

Health Information Technology Programs— Update 2005-06

The mission of AHRQ is to improve the quality, safety, efficiency, and effectiveness of health care by:

- Using evidence to improve health care.
- Improving health care outcomes through research.
- Transforming research into practice.

Background

In September 2004, the Agency for Healthcare Research and Quality (AHRQ) awarded \$139 million in grants and contracts to promote the use of health information technology (health IT) through the development of networks for sharing clinical data as well as projects for planning, implementing, and demonstrating the value of health IT. Additional grants and State contracts in the amount of \$27 million were awarded in September 2005, which will allow 16 of the original planning project grants to carry out the plans they developed in their earlier grants. Eleven of the 16 grants were awarded to small and rural communities—areas of special emphasis for AHRQ's health IT initiative.

Also in 2005, the Department of Health and Human Services (HHS) launched a pilot project to measure the impact of electronic prescribing data transmission systems on patient safety and quality of care.

The goals of these research projects are to:

- Improve patient safety by reducing medical errors.

Acronyms

IT – information technology
HIT – health information technology
EMR – electronic medical record
EHR – electronic health record
HIE – health information exchange
CPOE – computerized physician/provider order entry
CDSS – clinical decision support system

- Increase health information sharing between providers, laboratories, pharmacies, and patients.
- Help patients transition between health care settings.
- Reduce duplicative and unnecessary testing.
- Increase our knowledge and understanding of the clinical, safety, quality, financial, and organizational value and benefits of health IT.
- Foster partnerships and collaboration, especially in small or rural areas.





Introduction

In its 2001 report, *Crossing the Quality Chasm*, the Institute of Medicine (IOM) identified health IT as one of the most significant tools that could help improve health care quality in the United States. Further, the IOM, the National Committee on Vital and Health Statistics, and the President's Information Technology Advisory Committee also have recommended the development of a National Health Information Infrastructure to help improve safety, reduce costs, and enhance the quality of health care. To accelerate progress on developing a national electronic health information system, in April 2004 President Bush announced the formation of the Office of National Coordinator for Health Information Technology within the HHS. In September 2005, HHS Secretary Mike Leavitt announced the creation of the American Health Information Community, chaired by the Secretary. The 17 members of this committee will advise HHS on how to transform the delivery of health care by building a new health information infrastructure, including electronic health records and a new network to link health records nationwide. The AHRQ grants and contracts are an integral part of the President's emphasis on investment in health IT that improves health care quality and safety.

Transforming Healthcare Quality Through Health Information Technology

In 2004, AHRQ awarded over 100 grants totaling \$96 million in 38 States to help communities, hospitals, providers, and health care systems plan, implement and demonstrate the value of health IT. Additional implementation grants totaling over \$22 million were awarded in 2005. The planning grants supported the development of the health IT infrastructure and data sharing capacity among clinical provider organizations in their communities and helped those communities compete for

future implementation grants. The implementation grants support community-wide health IT, with emphasis on diverse and rural health care settings. The grants to demonstrate the value of health IT focus on how the adoption and use of health IT can improve patient safety and quality of care.

State and Regional Demonstrations in Health Information Technology

In 2004, AHRQ awarded 5 State or State-based contracts totaling \$25 million over 5 years to develop statewide networks allowing major purchasers of health care, public and private payers, hospitals, ambulatory care facilities, home health care providers, and long-term care providers to use health IT to communicate and share information. The five States are Colorado, Indiana, Rhode Island, Tennessee, and Utah. In 2005, an additional State contract was awarded to Delaware and a regional contract was awarded to Calspan-UB Research Center (CUBRC) in Buffalo, New York, for a combined total of \$5 million.

E-Prescribing Pilot Projects

In addition, HHS has awarded nearly \$6 million to four grantee teams, RAND Corporation, Santa Monica, CA; Brigham and Women's Hospital, Boston, MA; SureScripts, Alexandria, VA; and Achieve Healthcare Information Technology, MN, as part of a pilot project to test initial standards for electronic prescribing. The project, which will run during calendar year 2006, involves testing several systems of electronic data transmission standards and determining how efficiently and effectively prescriptions and prescription-related information can be sent to and received by the providers and pharmacies participating in electronic prescribing for Medicare Part D beneficiaries. The project will be administered jointly by the Centers for Medicare & Medicaid Services (CMS) and AHRQ.

The AHRQ National Resource Center for Health Information Technology

A consortium led by the National Opinion Research Center (NORC) at the University of Chicago was awarded a multi-million dollar, multi-year contract to establish and operate the AHRQ National Resource Center for Health Information Technology (the National Resource Center). The National Resource Center supports the work of the health IT projects funded by AHRQ and other Federal partners, and provides direct technical assistance and consulting services to individual projects during all phases of their work to develop and use health IT. Particular focus is placed on providing services to support challenges facing health IT implementation in rural settings.

Research resulting from these contracts and grants should provide important information to the health care system on how health IT can be successfully implemented. The findings will estimate the direct and indirect costs, identify the benefits and barriers to health IT adoption, and demonstrate how health IT can lead to safer and better health for all Americans. For more information about AHRQ, the health IT program, and resources available through the National Resource Center, visit <http://healthit.ahrq.gov>.

ALASKA

Total funding: \$138,344

Central Kenai Peninsula Health Collaborative Technology

Assesses current technology resources and plans implementation of area-wide electronic communications and connectivity to electronic health records and a patient-support, Web-based data system.

Estimated total funding: \$138,344
Principal Investigator: Susan Caswell
Applicant Institution: Central Peninsula General Hospital, Inc., Soldotna, AK
Grant No.: P20 HS14902
Estimated dates: 9/30/2004-9/29/2005

ARKANSAS

Total funding: \$1.46M

Arkansas Delta Inpatient/Outpatient Quality Improvement

Implements a computer decision-support system in a 23-county service area in both inpatient and outpatient settings, including several rural clinics; includes a training component for physicians and other health care providers as well as a hospital pharmacy component for adverse drug event management and prevention strategies.

Estimated total funding: \$1,465,539
Principal Investigator: Cinda Bates
Applicant Institution: St. Bernards Medical Center, Jonesboro, AR
Grant No.: UC1 HS15059
Estimated dates: 9/30/2004-9/29/2007

CALIFORNIA

Total funding: \$11M

El Dorado County Safety Net Technology Project

Develops a comprehensive plan for health IT implementation and integration by assessing specific clinical and organizational needs, feasibility of health IT implementation, defining project parameters, developing the implementation plan, and specifying procedures for ongoing evaluation and feedback.

Estimated total funding: \$185,972
Principal Investigator: Greg Bergner
Applicant Institution: Marshall Medical, Placerville, CA
Grant No.: P20 HS14908
Estimated dates: 9/30/2004-9/29/2005

2005

El Dorado County Safety Net Technology Project/Access El Dorado County (ACCEL)

Coordinates and integrates communication related to patient care, using a chronic care model, and permits sharing of patient demographic data through a Master Patient Index among authorized providers. First steps include using health IT to establish a medical "home" for underinsured and uninsured patients, maximizing patients' insurability, and coordinating pediatric mental health services.

Estimated total funding: \$1,491,985
Principal Investigator: Greg Bergner
Applicant Institution: Marshall Medical, Placerville, CA
Grant No.: UC1 HS016129
Estimated dates: 9/30/2005-9/29/2008

Crossing the Quality Chasm in Eastern Rural County

Develops a regional collaborative and business plan for implementing health IT in a rural region; also conducts a telemedicine demonstration project to assess the barriers and issues of broad health IT intervention including telemedicine/teleradiology, scan/store medical record, chronic disease registry and personal health record, and linking the region's partners.

Estimated total funding: \$199,145
Principal Investigator: Kiki Nocella
Applicant Institution: Tehachapi Hospital, Tehachapi, CA
Grant No.: P20 HS15342
Estimated dates: 9/30/2004-9/29/2005

2005

Accessing the Cutting Edge—Implementing Technology To Transform Quality in SE Kern

Creates a community-wide electronic medical records system to improve quality and chronic disease management in the region; upgrades the use of health IT in medical practices; fosters relationships among physicians; and provides education and support to the community.

Estimated total funding: \$1,484,361
Principal Investigator: Kiki Nocella
Applicant Institution: Tehachapi Hospital, Tehachapi, CA
Grant No.: UC1 HS016146
Estimated dates: 9/30/2005-9/29/2008

IT Systems for Rural Indian Clinic Health Care

Integrates health services research, clinic redesign, and electronic practice management by partnering with three rural Tribal Health Programs to implement EHR with CDSS.

Estimated total funding: \$1.5M
Principal Investigator: Susan Dahl
Applicant Institution: California Rural

Indian Health Board, Sacramento, CA
Grant No.: UC1 HS15339
Estimated dates: 9/20/2004-8/31/2007

Tulare District Hospital Rural Health EMR Consortium

Builds on an existing infrastructure to construct a fully integrated EMR to give clinicians real-time access to patient data through pharmacy management, laboratory management, patient scheduling, barcoding, clinical physician order entry, electronic signature, insurance eligibility, and Pyxis medication-dispensing units at nursing stations.

