AHRQ’s Early Grant and Contract Initiatives

Health IT Conference
June 2, 2010
Rebecca Roper
Erin Grace
Topics

- Transforming Healthcare Quality through Information Technology (THQIT) Initiative
- State and Regional Demonstration for Health Information Exchange
Transforming Healthcare Quality through Information Technology (THQIT) Initiative

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AHRQ
June 2, 2010
On-going efforts to synthesize and disseminate findings
- Groups and individual projects

Request for grantees’ continued collaboration after end of project period

Dissemination to multiple stakeholders
Transforming Healthcare Quality through Health IT (THQIT):

- 118 Individual Projects

AHRQ: $116.2 Million
THQIT, The Beginning

- Funding Opportunity Announcements
- Scientific Peer Review
- Grants Management Officials
- Project Officers from Across AHRQ
- AHRQ’s National Research Center (http://healthit.ahrq.gov)
AHRQ Website
http://healthit.ahrq.gov
Transforming Healthcare Quality through Health IT (THQIT): September 2004 – January 2010

- **40 Cooperative Agreements, THQIT Implementation I (HS-04-011)**
  - $53.6 Million from AHRQ, plus in-kind support
  - 24 No-cost extensions

- **38 P-20 THQIT Planning Grants (HS-04-010)**
  - $7.1 Million from AHRQ
  - 15 No-cost extensions

- **24 R-01 THQIT Value Grants (HS-04-012)**
  - $33.0 Million from AHRQ
  - 22 No-cost extensions

- **16 Cooperative Agreements, THQIT Implementation II (HS-05-013)**
  - $22.5 Million from AHRQ, plus in-kind support
  - 14 No-cost extensions
THQIT Synthesis and Dissemination

- Follow-up, Synthesize, and Disseminate yields many more WINNERS
AHRQ’s Interest

- No expiration date
- Send articles to AHRQ
  JournalPublishing@ahrq.hhs.gov
- Include grant citation in your presentations and publications
Summary of THQIT Initiative is
On-going THQIT Activities:

- AHRQ: THQIT Success Stories for Different Audiences
- THQIT Value Grants, Programmatic Assessment of Peer-reviewed Publications
  - Julie McGowan, Contract
- THQIT Synthesis: Mathematica, Contract
  - Sue Felt-Lisk
  - Jim Walker
IT'S THE ONLY WAY I CAN GET SOME OF MY PATIENTS TO LISTEN TO ME!
THQIT Success Stories

- Varied Target Audiences
- Easy-to-understand 1-page summaries of research project and its momentum to go forward
  - Capture reader’s understanding of who benefited by health IT implementation
  - Illustrations
  - Demonstrated, significant improvement in outcome(s)
  - Resiliency, Adaptability, Sustainability, Transferability of intervention, etc.
  - Quotes from different perspectives
- Plus, succinct, substantive ~2-page detail discussion
Web-based EMS Provides Improved Cardiac Care

- Web-based quality reporting system with Clinical Decision Support
  - EMS-based ECG
  - Patient Hospital Data

- Improve quality of care delivered by EMS responder to patient that may have had a heart attack

- Dr. Harry Selker, AHRQ grant UC1 HS015124

![Chart showing percent patients receiving cardiac care in 90 minutes before and after implementing the web-based quality reporting system. Baseline: 27%, Post-Web-based Quality Reporting System: 67%.]
HIE Increases Children’s Access to Care and Reduction in ED Visits

- Underserved Population
- Public and Private Agencies partnered to improve access and quality of care
- Community health workers facilitate navigation finding Primary Care Physician; Insurance
- Dr. Bergner, AHRQ Grants (P20 HS014908; US1 HS016129)

Graph: Children's Average Number of ED Visits/Year

- Baseline
- Post -Web-based Integrated Care System
Formulary Decision Support: May Lower Medication Costs

- E-Prescribing system with:
  - Dosing; Potential Interactions
  - Formulary decision support: Color-coded relative costs: green, blue, red
  - Electronic or fax prescription to the pharmacy

- On-going Projects to investigate further
- Physicians prescribed lower-cost medications 3.3% more often with system
- Estimated savings of $39.10/patient/year
- Suggest that e-prescribing could improve patient outcomes

- Dr. Joel Weissman, AHRQ Grant (R01 HS015175)
More Success Stories

- Sample of Successful Projects ending in 2009

- Rebecca.Roper@ahrq.hhs.gov

- AHRQ Annual Meeting, 2010
  - Presentation of Examples of THQIT Success Stories
June 4, 9:30 – 10:30 am

- Session 4.7 Translation of Findings to other Care Settings
  - Project ECHO, Dr. Sanjeev Arora
    - Extension for Community Healthcare Outcomes
  - Tennessee Health Information Exchange, State Regional Demonstration Project, Dr. Mark Frisse
  - Virtual Patient Advocate, Dr. Brian Jack
Julie McGowan of Indiana University, forthcoming

15 of 24 THQIT Value Grantees had at least one peer-reviewed publication included in this programmatic summary
Areas of Value (RFA-04-012)

- Clinical, including medical errors, effectiveness, and CDS systems.
  - 24 articles
  - 6 grants
- Organizational, including access to health care and coordination of care.
  - 14 articles
  - 5 grants
- Financial, including costs and productivity.
  - 9 articles
  - 3 grants
- Other, including patient satisfaction, transparency, readiness for health IT adoption, and so on, and the five long-term goals of the THQIT initiative
  - 12 articles
  - 3 grants
THQIT Synthesis

"Hi. I'm doing a survey. Do you have a few minutes to answer some questions?"
THQIT Synthesis

- Background Review
  - Final Reports
  - Publications

- Grantee Surveys (early 2011)

- Group of Follow-up Grantee interviews
  - Depth, Clarification

- Tool/Guideline
At Large, Answers Sought:

- Project Characteristics for success or not in terms of:
  - Incentives
  - Impediments
  - Strategies
    - Building Coalitions
    - Adequacy of Training
    - Retaining Manpower
    - Additional Funding
    - Working with Vendors

- To what extent are factors same/different by type of health IT or healthcare setting?

