




AHRQ
Agency for Healthcare Research and Quality
Advancing Excellence in Health Care www.ahrq.gov

Making the Connection: Health Information Technology and Quality Health Care

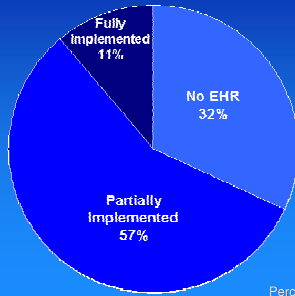
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Director
Agency for Healthcare Research and Quality

Minnesota e-Health Summit 2008

Brooklyn Park, MN – June 26, 2008




Hospitals are Adopting Electronic Health Records (EHRs)



More than two-thirds of hospitals had fully or partially implemented EHRs

Percent of Hospitals Reporting EHRs, 2006
American Hospital Association



Spectrum of Hospital use


Level of Use	Getting Started 0-3 Functions (0-25%) Fully implemented	Low 4-7 Functions (26-50%) Fully implemented	Moderate 8-11 Functions (51-75%) Fully implemented	High 12-15 Functions (76-100%) Fully implemented
Functions	<ul style="list-style-type: none"> Access to current medical records Access to medical history Access to patient flow sheets Access to patient demographics Order-entry - lab Results review - lab Order-entry - radiology 	<ul style="list-style-type: none"> Results review - radiology images (incl. PACS) Results review - radiology report Results review - consultant report Order-entry - pharmacy Real-time drug interaction alerts 	<ul style="list-style-type: none"> Back-end drug interaction alerts Clinical guidelines and pathways Patient support through home monitoring, self-testing, and interactive patient education 	

Continued Progress: Hospital use of Information Technology
American Hospital Association 2007.



The Government's Vision for Health IT

- “..to link all health records through an interoperable system that protects privacy as it connects patients, providers and payers, resulting in fewer medical mistakes, less hassle, lower costs and better health.”



*Michael O. Leavitt, Secretary
US Dept. of Health and Human Services*




The Government's Role in Health IT

- “Health IT desperately needs the leadership of the government to help organize it, not to own it.”



*Michael O. Leavitt, Secretary
US Dept. of Health and Human Services*



States are Leading the Way in Adoption of Health IT

- Minnesota Healthcare Value Exchange
 - One feature of the MN Chartered Value Exchange (CVE) is a newly formed Health Information Exchange to promote interoperable EHRs
- Minnesota was one of five CVE communities selected by CMS to participate in a five-year EHR demonstration project
 - The project is designed to encourage small- to medium-size primary care physician practices to use EHRs to improve the quality of patient care



Making the Connection



- AHRQ Resources and Priorities
- Current and Future Directions for Health IT
- Health IT and the Underserved
- 21st Century Health Care
- Q&A

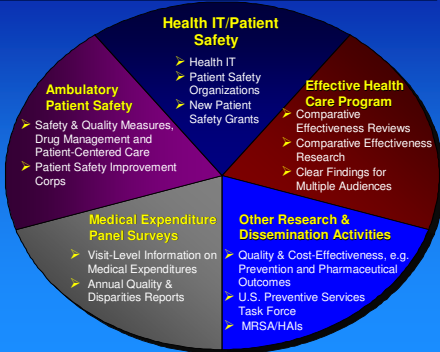


AHRQ's Mission

Improve the quality, safety, efficiency and effectiveness of health care for all Americans



AHRQ Priorities



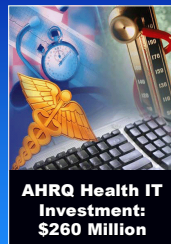
AHRQ FY 2008 Funding

- \$334.6 million
 - FY 2008 Request – \$329.6 million
 - FY 2007 Appropriation – \$318.7 million
- FY 2008 appropriation includes:
 - \$30 million for comparative effectiveness research
 - Double the \$15 million designated in FY 2007
 - \$5 million for research and activities to reduce Methicillin Resistant *Staphylococcus aureus* (MRSA) and related infections
 - The first such federal grant to AHRQ for MRSA/HAIs
- Congress also encouraged AHRQ to:
 - Consider proposals to detect medical errors and preemptively control injury via compact medical devices
 - Investigate the feasibility of an open-source, no-cost license computer model capable of predicting the effects of health care policy alternatives to improve quality and cost-effectiveness



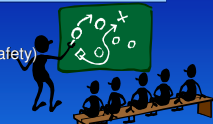
Health IT: Where We've Been; Where We're Going

- Long-term agency priority
 - Since 2004, AHRQ has supported more than 200 projects and demonstrations to improve the safety, quality and efficiency of health care in virtually every state
- Special attention to best practices that can improve quality of care in rural, small community, safety net and community health center care settings
 - *New focus on ambulatory safety and quality*



Health IT Investment Strategy

- Defined deliverables:
 - Improvements in care (quality & safety)
 - Efficiencies
 - Effectiveness
- Diverse vehicles:
 - Traditional research (Transforming Healthcare Quality through Information Technology [THQIT] Value)
 - R&D activities (TQHIT implementation and state health IT)
 - Implementation (Planning, Implementation and state health IT)
- Anticipating stakeholder needs
 - Short term: standards, eRX, grants, privacy, legal
 - Mid-term: prescription drug program, P4P/QI
 - Future: regional health information exchanges





DartNet Project

Colorado DEcIDE center with American Academy of Family Practice will develop the "Distributed Ambulatory Research Network" (DARTNet) using electronic health record (EHR) data from eight organizations representing over 200 clinicians and over 350,000 patients.