Estimated total funding: \$1.5M
Principal Investigator: Paul Galloway
Applicant Institution: Healthcare Management Systems, Tulare, CA
Grant No.: UC1 HS15096
Estimated dates: 9/30/2004-9/29/2007

Santa Cruz County, CA Diabetes Mellitus Registry

Expands an established Web-based, interactive Diabetes Mellitus Registry that provides patient histories and needed tests at the point of care among public, private, and not-for-profit health care providers; also tracks the diabetes population to identify trends in key indicators of care.

Estimated total funding: \$1,352,725
Principal Investigator: F. Wells Shoemaker
Applicant Institution: Pajaro Valley Community Health, Watsonville, CA
Grant No.: UC1 HS15362
Estimated dates: 9/30/2004-9/29/2007

Impact of Health Information Technology on Clinical Care

Evaluates the effects of staggered installation of an Epic health IT system that includes an electronic medical record with provider order entry and clinical decision support in primary care settings on quality, safety, and resource use within a large integrated delivery system serving a cohort of 780,000 members with chronic illnesses.

Estimated total funding: \$1,487,606
Principal Investigator: John Hsu
Applicant Institution: Kaiser Foundation Research, Oakland, CA

Grant No.: R01 HS15280
Estimated dates: 9/30/2004-9/29/2007

2005

Pilot Testing of Electronic Prescribing Standards

In addition to testing the standards, the project will determine changes in drug use, clinical outcomes, and patient satisfaction as a result of e-prescribing.

Estimated total funding: \$1,850,826
Principal Investigator: Douglas S. Bell
Applicant Institution: RAND Corporation, Santa Monica, CA
Grant No.: U18 HS016391
Estimated dates: 1/01/2006-12/31/2006

COLORADO

Total funding: \$5M

Colorado Connecting Communities-Health Information Collaborative (C3-HIC)

Implements State-wide information and communications technologies to enable clinicians to access patient information from other clinical data repositories at the point of care.

Estimated total funding: \$5.0M
Project Director: Arthur J. Davidson
Contracting Institution: University of Colorado Health Sciences Center, Aurora, CO
Contract No.: 290-04-0014
Estimated dates: 9/30/2004-9/29/2009

CONNECTICUT

Total funding: \$2.66M

Electronic Records To Improve Care for Children

Implements and evaluates a community-wide EHR for health care providers in pediatric primary care, school health, specialty care, and emergency medicine who provide care for inner-city children with asthma.

Estimated total funding: \$1,183,278
Principal Investigator: Richard Shiffman
Applicant Institution: Yale University, New Haven, CT
Grant No.: UC1 HS15420
Estimated dates: 9/30/2004-9/29/2007

Web-Based Renal Transplant Patient Medication System

Develops and evaluates Web-enabled education tools in hospitals and homes for renal transplant patients to reduce medication errors and improve safety and compliance using wireless portable computers.

Estimated total funding: \$1,474,873
Principal Investigator: Amy Freidman, Yale University, New Haven, CT
Grant No.: R01 HS15038
Estimated dates: 9/01/2004-7/31/2007

DELAWARE

Total funding: \$4.7M

2005

Delaware Health Information Network

Implements State-wide information and communications technologies to enable clinicians to access patient information from other clinical data repositories at the point of care.

Estimated total funding: \$4.7M
Project Director: Geena Perez
Contracting Institution: Delaware Health Information Network
Contract No.: 290-05-0012
Estimated dates: 1/01/2006-12/31/2011

FLORIDA

Total funding: \$746,069

HIT for Medication Safety in Critical Access Hospitals

Develops an implementation plan for pharmacy health information systems in critical access hospitals to include an onsite survey of health IT, flowcharting the medication use system, and an assessment of resources.

Estimated total funding: \$147,831
Principal Investigator: Abraham Hartzema
Applicant Institution: Doctor's Memorial Hospital, Bonifay, FL
Grant No.: P20 HS15325
Estimated dates: 9/30/2004-03/31/2005

Promoting Patient Safety with Web-Based Patient Profiles

Explores the feasibility of a community-wide strategic implementation plan for Web-based standardized patient care to provide point-of-care access to patient information across acute and long-term care systems and services.

Estimated total funding: \$198,238
Principal Investigator: Rosemary Laird
Applicant Institution: Health First, Inc., Cocoa Beach, FL
Grant No.: P20 HS14885
Estimated dates: 9/30/2004-9/29/2005

2005

Buddy Technology

Creates and tests technology to aid in the care of patients suffering from Alzheimer's disease.

Estimated total funding: \$400,000
Principal Investigator: Annie Becker
Applicant Institution: Florida Institute of Technology
Contract No.: SA 20060010
Estimated dates: 12/16/2005-12/15/2006

GEORGIA

Total funding: \$1.5M

Comprehensive IT Solution for Quality and Patient Safety

Implements a series of new health information technologies in carefully staged processes over 2 years to include an Inpatient Pharmacy System, Electronic Medication Administration Record, Bar Coding System, and a CPOE System; evaluates the impact of these systems on safety, quality and efficiency.

Estimated total funding: \$1,495,572
Principal Investigator: Ann Beach
Applicant Institution: Children's Healthcare of Atlanta, Atlanta, GA
Grant No.: UC1 HS15236
Estimated dates: 9/30/2004-9/29/2007

HAWAII

Total funding: \$3.14M

Holomua Project—Improving Patient Hand-Offs in Hawaii

Develops approaches to share data on patient clinical and diagnostic

information across systems and create an implementation plan for systems integration.

Estimated total funding: \$176,500
Principal Investigator: Christine Sakuda
Applicant Institution: Hawaii Primary Care Association, Honolulu, HI
Grant No.: P20 HS15248
Estimated dates: 9/30/2004-9/29/2005

2005

Holomua Project—Improving Transitional Care in Hawaii

Develops a patient Master Visit Registry (MVR), addressing the need for better information sharing among clinical organizations and enhancing their ability to give patients continuous high-quality care when they change providers. The MVR will expand upon an existing patient record-keeping system, while improving local handling and exchange of records.

Estimated total funding: \$976,200
Principal Investigator: Christine Sakuda
Applicant Institution: Hawaii Primary Care Association, Honolulu, HI
Grant No.: UC HS016160
Estimated dates: 9/30/2005-9/29/2008

Quality Focused Connectivity

Implements an HIE to the three rural islands of the State of Hawaii: Maui, Kauai, and the island of Hawaii that focuses on preventive health care, providing an opportunity for care to be addressed in a comprehensive manner so that the responsibility of health improvement shifts from the current physician focus on illness to a patient-centered focus on wellness.

Estimated total funding: \$500,000
Principal Investigator: Daniel Heslinga
Applicant Institution: Quality Healthcare Alliance, Honolulu, HI
Grant No.: UC1 HS15003
Estimated dates: 9/30/2004-9/29/2005

IDAHO

Total funding: \$1.1M

Rural Connection: Strengthening Care Through Technology

Explores health IT as a method of sharing patient information and develops an electronic health record for

patients who utilize rural, urban, acute, and rehabilitation facilities.

Estimated total funding: \$179,198
Principal Investigator: Anne Oglevie
Applicant Institution: Weiser Memorial Hospital, Weiser, ID
Grant No.: P20 HS14883
Estimated dates: 9/30/2004-9/29/2005

Rural Community Partnerships—EMR Implementation Project

Implements an ambulatory EMR in multiple rural primary and specialist care provider settings and measures the impact of health IT on clinical practice, organizational structure, and financial benefits; integrates ambulatory EMR case scenarios into the curricula of the Health Science and Human Services Department to ensure that future health care providers have adequate training and exposure to ambulatory EMR technology.

Estimated total funding: \$924,216
Principal Investigator: R'Nee Mullen
Applicant Institution: Magic Valley Memorial Hospital, Twin Falls, ID
Grant No.: UC1 HS15302
Estimated dates: 9/20/2004-8/31/2007

ILLINOIS

Total funding: \$6.1M

Linking Rural Providers To Improve Patient Care and Health

Develops a central EHR system that will allow sharing of health information between a hospital, medical group, county health department, and behavioral health organization for rural economically disadvantaged, ethnic/racial minority residents, the elderly, and persons with special/complex health care needs.

Estimated total funding: \$199,053
Principal Investigator: Timothy Broos
Applicant Institution: Katherine Shaw Bethea Hospital, Dixon, IL
Grant No.: P20 HS15023
Estimated dates: 9/30/2004-9/29/2005

Sharing Patient Record Access in Rural Health Settings

Develops an implementation plan for an ambulatory EMR in a medically underserved region that will

electronically connect physician offices, the regional hospital, ancillary services, and other community health services; identify indicators to track measurable improvements in patient safety, quality of care, clinician and patient satisfaction, and operational efficiency.

