Network (HAN)/Public Health Information Network (PHIN) includes a provider database; a rudimentary Master Patient Index; standardized vocabulary for electronic laboratory result reporting; and case management information systems for public health clients.
- Finally, the EMSSystem displays real-time information from emergency rooms across Southeast Wisconsin. It permits a different (but overlapping) set of professionals access to confidential information based on their clinical or public health roles.

The National Institute for Medical Informatics is the incubator for the Health Information Exchange’s early growth, providing 501(c)3 status, neutral “turf,” and expertise in health informatics and collaborative governance. Once a robust governance and business model is established, the Health Information Exchange can become an independent organization as determined by its members.

**Resources**

Several national resources can provide information and support as public and private entities in Wisconsin move forward with health information technology projects. More information on all these projects is available at [http://www.hhs.gov/healthit/](http://www.hhs.gov/healthit/).

1. **Office of the National Coordinator for Health Information Technology**
   
   [www.os.dhhs.gov/healthit/](http://www.os.dhhs.gov/healthit/)

   The lead federal agency responsible for work related to health information technology (HIT). Since its creation, the Office has created a strategic framework for the adoption of HIT nationwide, created commissions to develop HIT standards and to create a private sector mechanism to certify the proper adoption of HIT, and undertaken the adoption and use of HIT within the federal government. To guide its future work, the Office is currently receiving comments on achieving and sustaining wide spread interoperability of health information exchanges nationwide.
2. **Agency for Healthcare Research and Quality**

The federal AHRQ mission is to support research designed to improve the quality, safety, efficiency, and effectiveness of health care for all Americans. Eighty percent of the Agency’s budget is used for research grants, including grants on health information technology.

The Department of Health and Human Services recently announced $139 million in funding of HIT-related programs through the AHRQ to fund HIT implementation and health information exchange networks. AHRQ is also launching a National Health Information Technology Resource Center that is designed to provide support to grantees and other healthcare stakeholders across the country.

3. **eHealth Initiative and the Foundation for eHealth Initiative**
   [http://ccbh.ehealthinitiative.org/default.mspx](http://ccbh.ehealthinitiative.org/default.mspx)

These companion organizations share the mission to promote the adoption and use of health information technology. These groups provide grant money for HIT projects, convene conferences so HIT actors can learn from each other, and provide support for states and organizations undertaking HIT projects.

The eHealth Initiative has launched a project called State Health Information Technology Policy Summit Initiative. According to the eHealth Initiative, “The goal of State Policy Summit Initiative is to help public policy officials and key stakeholders in the healthcare and business communities develop state policy agendas that support the rapid development and implementation of HIT. Through this process we hope to provide an opportunity for local input into the national dialogue and help states prepare for the important work that lies ahead.”

The project will work in four areas:

- The Value Proposition for State Investment in Health Care Information Technology.
- State Law and Legal Issues That Influence the Effective use of Health Care Information Technology.

In addition, support for HIT projects comes from seven working groups covering all aspects of HIT. These are:

- The Working Group for Connecting Communities.
• The Working Group for Financing and Sustainability.
• The Working Group for HIT for Small and Medium Practices.
• The Working Group for the Leadership in Global Health Technology (LIGHT) Initiative.
• The Working Group on Electronic Prescribing.
• The Policy and Advocacy Working Group.
• eHealth Initiative Employer and Purchaser Advisory Board.

The State Policy Summit Initiative and each of the working groups could provide practical advice to Wisconsin actors wishing to learn more about HIT or develop a HIT project.

4. National Health Information Technology Resource Center
   http://www.norc.uchicago.edu/about/index.asp

The National Opinion Research Center (NORC) leads this project from a base at the University of Chicago. Collaborators include the Regenstrief Institute, the Center for Information Technology Leadership, the Vanderbilt Center for Better Health, Computer Sciences Corporation, and the eHealth Initiative Work Group for Connecting Communities.

This consortium has been awarded a multi-million dollar, multi-year contract by AHRQ to establish and operate the National HITRC. The National HITRC will support the work of over 100 planning, implementation, evaluation and demonstration projects covering all aspects of HIT funded by AHRQ and other Federal partners. It will provide direct technical assistance and consulting services to individual projects during all phases of their work to develop and use health information technology. Particular focus will be placed on providing services to support challenges facing health information technology implementation in rural settings.

5. National Center for Emergency Medicine Informatics
   http://www.ncemi.org/

The Center is a not-for-profit institute dedicated to the advancement of emergency medicine through the application of information technology. The Center’s website offers more than 100 different tools to help with clinical emergency medicine, medical education, medical research, and ER management, including clinical calculators, reference materials, medical search engines, online books, EKG archives, x-rays, and links to other emergency medicine sites.