Research Study: Diabetes Treatments



HMORN Project

- HMO Research Network (HMORN) DEcIDE will develop the "Virtual Data Warehouse" to assess the effectiveness and safety of different anti-hypertensive 5.5 million to 6 million individuals cared for by six health plans
- The development of the network prototype and implementation of the proof of principle research project will take place in six HMO Research Network health plans
- The research project will merge data from both electronic medical records and administrative claims data

Research Study: Hypertension Treatment



Examples of AHRQ-Funded Health IT Projects in Minnesota

- **Health IT Strategic Plan of SW Minnesota Provide** – Regional health IT plan between 28 providers
- **A Community Shared Clinical Abstract to Improve Care** – Using health IT to enhance communication at care transitions, with a plan to develop an EMR abstract that would be available at the point of care
- **Health IT-Based Medication Management Pharmacy System** – Interactive video-conferencing system at rural hospitals
- **Long Term Care E-Prescribing Standards Pilot Study** – The first program to evaluate how e-prescribing standards work in certain long-term care settings



AHRQ Health Care Innovations Exchange

Web-based Repository of Cutting-Edge Service Innovations

- National electronic learning hub for sharing health care service innovations, bringing innovators and adopters together
- Searchable database featuring innovation successes and failures, expert commentaries, lessons learned, etc.,
- Designed to help health care "Agents of Change" improve quality



www.innovations.ahrq.gov



Coming Soon: MEADERS

Medication Error and Adverse Drug Event Reporting System (MEADERS)

- Designed to help doctors in small practices quantify medication errors and ADEs
- Web-based system for documenting and reporting in ambulatory settings
- Information fed back to practices for QI purposes
- Voluntary and confidential



Preliminary results from a field test will be presented at the AHRQ Annual Conference in September



Selected Health IT Initiatives

- Transforming Healthcare Quality through Information Technology (THQIT):
- 3 Grant Solicitations
 - Focus on community partnerships
 - AHRQ National Resource Center for Health IT
 - State and Regional Health IT Demonstrations
 - Ambulatory Safety and Quality Program

National Resource Center for Health IT

AHRQ National Resource Center for Health Information Technology

- Disseminates Lessons Learned
- Provides Technical Assistance
- Sponsors National Web Conferences
- Houses Comprehensive Online Knowledge Library

<http://healthit.ahrq.gov>

For updates on events and resources, visit: <http://healthit.ahrq.gov/realtime>
 For questions, contact: NRC-HealthIt@ahrq.hhs.gov

State and Regional Demonstrations: RHIO Prototypes

- Five-year state-based contracts:
 - Help states develop secure statewide networks
 - Ensure privacy of health information
 - Make an individuals' health information more available to health care providers
- FY04: Five states awarded \$1M/year
 - Colorado
 - Indiana
 - Rhode Island
 - Tennessee
 - Utah

Ambulatory Safety and Quality (ASQ) Program

- Purpose: Improve safety and quality of ambulatory health care in the U.S. More than 60 grants in 3 areas:
 - Enabling Quality Measurement through Health IT (EQM)
 - Improving Quality Through Clinician Use of Health IT (IQHIT)
 - Enabling Patient-Centered Care Through Health IT (PCC)
- Types of Health IT used in projects:
 - Personal Health Records
 - Clinical/Medication Reminders
 - Clinical Decision Support
 - Telehealth
 - Human/Machine Interface

Ambulatory Safety and Quality Program (ASQ)

- Emphasis on role of Health IT in 3 areas:
 - Enabling quality measurement through Health IT
 - Improving quality through clinician use of Health IT
 - Enabling patient-centered care through Health IT
- Examples of program
 - Electronic prescribing and decision support to improve rural primary care quality (Sioux Falls, SD)
 - Optimizing medication history value in clinical encounters with elderly patients (Providence, RI)
 - Surveillance for adverse drug events in ambulatory pediatrics (St. Louis, MO)


ASQ in Minnesota

- eHealth Records To Improve Dental Care for Patients With Chronic Illnesses – Healthpartners Research Foundation, Minneapolis
 - Randomized clinical trial to evaluate the effectiveness of an integrated electronic health record system that includes an EMR, PHR and eDental Record to improve the quality and safety of dental care for patients with chronic illnesses
 - Type of Health IT: Systems Integration, clinical/medication reminders (provider focused)

Estimated Total Funding: \$996,737
 Project Start – Sept. 30, 2007
 Project End – Sept. 29, 2010

ASQ: Online Disease Management

- Patient-Centered Online Disease Management using a PHR Record System – Palo Alto Medical Foundation Research Institute
 - Evaluates a Customized, Continuous Care Management (CCM) program for diabetes
 - Type of Health IT: Clinical/medication reminders