Estimated total funding: \$175,173
Principal Investigator: Michael DeLuca
Applicant Institution: Sarah Bush
Lincoln Health Center, Mattoon, IL
Grant No.: P20 HS15113
Estimated dates: 9/30/2004-9/29/2005

2005

Implementing an Ambulatory Electronic Medical Record and Improving Shared Access

Implements an emergency medical records system that will provide shared access to patient records across various community health care providers and incorporates electronic tools for prescription distribution and management.

Estimated total funding: \$1,500,000
Principal Investigator: Michael DeLuca
Applicant Institution: Sarah Bush
Lincoln Health Center, Mattoon, IL
Grant No.: UC1 HS016128
Estimated dates: 9/30/2005-9/29/2008

Enhancing Quality in Patient Care (EQUIP) Project

Implements an EHR system in a network of community health centers and develops a data warehouse to monitor, aggregate, and provide data for quality improvement.

Estimated total funding: \$1,499,132
Principal Investigator: Fred Rachman
Applicant Institution: Erie Family
Health Center, Chicago, IL
Grant No.: UC1 HS15354
Estimated dates: 9/30/2004-8/31/2007

Toward an Optimal Patient Safety Information System

Promotes and evaluates the interchange of patient safety information and the reporting of adverse events and close calls among public and private voluntary incident reporting systems being used at U.S. hospitals.

Estimated total funding: \$1,498,434
Principal Investigator: Andrew Chang
Applicant Institution: Joint
Commission on Accreditation of
Healthcare Organizations (JCAHO),
Oakbrook Terrace, IL
Grant No.: R01 HS15164
Estimated dates: 9/30/2004-9/29/2007

Value of Technology To Transfer Discharge Information

Assesses the value of software applications to facilitate information transfer during the high-risk transition from hospital to home at discharge and compares health IT to usual care for benefits outcomes, adverse events, effectiveness, costs, and satisfaction among patients and physicians.

Estimated total funding: \$1,263,634
Principal Investigator: James Graumlich
Applicant Institution: Board of Trustees
of the University of Illinois, Chicago, IL
Grant No.: R01 HS15084
Estimated dates: 9/01/2004-8/31/2007

INDIANA

Total funding: \$9.3M

An Evolving Statewide Indiana Information Infrastructure

Develops and implements HIE using an established technical infrastructure and interconnects local health information infrastructures; also implements a State-wide public health surveillance network that links all hospitals to share emergency department data.

Estimated total funding: \$5.0M
Project Director: Marc Overhage
Contracting Institution: Indiana
University School of Medicine,
Indianapolis, IN
Contract No.: 290-04-0015
Estimated dates: 9/30/2004-9/29/2009

Improving Health Care Through HIT in Morgan County, IN

Creates a secure infrastructure for communication among providers to allow electronic sharing of patient clinical information with hospitals and other physicians/health providers in the county, region, and State; also assesses the effectiveness of the system in improving workflow, timeliness and

completeness of information, patient safety, continuity of care, and health outcomes.

Estimated total funding: \$1,489,942
Principal Investigator: Paul Clippinger
Applicant Institution: Morgan Hospital
and Medical Center, Martinsville, IN
Grant No.: UC1 HS15258
Estimated dates: 9/30/2004-9/29/2007

Value of Health Information Exchange in Ambulatory Care

Assesses the value of HIE in ambulatory care by modifying an existing economic model of HIE and testing the model in a randomized controlled trial.

Estimated total funding: \$1,499,662
Principal Investigator: Marc Overhage
Applicant Institution: Indiana
University, Indianapolis, IN
Grant No.: R01 HS15409
Estimated dates: 9/30/2004-9/29/2007

Value of New Drug Labeling Knowledge for e-Prescribing

Creates a prescribing tool with decision support (checking dosage, contraindications, and drug interactions) that can be easily integrated into a provider's practices; implements and pilot tests the tool to evaluate its benefits and costs.

Estimated total funding: \$1,356,108
Principal Investigator: Gunther
Schadow
Applicant Institution: Indiana
University, Indianapolis, IN
Grant No.: R01 HS15377
Estimated dates: 9/08/2004-8/31/2007

IOWA

Total funding \$4.47M

EMR Planning To Improve North Iowa Health Care

Designs a system-wide patient-centered planning process and an EHR implementation plan that will securely exchange patient information within and across diverse health care settings for the Hancock County Memorial Hospital and 21 affiliated physician health organization clinics.

Estimated total funding: \$199,976
Principal Investigator: Toni Ebeling

Applicant Institution: Hancock County Health Services, Britt, IA
Grant No.: P20 HS15396
Estimated dates: 9/30/2004-9/29/2005

2005

Collaborative EHR Implementation To Bridge the Continuum of Care in Rural Iowa

Shares an electronic medical records system that will improve patient safety and quality of care. Also serves as a critical learning tool for clinicians in a coalition of three large health organizations and 24 primary care clinics in northern Iowa.

Estimated total funding: \$1,474,178
Principal Investigator: Toni Ebeling
Applicant Institution: Hancock County Health Services, Britt, IA
Grant No.: UC1 HS016156
Estimated dates: 9/30/2005-9/29/2008

Rural Iowa Redesign of Care Delivery with EHR Functions

Implements a comprehensive, integrated, EHR system with CPOE and clinical decision-support tools in hospital inpatient units, ambulatory care, primary care and specialty clinics, home health, and hospice care; also evaluates medical errors and near misses, use of evidence-based practices, responsiveness to adverse drug alerts, and patient/provider satisfaction.

Estimated total funding: \$1,499,869
Principal Investigator: Donald Crandall
Applicant Institution: Mercy Medical Center-North Iowa, Mason City, IA
Grant No.: UC1 HS15196
Estimated dates: 9/30/2004-8/31/2007

Health Information Technology Value in Rural Hospitals

Documents the patient safety and health care quality challenges in critical access to rural hospitals; assesses health IT capacity in these rural hospitals and how they would use health IT to improve safety and quality; develops decisionmaking health IT toolkits for other rural hospitals.

Estimated total funding: \$1,304,478
Principal Investigator: Marcia Ward
Applicant Institution: University of Iowa, Iowa City, IA

Grant No.: R01 HS15009
Estimated dates: 9/01/2004-8/31/2007

KENTUCKY

Total funding: \$3.0M

Meeting Information Needs of Referrals Electronically

Identifies essential technological needs for accessing and sharing data and information between patients and health care providers; develops an implementation plan to expand the transmission of referral information electronically in a closed health system to an open system.

Estimated total funding: \$197,528
Principal Investigator: Carol Ireson
Applicant Institution: University of Kentucky Research Foundation, Lexington, KY
Grant No.: P20 HS15208
Estimated dates: 9/30/2004-9/29/2005

Connecting Healthcare in Central Appalachia

Implements and trains staff on the use of an EMR system in a rural integrated health care delivery system serving approximately 20 counties throughout Eastern Kentucky and Southern West Virginia.

Estimated total funding: \$1.5M
Principal Investigator: Polly Bentley
Applicant Institution: Appalachian Regional Health, Hazard, KY
Grant No.: UC1 HS15182
Estimated dates: 9/30/2004-8/31/2007

ED Information Systems-Kentucky & Indiana Hospitals

Implements and trains users of a Web-based electronic record system in the emergency departments of two small community hospitals, one medium-sized community hospital, one rural hospital, and three private primary care physician practices; evaluates the reduction in medical errors, waiting time, and costs as well as patient and physician satisfaction.

Estimated total funding: \$1,302,554
Principal Investigator: David Pecoraro
Applicant Institution: Jewish Hospital Health Care, Louisville, KY
Grant No.: UC1 HS14897
Estimated dates: 9/30/2004-9/29/2007





LOUISIANA

Total funding: \$3.2M

Cardiovascular Care Disparities: Safety-Net HIT Strategy

Designs the implementation of a longitudinal cardiovascular disease information system platform to address disparities viewed as a lifelong disease process, and examines the impact of health IT on quality improvement, medical and financial effectiveness, and increased value.

Estimated total funding: \$194,499
Principal Investigator: Bruce Ferguson
Applicant Institution: Louisiana State University Health Sciences Center, New Orleans, LA
Grant No.: P20 HS15305
Estimated dates: 9/30/2004-9/29/2005

Distance Management of High-Risk Obstetrical Patients

Develops a technology plan to improve access to maternal-fetal medicine services throughout the State and guides the implementation of telemedicine capabilities to provide real-time remote diagnostic ultrasound and consultative services to women with high-risk pregnancies.

Estimated total funding: \$187,624
Principal Investigator: Candice Ferguson
Applicant Institution: Woman's Hospital, Baton Rouge, LA
Grant No.: P20 HS15435
Estimated dates: 9/30/2004-9/29/2005

HIT Service Integration

Creates a detailed assessment of the feasibility of health IT implementation including the development of an implementation plan, specification of clinical and organizational needs, identification of goals, and identifying barriers and ways to address those barriers.

Estimated total funding: \$200,000
Principal Investigator: Michelle Lemming
Applicant Institution: Franklin Foundation Hospital, Franklin, LA
Grant No.: P20 HS15195
Estimated dates: 9/30/2004-9/29/2005

2005

Service Integration

Builds an integrated communications system with area hospitals, clinics and service providers in St. Mary Parish, Iberia Parish, and Terrebonne Parish that will support chronic disease management and improve patient safety. Authorizes health care providers will have swift, secure access to important patient information at the point of care.

Estimated total funding: \$1,500,000
Principal Investigator: Michelle Lemming
Applicant Institution: Franklin Foundation Hospital, Franklin, LA
Grant No.: UC1 HS016151
Estimated dates: 9/30/2005-9/29/2008

Louisiana Rural Health Information Technology Partnership

Implements a Complete Medical Record (a computerized emergency department communication, documentation, passive tracking, and medical records system) in an emergency department and evaluates the use of this technology toward improving patient safety and quality of care.

Estimated total funding: \$1,125,258
Principal Investigator: Paul Salles
Applicant Institution: Assumption Community Hospital, Napoleonville, LA
Grant No.: UC1 HS14953
Estimated dates: 9/30/2004-9/29/2007

MAINE

Total funding: \$4.5M

The Chronic Care Technology Planning Project

Plans for standard exchange of clinical information for patients with chronic disease when transitioning from acute to non-acute care settings between primary care physicians, outpatient specialists, home health providers, nursing homes, and hospitals; creates an Institute for Healthcare Improvement Breakthrough Series Learning Collaborative to build on their work

implementing the Chronic Care Model by enhancing the use of IT.

Estimated total funding: \$188,739
Principal Investigator: John Branscombe
Applicant Institution: The Aroostook Medical Center, Presque Isle, ME
Grant No.: P20 HS14949
Estimated dates: 9/30/2004-9/29/2005

2005

The Chronic Care Technology Project

Facilitates transfer of information among providers and patients in the Presque Isle community; implements a model of chronic care management; and educates area health care providers on how best to use current information systems to communicate with each other.

Estimated total funding: \$1,312,329
Principal Investigator: John Branscombe
Applicant Institution: Aroostook Medical Center, Presque Isle, ME
Grant No.: UC1 HS016154
Estimated dates: 9/30/2005-9/29/2008

Midcoast Maine Patient Safety with IT Integration

Develops new systems and a high level of integration and cooperation in four significant areas: medication management, patient discharge, high-level integration of information, and the development of a new paradigm for evaluating, selecting, and implementing new technologies.

Estimated total funding: \$200,000
Principal Investigator: Maureen Buckley
Applicant Institution: Northeast Health Foundation, Rockland, ME
Grant No.: P20 HS15170
Estimated dates: 9/30/2004-9/29/2005

Improving Care in a Rural Region with Consolidated Imaging

Implements and evaluates the results of the Consolidated Imaging-Picture Archiving and Communication System (a shared, standards-based, interoperable health information technology) that makes radiology images available for review within minutes of when they are acquired.

Estimated total funding: \$1,382,861
Principal Investigator: Robert Coleman

Applicant Institution: Maine Medical Center, Portland, ME

Grant No.: UC1 HS15328
Estimated dates: 9/30/2004-9/29/2007

Improving HIT Implementation in a Rural Health System

Implements an outpatient EMR in a rural health system using distinct phases to match the expected learning curve and to reduce the potential loss of practice productivity often associated with the implementation of an EMR; also collects data about patient safety, quality, access, cost, and productivity.

Estimated total funding: \$1,375,179
Principal Investigator: Daniel Mingle
Applicant Institution: Maine General Medical Center, Augusta, ME
Grant No.: UC1 HS15337
Estimated dates: 9/10/2004-8/31/2007

MARYLAND

Total funding: \$1.56M

Community HealthLink Care: Regional EMR

Develops a secure, comprehensive, virtual health record for medically underserved patients that will lead to the implementation of a health IT infrastructure necessary to support a single, shared EMR application to promote the community-wide exchange of patient information for clinical decision support, research, and disease management on behalf of low-income, uninsured people.

Estimated total funding: \$200,000
Principal Investigator: Thomas Lewis
Applicant Institution: Primary Care Coalition of Montgomery County, Silver Spring, MD
Grant No.: P20 HS14962
Estimated dates: 9/30/2004-9/29/2005

2005

Metro DC Health Information Exchange (MeDHIX)

Implements a regional, Web-based electronic health record system, linking Washington, D.C., area providers who care for the underinsured and their families; creates a Web-based resource center for clinicians to use in decisionmaking; and ensures patient

control over access to their medical records.

Estimated total funding: \$1,363,135
Principal Investigator: Thomas Lewis
Applicant Institution: Primary Care Coalition of Montgomery County, Silver Spring, MD
Grant No.: UC1 HS016130
Estimated dates: 9/30/2005-9/29/2008

MASSACHUSETTS

Total funding: \$14.4M

Statewide Implementation of Electronic Health Records

Performs a rigorous evaluation of the impact of a State-wide implementation program on EHR adoption by rural and non-rural ambulatory care practices and its impact on medication errors and the quality of ambulatory care as a collaborative effort among providers, insurers, and businesses in cooperation with the State government.

Estimated total funding: \$1,497,154
Principal Investigator: David Bates
Applicant Institution: Brigham and Women's Hospital, Boston, MA
Grant Number: UC1 HS15397
Estimated dates: 9/30/2004-9/29/2007

SAFEHealth – Secure Architecture for Exchanging Health Information

Creates a local health information exchange infrastructure that integrates workflow and improves communication for patients, health care providers, payers, and public health agencies.

Estimated total funding: \$1,419,846
Principal Investigator: Lawrence Garber,
Applicant Institution: Fallon Clinic, Inc., Worcester, MA
Grant No.: UC1 HS15220
Estimated dates: 9/30/2004-9/29/2007

EMS-Based TIPI-IS Cardiac Care QI-Error Reduction System

Implements the time-insensitive predictive instruments built into the computerized electrocardiograph in emergency medical service settings and emergency departments; also evaluates its impact on reducing errors and avoidable delays in emergency care.

Estimated total funding: \$1,499,998
Principal Investigator: Harry Selker

Applicant Institution: New England Medical Center, Boston, MA
Grant Number: UC1 HS15124
Estimated dates: 9/30/2004-9/29/2007

Improving Pediatric Safety and Quality with Health Care IT

Assesses improvements in patient safety and experience of care associated with implementation of several decision support functions embedded in an electronic health record: (1) the influence of weight-based dosing on pediatric adverse drug events; (2) the influence of a test result tracking system on appropriate followup of ordered tests; and (3) the influence of automated reminders on symptom monitoring and medications for children with asthma and attention deficit disorder.

Estimated total funding: \$1,489,826
Principal Investigator: Timothy Ferris
Applicant Institution: Massachusetts General Hospital, Boston, MA
Grant No. R01 HS15002
Estimated dates: 9/30/2004-9/29/2007

Improving Safety and Quality with Outpatient Order Entry

Examines the impact of integrating ambulatory CPOE with advanced CDSS on safety and quality in the ambulatory setting, its organizational efficiency, workflow, and satisfaction, and conducts a cost-benefit analysis.

Estimated total funding: \$1,499,401
Principal Investigator: Tejal Gandhi
Applicant Institution: Brigham and Women's Hospital, Boston, MA
Grant No.: R01 HS15226
Estimated dates: 9/03/2004-8/31/2007

Value of Imaging-Related Information Technology

Assesses the impact of Medical Imaging Informatics on health care costs and quality and develops a business case related to the acquisition and implementation of automated radiology systems; develops a financial model to demonstrate the impact of these systems on provider systems and health care quality.

Estimated total funding: \$1,471,989
Principal Investigator: Scott Gazelle
Applicant Institution: Massachusetts General Hospital, Boston, MA
Grant No.: R01 HS14891
Estimated dates: 9/07/2004-8/31/2007

Health Information Technology in the Nursing Home

Assesses the effects of CDSS in nursing homes on medication ordering and monitoring for residents in long term care setting; also tracks costs and assesses productivity, impact, and nursing home culture and organization.

Estimated total funding: \$1,458,965
Principal Investigator: Jerry Gurwitz
Applicant Institution: University of Massachusetts, Worcester, MA
Grant No.: R01 HS15430
Estimated dates: 9/30/2004-9/29/2007

Evaluating Smart Forms and Quality Dashboards in an EHR

Assesses the value of health IT to clinicians through creation of CDSS tools integrated with clinical documentation workflow and physician performance feedback, its impact on clinical decision support and quality assessment, and its cost-effectiveness.

Estimated total funding: \$1,153,892
Principal Investigator: Blackford Middleton
Applicant Institution: Brigham and Women's Hospital, Boston, MA
Grant No.: R01 HS15169
Estimated dates: 9/30/2004-9/29/2007

ParentLink: Better and Safer Emergency Care for Children

Evaluates the completeness and accuracy of information on symptoms, disease conditions, medications, and allergies generated by parents using a patient-centered health technology called ParentLink compared to information documented by emergency department physicians and nurses; ParentLink's impact on patient safety and quality.