Estimated Total Funding: \$1.16 million
 Project Start – Sept. 1, 2007
 Project End – August 31, 2010

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Patient-Centered Care Through Health IT


- Using a Telemedicine System to Promote Patient Care Among Underserved Individuals – Temple University
 - Improving hypertension care for African-Americans in North Philadelphia by incorporating hypertension treatment guidelines and quality measures
 - Type of Health IT: Telehealth (patient-focused), Data Electronic Transform & Load, Clinical/Medication reminders (patient & provider-focused)




Estimated Total Funding: \$1.19 million
Project Start – Sept. 30, 2007
Project End – Sept. 29, 2010

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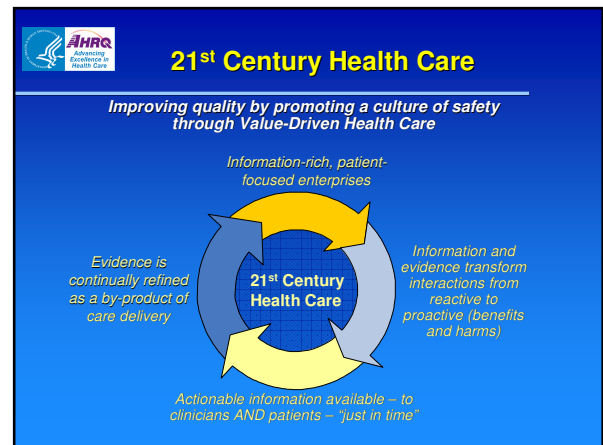
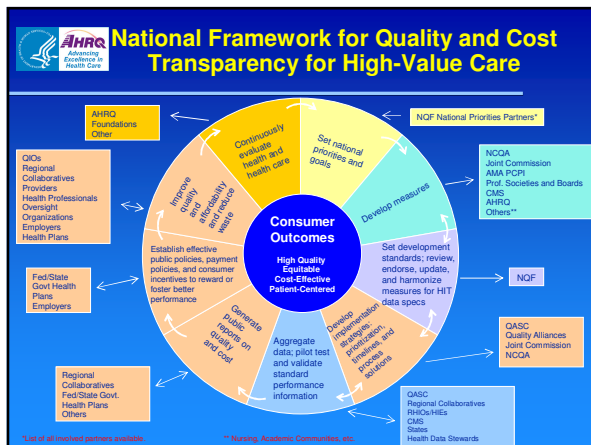
Clinician Use



- The BLUES Project: Improving Diabetes Outcomes in Mississippi with Health IT – Delta Health Alliance, Jackson, MS
 - Demonstrating the effects of diabetes management practices at several ambulatory clinics throughout Mississippi when utilizing well-designed, comprehensive health IT
 - Type of Health IT: Electronic Medical Record

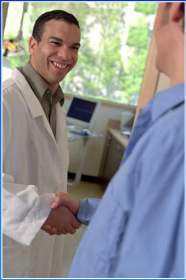


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Call to Action: The Role of the AHIC/Health IT Enterprise



- "Information governance" is essential to Value-Driven Health Care
- Quality enterprise is dynamic – big opportunities to get implementation right
- Relationships between Chartered Value Exchanges and HIE's a work in progress
- Keeping consumer's needs front and center is essential

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Future Program Emphasis

- Regional collaborations
 - Regional health information exchanges
 - Linkage with existing and future initiatives (e.g., payment or quality)
- Delineate privacy and legal framework
- Synergize ongoing and future medication & therapeutic initiatives
 - ePrescribing (e.g., grants to physicians, MMA eRx programs)
 - Chronic disease programs
 - Integrate decision support with prescribing
- Create avenues for enhancing technical and resource support for stakeholders



Future Program Emphasis

- Development of metrics
 - Development of measures that are valid, reliable, clear and understood by all stakeholders
 - Done in cooperation with researchers, purchasers and providers
- Ability to evaluate value to stakeholders and investors
 - Fiscal
 - Non-fiscal



Challenges

- Initiating, pre-populating electronic systems is costly
- Bandwidth at provider level: for safety net providers, grant dollars are not enough
 - Need to integrate technology into clinical "workflow"
 - Need appropriate expertise at provider level
 - Need solid infrastructure, existing systems to start
 - No time to manage complex, chronic illnesses
- Patient compliance, "no show" rates are higher
- Lack of claims-based data for populating registries with uninsured patients
- Connectivity problems in rural areas
- No reimbursement incentive for quality with Medicaid



Seeing the Forest... ...and the Trees

- A robust health care system must include capacity for:
 - Rapid translation of beneficial advances or breakthroughs



Achievability: What can work under ideal circumstances for some people

Reliability: Getting it right for all patients every time – the first time



2008 AHRQ Annual Conference

"Promoting Quality – Partnering for Change"

September 7-10, 2008

Bethesda North Marriott Convention Center Bethesda, MD

Sessions on topics including the following:

- AHRQ's patient safety and health IT portfolios
- Implementation of research findings into changes in practice and policy
- Health Care Innovations

To Register: www.blsm meetings.net/2008ahrqannual



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Your Questions?