Estimated total funding: \$756,301
Principal Investigator: Stephen Porter
Applicant Institution: Children's Hospital Corporation, Boston, MA
Grant No.: R01 HS14947
Estimated dates: 9/30/2004-9/29/2006

E-Prescribing Impact on Patient Safety, Use, and Cost

Assesses the impact of a State-wide rollout of e-prescribing using PocketScript software and its effect on safety, quality, cost, formulary compliance, and outcomes.

Estimated total funding: \$1,122,244
Principal Investigator: Joel Weissman
Applicant Institution: Massachusetts General Hospital, Boston, MA
Grant No.: R01 HS15175
Estimated dates: 9/30/2004-12/31/2006

2005

Electronic Prescribing Using a Community Utility: The ePrescribing Gateway

Uses an existing community utility for e-Prescribing called the eRx Gateway to test the e-Prescribing standards and conduct needed research into ambulatory drug safety and the impact of e-Prescribing on physician workflows.

Estimated total funding: \$1,000,000
Principal Investigator: Jeffrey M. Rothschild
Applicant Institution: Brigham and Women's Hospital, Boston, MA
Grant No.: U18 HS016377
Estimated dates: 1/01/2006-12/31/2006

MICHIGAN

Total funding: \$4.38M

HIT Planning for a Critical Access Hospital Partnership

Plans, develops, and implements health IT to assist local rural communities in improving health care access, building local and regional resources to monitor the quality of health care, and expanding the use of health IT educational, communication, and clinical applications.

Estimated total funding: \$193,848
Principal Investigator: Donald Wheeler
Applicant Institution: Baraga County Memorial Hospital, L'Anse, MI
Grant No.: P20 HS15004
Estimated dates: 9/30/2004-9/29/2005

2005

Critical Access Hospital Partnership Health IT Implementation

Establishes a Web-based electronic medical record system for 10 small rural hospitals to connect them to the area's regional medical center. The project's ultimate goal is to quickly give all providers access to patient data, eliminate duplicate tests and exams, deliver high-quality care, reduce medical errors and track health outcomes.

Estimated total funding: \$1,484,167
Principal Investigator: Donald Wheeler
Applicant Institution: Upper Peninsula Health Care Network, L'Anse, MI
Grant No.: UC1 HS016152
Estimated dates: 9/30/2005-9/29/2008

Bar Coding for Patient Safety in Northern Michigan

Implements a bar-coding application in to an existing integrated health IT network that alerts providers to potential drug interactions and allergic reactions, tracks "near misses," and provides a permanent record of the patient's medication history that is accessible by providers at any site.

Estimated total funding: \$1,254,250
Principal Investigator: Randi Oehlers
Applicant Institution: Munson Medical Center, Traverse City, MI
Grant Number: UC1 HS14878
Estimated dates: 9/30/2004-9/29/2007

HIT Support for Safe Nursing Care

Examines the use of the HANDS software system, an health IT-supported care planning process for nursing care, and its ability to be transferable between nurses, units, and health care settings.

Estimated total funding: \$1,486,634
Principal Investigator: Gail Keenan
Applicant Institution: Regents of the University of Michigan, Ann Arbor, MI
Grant No.: R01 HS15054
Estimated dates: 9/01/2004-8/31/2007

MINNESOTA

Total funding: \$3.23M

A Community-Shared Clinical Abstract To Improve Care

Plans the use of IT to enhance communication at care transitions and develops an implementation plan for a community- and patient-shared EMR abstract that will be available at the point of care.

Estimated total funding: \$181,202
Principal Investigator: Barry Bershaw
Applicant Institution: Fairview Health Services, Minneapolis, MN
Grant No.: P20 HS14951
Estimated dates: 9/30/2004-9/29/2005

2005

A Community-Shared Clinical Abstract To Improve Care

Establishes an EMR system to enhance communication among area health care organizations and promote safe, high-quality care for patients with chronic illnesses. Initially, the project will focus on patients with congestive heart failure.

Estimated total funding: \$1,482,674
Principal Investigator: Donald Connelly
Applicant Institution: Fairview Health Services, Minneapolis, MN
Grant No.: UC1 HS016155
Estimated dates: 9/30/2005-9/29/2008

HIT Strategic Plan of SW Minnesota Health Providers

Develops a regional health IT strategic plan between 28 health care providers including a comprehensive needs assessment of all of the participating organizations, prioritization of needs, identification of health IT solutions to prioritized needs, and development of appropriate implementation plans.

Estimated total funding: \$196,274
Principal Investigator: Charles Ness
Applicant Institution: Granite Falls Municipal Hospital, Granite Falls, MN
Grant No.: P20 HS14912
Estimated dates: 9/30/2004-9/29/2005

HIT Based Regional Medication Management Pharmacy System

Implements an interactive video-conferencing system at rural hospitals to

provide continuing education for pharmacists and pharmacy technicians as well as a model for bedside verification of medication administration and medication bar coding; also evaluates structure, process, and outcomes related to improvement of patient safety and more effective patient medication management.

Estimated total funding: \$1,374,616
Principal Investigator: Mark Schmidt
Applicant Institution: Clouquet Community Memorial, Clouquet, MN
Grant No.: UC1 HS14965
Estimated dates: 9/30/2004-9/29/2007

2005

Long-Term Care e-Prescribing Standards Pilot Study

Evaluates how the e-prescribing standards work in certain long-term care settings; also assesses the impact of e-prescribing on the workflow among prescribers, nurses, the pharmacies, and payers.

Estimated total funding: \$1,149,161
Principal Investigator: Michael D. Bordelon
Applicant Institution: Achieve Healthcare Information Technology, LP, Eden Prairie, MN
Grant No.: U18 HS016378
Estimated dates: 1/01/2006-12/31/2006

MISSISSIPPI

Total funding: \$2.92M

Creating Online NICU Networks To Educate, Consult & Team

Develops, implements, and evaluates a cooperative effort using health IT to facilitate a continuum of appropriate medical and developmental care from the time infants are admitted to Neonatal Intensive Care Units through the transition process to community-based health care services for infants most at-risk for long-term neurodevelopmental problems.

Estimated total funding: \$200,000
Principal Investigator: Jane Siders
Applicant Institution: The University of Southern Mississippi, Hattiesburg, MS
Grant No.: P20 HS14996
Estimated dates: 9/30/2004-9/29/2005

2005

Creating Online NICU Networks To Educate, Consult & Team

Expands upon an EMR-sharing initiative for high-risk infants and their families in Mississippi, links new health centers and clinics and serving a rural area that spans 17 counties; uses telemedicine technologies to enhance evidence-based developmental care for newborns in acute care hospitals; and creates Web-based decision support resources for physicians who care for infants.

Estimated total funding: \$1,499,995
Principal Investigator: Valerie Rachal
Applicant Institution: The University of Southern Mississippi, Hattiesburg, MS
Grant No.: UC1 HS016147
Estimated dates: 9/30/2005-9/29/2008

Detecting Med Errors in Rural Hospitals Using Technology

Implements and evaluates a voluntary system for reporting medical errors and adverse drug events in eight small rural hospitals; identifies barriers to technology, describes the epidemiology and root causes of the errors, formulates quality-improvement interventions, and disseminates the results of the project.

Estimated total funding: \$1,222,089
Principal Investigator: Andrew Brown
Applicant Institution: University of Mississippi, Jackson, MS
Grant Number: UC1 HS15400
Estimated dates: 9/30/2004-8/31/2007

MISSOURI

Total funding: \$1.5M

Project InfoCare

Creates a community-wide EMR with integrated clinical decision support that is available across the continuum of care including a rural hospital, a home health agency, 14 physician clinics, and 5 long-term care facilities.

Estimated total funding: \$1.5M
Principal Investigator: Peggy Esch
Applicant Institution: Citizens Memorial Hospital, Bolivar, MO
Grant No.: UC1 HS15110
Estimated dates: 9/30/2004-9/29/2007

MONTANA

Total funding: \$1.82M

Planning the Implementation of HIT in a Rural Setting

Plans the development and implementation of a health IT infrastructure throughout three rural counties including high-speed Internet access, CPOE, CDSS, EHR, and continuity of care record templates.

Estimated total funding: \$186,200
Principal Investigator: William Reiter
Applicant Institution: Community Hospital of Anaconda, Inc., Anaconda, MT
Grant No.: P20 HS14903
Estimated dates: 9/30/2004-9/29/2005

Decreasing ADEs in Montana Frontier Critical Access Hospitals through HIT

Assesses opportunities to decrease adverse drug events and medication errors in frontier Montana Critical Access Hospitals; identifies appropriate, cost-effective health IT solutions to challenges in medication use.

Estimated total funding: \$174,886
Principal Investigator: Kipman Smith
Applicant Institution: Townsend Health Systems, Inc., Townsend, MT
Grant No.: P20 HS14995
Estimated dates: 9/30/2004-9/29/2005

Home HF Care Comparing Patient-Driven Technology Models

Assesses the impact of health IT on clinical and financial outcomes for patients with symptomatic congestive heart failure (HF) living in a rural area, including telemonitoring of vital signs and symptoms, evaluation of Technology Supported Case Management, and Technology Support Self Management.

Estimated total funding: \$1,454,568
Principal Investigator: Lee Goldberg
Applicant Institution: St. Vincent Healthcare Foundation, Billings, MT
Grant No.: R01 HS15459
Estimated dates: 9/30/2004-9/29/2007

NEBRASKA

Total funding: \$1.89M

HIT Plan for Region V Behavioral Health Care Providers

Plans, develops, and implements a methodology for behavioral health care providers to standardize core shared data elements; designs an integrated management information system for the sharing of health care data and information among rural and urban health care providers; connects rural providers to urban providers; and develops messaging capabilities between primary care and behavioral health care providers.

Estimated total funding: \$200,000
Principal Investigator: Wende Baker
Applicant Institution: Heartland Health Alliance, Holbrook, NE
Grant No.: P20 HS15039
Estimated dates: 9/30/2004-9/29/2005

Regional Health Records for Frontier Communities

Plans for the implementation of a regional health record system within established networks of rural hospitals, clinics, public health providers, behavioral health providers, and others across a 14,000-square-mile remote area.

Estimated total funding: \$198,772
Principal Investigator: Nancy Shank
Applicant Institution: Chadron Community Hospital, Lincoln, NE
Grant No.: P20 HS15365
Estimated dates: 9/30/2004-9/29/2005

2005

Health Information Exchange: A Frontier Model

Implements a regional health information exchange among an established collaborative of hospitals, clinics, and providers across Nebraska's remote 14,000-square-mile western panhandle; also helps participating providers acquire the equipment and other resources necessary to share laboratory and pharmaceutical data, as well as electronic medical records. The long-term goal is to create a model applicable to small hospitals nationwide and to deliver quality care.

Estimated total funding: \$1,498,623
Principal Investigator: Nancy Shank
Applicant Institution: Chadron
Community Hospital, Lincoln, NE
Grant No.: UC1 HS016143
Estimated dates: 9/30/2005-9/29/2008

NEW HAMPSHIRE

Total funding: \$197,649

Electronic Communications Across Provider Settings

Integrates an office-based EMR within an acute care hospital, rural community health centers, a community mental health center, a family medicine residency, private physician practices, and a home nursing service to improve use of the EMR as a clinical tool, integrate clinical data, and increase access to the data.

Estimated total funding: \$197,649
Principal Investigator: Deane Morrison
Applicant Institution: Concord
Hospital, Concord, NH
Grant No.: P20 HS15414
Estimated dates: 9/30/2004-9/29/2005

NEW MEXICO

Total funding: \$2.45M

Project ECHO – Extension for Community Healthcare Outcomes

Connects urban medical center disease experts with rural general practitioners and community health representatives over a telehealth network to effectively treat patients with chronic, common and complex diseases who do not have direct access to specialty health care providers.

Estimated total funding: \$1,455,258
Principal Investigator: Sanjeev Arora
Applicant Institution: University of
New Mexico, Albuquerque, NM
Grant No.: UC1 HS15135
Estimated dates: 9/30/2004-8/31/2007

New Mexico Health Information Collaborative

Develops a community-wide HIE collaborative in a rural area that will give patients and providers access to comprehensive clinical data on the Internet; develops disease-management prototypes on diabetes, pediatric asthma, depression, and low back pain and evaluates the development,

implementation, and outcomes of the collaborative.

Estimated total funding: \$992,377
Principal Investigator: Maggie Gunter
Applicant Institution: Lovelace Clinic
Foundation, Albuquerque, NM
Grant No.: UC1 HS15447
Estimated dates: 9/30/2004-9/29/2007

NEW YORK

Total funding: \$4.8M

2005

Western New York Health IT Community Tracking

Identifies and supports the planning of regional data sharing and interoperability activities in the western New York area.

Estimated total funding: \$297,460
Project Director: Michael Moskal
Contracting Institution: CUBRC
Incorporated, Buffalo, NY
Contract No.: 290-05-0017
Estimated dates: 9/30/2005-9/29/2006

Planning Implementation of an EMR in a Rural Area

Researches the implementation of an EMR in the medical community and the use of electronic ordering; identifies a system that will allow for the seamless exchange of clinical information throughout the medical community.

Estimated total funding: \$96,100
Principal Investigator: Jay Federaman
Applicant Institution: Adirondack
Medical Center, Saranac Lake, NY
Grant No.: P20 HS15163
Estimated dates: 9/30/2004-9/29/2005

Creating an Evidence Base for Vision Rehabilitation

Implements the newly developed Electronic Vision Rehabilitation Record and its tools to evaluate the effectiveness of current best practices and help refine practice as the evidence indicates.

Estimated total funding: \$1,442,113
Principal Investigator: Betty Bird
Applicant Institution: Lighthouse
International, New York, NY
Grant No.: UC1 HS15052
Estimated dates: 9/01/2004-8/31/2007





Taconic Health Information Network and Community

Adds a health care portal to the existing community-wide electronic data exchange which will allow for use of the current electronic messaging system along with migration to a full EMR; evaluates physician office efficiency improvement and cost reduction, payer return on investment, and safety and quality improvement.

Estimated total funding: \$1.5M
Principal Investigator: John Blair III
Applicant Institution: Taconic IPA, Fishkill, NY
Grant No.: UC1 HS15316
Estimated dates: 9/30/2004-9/29/2007

Valuation of Primary Care-Integrated Telehealth

Assesses the impact of a telehealth program on primary care utilization and cost for remote assessment and treatment of ill children in childcare and school sites.

Estimated total funding: \$1,464,778
Principal Investigator: Kenneth McConnochie
Applicant Institution: University of Rochester, Rochester, NY
Grant No.: R01 HS15165
Estimated dates: 9/30/2004-9/29/2007

NORTH CAROLINA

Total funding: \$3.0M

Automated Adverse Drug Events Detection and Intervention

Establishes an automated surveillance system for detecting, reporting, and intervening as well as measuring the incidence and nature of adverse drug events suffered by patients.

Estimated total funding: \$1,455,091
Principal Investigator: Peter Kilbridge
Applicant Institution: Duke University, Durham, NC
Grant No.: UC1 HS14882
Estimated dates: 9/01/2004-8/31/2007

Showing Health Information Value in a Community Network

Assesses the costs and benefits of health IT in an established community-wide network of academic, private and public health care facilities created to share clinical information for the purpose of

population-based care management of Medicaid beneficiaries.

Estimated total funding: \$1,487,072
Principal Investigator: David Lobach
Applicant Institution: Duke University, Durham, NC
Grant No.: R01 HS15057
Estimated dates: 9/30/2004-8/31/2007

OHIO

Total funding: \$3.0M

CCHS-East Huron Hospital CPOE Project

Creates an information management environment that integrates patient care data, standardizes practice variation and use of best practices, and supports the delivery of a seamless continuum of patient care throughout the health system through CPOE.

Estimated total funding: \$1.5M
Principal Investigator: Greg Kall
Applicant Institution: Meridia Health System, East Cleveland, OH
Grant No.: UC1 HS15076
Estimated dates: 9/30/2004-8/31/2007

Trial of Decision Support To Improve Diabetes Outcomes

Evaluates the effects of a Web portal-based patient empowerment program and EMR system on quality of care, patient safety, and utilization for patients with diabetes and physicians in primary care practices.

Estimated total funding: \$1,495,569
Principal Investigator: Randall Cebul
Applicant Institution: Case Western Reserve University
Grant No.: R01 HS15123
Estimated dates: 9/30/2004-8/31/2007

OKLAHOMA

Total funding: \$2.76M

Health Improvement Collaboration in Cherokee County, OK

Creates a plan for developing an integrated, multifunctional, HIPAA-compliant Community Health Information Network; developing a telephonic comprehensive nurse line service and triage function; and investigating and implementing improvements for streamlining existing appointment systems.

Estimated total funding: \$200,000
Principal Investigator: Mark Jones
Applicant Institution: Tahlequah City Hospital, Tahlequah, OK
Grant No.: P20 HS15364
Estimated dates: 9/30/2004-9/29/2005

2005

Implementation of Health Improvement Collaboration in Cherokee County, OK

Implements a HIPAA-compliant electronic records system to improve public health, patient safety and facilitate information sharing among health care providers in the Talequah area, with the goals of establishing a Web-based information and referral service and creating a community-wide, science-based prevention strategy supported by the new information system.

Estimated total funding: \$1,499,200
Principal Investigator: Mark Jones
Applicant Institution: Tahlequah City Hospital, Tahlequah, OK
Grant No.: UC1 HS016131
Estimated dates: 9/30/2005-9/29/2008

INTEGRIS Telewoundcare Network

Demonstrates and evaluates the clinical effectiveness and cost savings of utilizing telehealth technology to reduce the days to healing for chronic wounds by improving access to caregivers, point of care processes, and dissemination of best practice information.

Estimated total funding: \$1,063,213
Principal Investigator: Charles Bryant
Applicant Institution: INTEGRIS Health, Inc., Oklahoma City, OK
Grant No.: UC1 HS15359
Estimated dates: 9/30/2004-9/29/2007

Delivery of Preventive Services in Primary Care

Disseminates strategies targeted toward increasing immunizations and preventive care, including a computer reminder system to practices in a Practice-Based Research Network (PBRN). Assesses, using a randomized controlled trial methodology, the relative adoption success of academic detailing combined with and without practice

facilitation and technology implementation assistance, on the delivery of preventive services.

Estimated total funding: \$439,500
Principal Investigator: James Mold
Applicant Institution: University of Oklahoma Health Sciences Center, Oklahoma City, OK
Grant No: R21 HS14850
Estimated dates: 9/30/2004 -9/29/2006

OREGON

Total funding: \$4.8M

Improving the Quality of Healthcare in Central Oregon

Develops an integrated health IT to improve rural access to health care and identifies key issues to improve patient safety and quality of care, including analyzing the cost-benefit of technical solutions.

Estimated total funding: \$199,897
Principal Investigator: Diane Audiss
Applicant Institution: St. Charles Medical Center, Bend, OR
Grant No.: P20 HS14930
Estimated dates: 9/30/2004-9/29/2005

Bay Area Community Informatics Project

Plans the implementation of an HIE using a secure fiber optic connection between community care providers to share patient demographic, medical records, laboratory results, and radiographic images.

Estimated total funding: \$174,190
Principal Investigator: Jeffery Givens
Applicant Institution: Bay Area Hospital, Coos Bay, OR
Grant No.: P20 HS14893
Estimated dates: 9/30/2004-9/29/2005

Using IT To Improve Medication Safety for Rural Elders

Implements a Patient-Centered Medication Information System (PCMIS) to provide secure access to accurate, complete, and current medication information for patients, clinicians, pharmacists, and nurses, reconcile differences in medication information, and provide a platform for evidence-based decision support; assesses the benefits and costs of the system.

Estimated total funding: \$1,496,748
Principal Investigator: Paul Gorman
Applicant Institution: Samaritan North Lincoln Hospital, Lincoln City, OR
Grant No.: UC1 HS14928
Estimated dates: 9/30/2004-9/29/2007

Medication Management: A Closed Computerized Loop

Implements health IT specifically related to medication administration and management and assesses the extent to which these technologies contribute to measurable and sustainable improvements in patient safety and quality of care.

Estimated total funding: \$1,490,897
Principal Investigator: Mark Hetz
Applicant Institution: Three Rivers Community Hospital, Grants Pass, OR
Grant No.: UC1 HS15231
Estimated dates: 9/10/2004-8/31/2007

Improving Safety and Quality with Integrated Technology

Demonstrates the value of an integrated outpatient and inpatient health information system by assessing adherence to evidence-based treatment guidelines for women who are group B streptococcus positive including inappropriate antibiotic use and screening in the outpatient setting, and cost-benefit analysis.

Estimated total funding: \$1,461,150
Principal Investigator: Jeanne-Marie Guise
Applicant Institution: Oregon Health and Sciences University, Portland, OR
Grant No.: R01 HS15321
Estimated dates: 9/30/2004-8/31/2007

PENNSYLVANIA

Total funding: \$3.2M

Regional Approach for THQIT in Rural Settings

Conducts a formal clinical information and technical needs assessment to identify the optimal technical model for information sharing as well as actions required to overcome barriers; develops a project plan that will promote implementation of cost-effective clinical information services.

Estimated total funding: \$200,000
Principal Investigator: James Walker
Applicant Institution: Geisinger Clinic,
Danville, PA
Grant No.: P20 HS15457
Estimated dates: 9/30/2004-9/29/2005

2005

Regional Approach for THQIT in Rural Settings

Launches a health records-sharing project, led by Geisinger Health System, with Shamokin Area Community Hospital and Sunbury Community Hospital to permit secure electronic access to patient records.

Estimated total funding: \$1,499,999
Principal Investigator: Francis Richards
Applicant Institution: Weis Center for Research-Geisinger Clinic, Danville, PA
Grant No.: UC1 HS016162
Estimated dates: 9/30/2005-9/29/2008

Enhancing Patient Safety Through a Universal EMR System

Implements an EMR system that allows 24-hour data sharing across seven rural health care delivery sites for clinicians to access current and complete patient information using either Personal Digital Assistants or a Web portal.

Estimated total funding: \$1.5M
Principal Investigator: Thomas Johnson
Applicant Institution: Dubois Regional Medical Center, DuBois, PA
Grant No.: UC1 HS15083
Estimated dates: 9/30/2004-9/29/2007

RHODE ISLAND

Total funding: \$5.0M

State and Regional Demonstrations in Health Information Technology

Plans, develops, implements, and evaluates a Master Patient Index to facilitate interoperability and sharing patient data between public and private health care sectors.

Estimated total funding: \$5.0M
Project Director: Patricia Nolan
Contracting Institution: State of Rhode Island, Providence, RI
Contract No.: 290-04-0007
Estimated dates: 9/30/2004-9/29/2009

TENNESSEE

Total funding: \$7.92M

State and Regional Demonstrations in Health Information Technology

Plans, implements, and evaluates a state-based regional data sharing and interoperability service interconnecting the health care entities in three counties including needs assessment for health care improvement and reforming TennCare.

Estimated total funding: \$5.0M
Project Director: Mark E. Frisse
Contracting Institution: Vanderbilt University Medical Center, Nashville, TN
Contract No.: 290-04-0006
Estimated dates: 9/30/2004-9/29/2009

Improving the Quality and Safety of Regional Surgical Patient Care through the Creation of a Multi-institutional Partnership for the Implementation and Support of Perioperative Informatics Tools

Develops a detailed plan for the implementation and support of informatics tools in regional health centers including the creation of informatics tools to manage institutional surgical care information, creation of a multi-institutional partnership to manage both the informatics and surgical quality improvement programs, and the development of an economic model related to the business and safety benefits.

Estimated total funding: \$198,650
Principal Investigator: Michael Higgins
Applicant Institution: Vanderbilt University Medical Center, Nashville, TN
Grant No.: P20 HS15401
Estimated dates: 9/30/2004-9/29/2005

Improving Quality Care for Children with Special Needs

Develops a database that includes diagnoses, health records, and educational information on Children with Special Health Care Needs with emphasis on children with genetic conditions and developmental

disabilities; makes this information available to physicians via a secure Web-based system.

Estimated total funding: \$200,000
Principal Investigator: Carmen Lozzio
Applicant Institution: University of Tennessee Health Sciences Center, Memphis, TN
Grant No.: P20 HS15426
Estimated dates: 9/30/2004-9/29/2005

2005

Improving Quality Care for Children with Special Needs

Expands upon an existing Web-based electronic health record for children with special health care needs to improve coordination of services and continuity of care; incorporates new populations (children with genetic, behavioral, and mental health disorders); establishes links with educational services and the State Medicaid program.

Estimated total funding: \$1,096,491
Principal Investigator: Carmen Lozzio
Applicant Institution: University of Tennessee, Memphis, TN
Grant No.: UC1 HS16133
Estimated dates: 9/30/2005-9/29/2008

Technology Exchange for Cancer Health Network (TECH-Net)

Implements a systematic care program to improve cancer management in rural communities by building upon an innovative approach to total clinical decision support to provide access to oncology, hematology, and other specialists through a dedicated telehealth network.

Estimated total funding: \$1,429,265
Principal Investigator: Karen Fox
Applicant Institution: University of Tennessee Health Sciences Center, Memphis, TN
Grant No.: UC1 HS15437
Estimated dates: 9/30/2004-9/29/2007

TEXAS

Total funding: \$2.98M

Rural Hospital Collaborative for Excellence Using IT

Implements advanced information technology in rural and small community hospitals including Web-based business intelligence tools, Internet connectivity, and standardized national measures of patient safety and quality; also provides education intervention to support implementation efforts and evaluate its effects on patient safety and quality.

Estimated total funding: \$1,482,965

Principal Investigator: Patricia Dorris

Applicant Institution: Palo Pinto

General Hospital, Mineral Wells, TX

Grant No.: UC1 HS15431

Estimated dates: 9/30/2004-9/29/2007

Measuring the Value of Remote ICU Monitoring

Examines the effect of tele-ICU monitoring on mortality, complications, length of stay, cost-effectiveness, provider attitudes, and human factors issues in ICUs and seven community hospitals.

Estimated total funding: \$1,442,426

Principal Investigator: Eric Thomas

Applicant Institution: University of

Texas-Houston, Houston, TX

Grant No.: R01 HS15234

Estimated dates: 9/30/2004-9/29/2007

UTAH

Total funding: \$8.0M

Improving Communication Between Health Care Providers Via a Statewide Infrastructure: UHIN Clinical

Expands and enhances current State-wide network for the electronic exchange of patient administrative and clinical data and will support the adoption of EMRs.

Estimated total funding: \$5.0M

Project Director: Jan Root

Contracting Institution: Utah Health

Information Network, Murray, UT

Contract No.: 290-04-0002

Estimated dates: 9/30/2004-9/29/2009

Nursing Home IT: Optimal Medication and Care Delivery

Implements an health IT system with added best-practices decision support modules in seven nursing homes and evaluates the impact on care processes, resident health outcomes, and staff efficiency and satisfaction.

Estimated total funding: \$1,486,452

Principal Investigator: Susan Horn

Applicant Institution: International

Severity Information Systems, Inc., Salt Lake City, UT

Grant No.: UC1 HS15350

Estimated dates: 9/30/2004-9/29/2007

Rural Trial of Clinic Order Entry with Decision Support

Assesses the value of a computerized clinic order entry tool in rural primary care practices for appropriateness of antimicrobial therapy for acute respiratory infections, frequency of hemoglobin A1c in diabetics, incidence of outpatient adverse drug events, and influenza vaccine immunizations.

Estimated total funding: \$1,499,650

Principal Investigator: Matthew Samore

Applicant Institution: University of

Utah, Salt Lake City, UT

Grant No.: R01 HS15413

Estimated dates: 9/20/2004-8/31/2007

VERMONT

Total funding: \$2.39M

Improving Rural Healthcare with Technology

Utilizes existing health IT standards to integrate the current stand-alone databases and information systems of a consortium of three rural health care systems as the basis for creating a comprehensive electronic health record for patient care.

Estimated total funding: \$200,000

Principal Investigator: C. Frederick Lord

Applicant Institution: Mt. Ascutney

Hospital and Health Center, Windsor, VT

Grant Number: P20 HS14896

Estimated dates: 9/30/2004-9/29/2005

2005

Improving Rural Health Care: Implementing Innovative Integration Solutions

Integrates existing health IT technology software and systems among a three-hospital consortium to create a shared electronic record that will ultimately give providers access to real-time data and the ability to electronically prescribe medications. The goals of the project are to reduce medical errors, improve the quality of patient care, increase patient satisfaction, and lower costs.

Estimated total funding: \$685,191

Principal Investigator: Thomas Sims

Applicant Institution: Mt. Ascutney

Hospital and Health Center, Windsor, VT

Grant No.: UC1 HS016142

Estimated dates: 9/30/2005-9/29/2008

Improving Healthcare Quality via Information Technology

Implements an integrated electronic patient medical record, electronic medication administration record, computerized physician order entry, and clinical decision support software that will be accessible at all participating facilities which include an acute care hospital, home health care agency, ambulatory clinics, a rehab facility, and the patient/resident from home.

Estimated total funding: \$1,486,304

Principal Investigator: Robert Pezzulich

Applicant Institution: Southwestern

Vermont Health, Bennington, VT

Grant No.: UC1 HS15270

Estimated dates: 9/30/2004-9/29/2007

VIRGINIA

Total funding: \$2.2M

Rural Virginia e-Health Collaborative

Examines the automation of the continuity of care record for use in patient referrals, hospital admission, and hospital discharge; e-prescribing in physician practices, hospital discharge medications, and long-term care facilities with links to community pharmacies; and disease registries for managing preventive care interventions and chronic diseases.

Estimated total funding: \$200,000
Principal Investigator: Michael Matthews
Applicant Institution: Rappahannock General Hospital, Kilmarnock, VA
Grant No.: P20 HS15301
Estimated dates: 9/30/2004-9/29/2005

Maximizing Effectiveness of E-Prescribing Between Physicians and Community Pharmacists

Evaluates how the e-prescribing standards work in a variety of practice settings, geographic areas, and e-prescribing technologies. In addition, assesses how prescriber and vendor characteristics influence e-prescribing adoption and what best features of vendor software improve medication-related safety outcomes. Physicians and pharmacies will be recruited for participation in Florida, Massachusetts, Nevada, New Jersey, Tennessee, and potentially Rhode Island.

Estimated total funding: \$1,998,370
Principal Investigator: Kate Lapane
Applicant Institution: SureScripts, Alexandria, VA
Grant No.: U18 HS016394
Estimated dates: 1/01/2006-12/31/2006

WASHINGTON

Total funding: \$2.5M

Patient-Provider Electronic Messenger in Chronic Illness

Analyzes a patient secure messaging application for patients with depression, congestive heart failure, and diabetes and evaluates potential for safer and more effective medical care.

Estimated total funding: \$99,992
Principal Investigator: James D. Ralston
Applicant Institution: Group Health Cooperative of Puget Sound
Grant No.: R03 HS14625
Estimated dates: 9/01/2004-8/31/2005

Evaluating the Impact of an ACPOE/CDS System on Outcomes

Implements an ambulatory computer physician order entry (ACPOE) system with clinical decision support capabilities in an ambulatory, community-based, integrated health-system; evaluates the impact of the

system both internally, on organizational processes and human factors, and externally, on patient safety as measured by medication errors and adverse drug events.

Estimated total funding: \$1,030,363
Principal Investigator: Sean Sullivan
Applicant Institution: University of Washington, Seattle, WA
Grant No.: UC1 HS15319
Estimated dates: 9/30/2004-9/29/2007

A Rural HIT Cooperative To Promote Clinical Improvement

Demonstrates the value of health IT in improving quality of inpatient care for community-acquired pneumonia and emergency care of acute myocardial infarctions in rural hospitals.

Estimated total funding: \$1,498,916
Principal Investigator: Elizabeth Floersheim
Applicant Institution: Rural Healthcare Quality Network, Davenport, WA
Grant No.: R01 HS15188
Estimated dates: 9/17/2004-8/31/2007

WEST VIRGINIA

Total funding: \$1.1M

Boone County Community Care Network

Designs a county-wide health information system that will allow health information sharing and permit real-time order placement by hospitals, health departments, private physicians' offices, clinics, and long term care facilities.

Estimated total funding: \$200,000
Principal Investigator: Robert Atkins
Applicant Institution: Boone Memorial Hospital, Madison, WV
Grant No.: P20 HS15286
Estimated dates: 9/30/2004-9/29/2005

Partnering To Improve Patient Safety in Rural WV

Expands the reporting of medical errors and near misses, monitors safety event reporting, and develops a learning network among small, rural hospitals and their associated ambulatory care facilities, long-term care facilities, and home health agencies.

Estimated total funding: \$889,388
Principal Investigator: Gail Bellamy
Applicant Institution: West Virginia Medical Institute, Charleston, WV
Grant No.: UC1 HS14920
Estimated dates: 9/30/2004-9/29/2005

WISCONSIN

Total funding: \$3.3M

Planning for a Rural Prescription Medication Network

Develops a shared electronic repository for patient-level prescription medication data that enables real-time access for patients receiving health care services and plans a model system design to electronically link prescription medication data across hospitals and physician practices.

Estimated total funding: \$167,781
Principal Investigator: Robert Gribble
Applicant Institution: St. Joseph's Hospital, Marshfield, WI
Grant No.: P20 HS15327
Estimated dates: 9/30/2004-9/29/2005

Developing Shared EHR Infrastructure in Wisconsin

Plans the implementation of a common infrastructure for an integrated EHR and CPOE to enhance access to clinical data, develops a workable model/plan for standards-based data sharing to allow multiple providers using disparate information systems to access patient information, and creates a quality measurement and enhancement tool that would measure improvements in quality and patient care.

Estimated total funding: \$192,000
Principal Investigator: Tim Size
Applicant Institution: Reedsburg Area Medical Center, Reedsburg, WI
Grant No.: P20 HS15295
Estimated dates: 9/30/2004-9/29/2005

Improving Patient Safety/Quality with HIT Implementation

Implements an Epic health IT system and diffuses the system community-wide; identifies the prevalence of medication errors, near misses, and preventable adverse drug events; assesses costs and customer satisfaction both before and after implementation.

Estimated total funding: \$1.5M
Principal Investigator: John Reiling
Applicant Institution: St. Joseph's
Community Hospital, West Bend, WI
Grant No.: UC1 HS15284
Estimated dates: 9/30/2004-9/29/2007

CPOE Implementation in ICU's

Assesses the implementation of CPOE systems in six intensive care units (ICUs) and evaluates the value and outcomes of patient safety involving medication errors; quality of care; end users' job tasks, perceptions, and attitudes; and financial impact.

Estimated total funding: \$1,455,066
Principal Investigator: Pascale Carayon
Applicant Institution: University of
Wisconsin, Madison, WI
Grant No.: R01 HS15274
Estimated dates: 9/01/2004-8/31/2007

For More Information

For additional information on AHRQ projects on health information technology, please visit www.healthit.ahrq.gov or contact the health IT staff at healthit@ahrq.gov.





AHRQ Pub. No. 06-P009
February 2006