- Post-grant Experience:
  - Maintenance, Modifications, Sustainability, Transferability
Programmatic Answers Sought:

- **Mechanism**
  - Cooperative Agreement (Implementation grants)
  - R01 (Value grants)
  - P-Grant (Planning Grant)

- **Factors Associated with timely completion of grants/cooperative agreements**
  - Partnership building
  - Vendors
  - Role of other support
  - IRB
  - Previous grant experience
  - No-cost Extension
  - Staff turnover
  - Institutional commitment
  - Evaluation Plan
  - Dissemination
Multiple Stakeholders

- Planning grants
- Implementation grants
- Value grants
In conclusion

- On-going efforts to synthesize and disseminate findings of THQIT projects in groups and individually
  - Keep AHRQ informed
  - Acknowledge AHRQ’s support
State and Regional Demonstration Projects (SRD) for Health Information and Exchange

Project Officer, Erin Grace
Faces of the SRDs
State and Regional Demonstrations

- State and Regional Demonstrations in Health IT (referred to as SRDs)
- CO, IN, RI, TN, and UT in 2004; DE in 2005
- 5-year, $5 million contracts
- Support data sharing and interoperability activities on a State or regional level
- To improve the quality, safety, effectiveness and efficiency of healthcare for patients and populations
Exchange of lab and prescription drug data among unrelated entities

Conduct an analysis of the role of the Medicaid program

Complete an evaluation of the project

Develop a sustainability model
2004: Setting the Stage

- New ONC (April 2004)
- Pre-HITECH
- Pre-HIE software
- 2004 eHI “Annual Survey of State, Regional and Community-Based Health Information Exchange Organizations” reported 9 “fully operational” HIEs
Colorado – Summary

- Formed CORHIO
- 4 Initial Partners – Denver Health, Kaiser Permanente of Colorado, The Children’s Hospital, and University of Colorado Hospital
- Focus on Point of Care exchange
- Data to be exchanged – laboratory results, radiology images/reports, medication history, problem lists, EKG images and reports
- Federated model
Colorado In Operation

- Went live December 2008
- Data exchanged: lab results, radiology reports, EKG reports, medication history, and problem lists
- 1.4 million individuals included in the eMPI
- Over 200 registered users
Delaware - Summary

- DHIN
- Data Sharing Partners – over 5 major hospitals/hospital systems, labs, provider offices
- Initial focus on results delivery
- Data to be exchanged: lab results, radiology reports, ADT reports
Delaware in Operation

- Went live May 2007
- Data currently exchanged: lab results, radiology reports, medication history, EKG reports, problem lists, public health reporting
- As of early 2010, 194 practices enrolled with over 1,400 users and over 800,000 unique patients in the MPI
Indiana - Summary

- Regenstrief, INPC, IHIE
- Data Sharing Partners: Hospitals, labs, imaging centers, physician offices, health plans
- Initial focus: assess effects of HIE on productivity, patient quality, safety, satisfaction, and sustainable business model
Indiana in Operation

- Went live 1995
- Almost 10 million patients in database
- 39 hospitals, 3 labs, 11 imaging centers, 5 health plans, almost 200 physician practices, 2 public health departments
- Data exchanged: lab results, radiology results, cardiology diagnostic events, gastro study results, diagnoses, procedures, transcribed reports, medication history
- Services – clinical messaging, quality reporting, research, medication hub, public reporting
Rhode Island - Summary

- *currentcare*
- RI Department of Heath and RIQI
- Data sharing partners: labs, nursing homes
- Initial focus on sharing lab data and meds for nursing home partners
- Consumer control of data sharing
Mid-South e-Health Alliance (MSeHA)
  - Project Team from Vanderbilt Regional Informatics

Data Sharing Partners: EDs, hospitals, ambulatory sites, labs, Medicaid

Initial focus: labs, medication history, demographics, ADTs, radiology results, diagnosis codes, allergy lists, problem lists

Built on infrastructure developed at Vanderbilt University
Tennessee in Operation

- Went live May 2006
- Over 5 million records
- Over 1.25 million patients
- Data currently exchanged: lab results, medication history, ADTs, ICD-9s, microbiology reports, chest x-rays
- 15 hospitals, 14 clinics, 3 counties, 2 States
Utah - Summary

- UHIN
- Data Sharing Partners: hospitals, physician offices, labs, Medicaid, across the State
- Initial focus: adding clinical document exchange to administrative exchange platform
- Initial data exchange: medication history and lab results
Utah in Operation

- Went live with UHINt 2.0 in 2007
- Results delivery
- Currently testing new infrastructure – cHIE live May 2010
- Planned data exchange: lab orders and results, medication history, formulary and benefit information, MPI implementation, EMR-lite
Selected Accomplishments

- CORHIO – robust eMPI
- DE – significant provider participation
  - Over 50% of DE providers
  - Over 85% of lab transactions
  - Over 80% of hospitalizations
- IN – expansion across State, quality reporting
Selected Accomplishments

- RI – policies and procedures for “Opt-In” model of patient participation
- TN – Multi-state region, transferable architecture, robust evaluation
- UT – transition from administrative data exchange to clinical data exchange, national leader in data standardization guidelines
SRDs on the National Scene

- DHIN – State HIE grantee, NHIN contractor, HISPC
- CORHIO – State HIE grantee, REC grantee, HISPC
- IHIE – State HIE participant, Beacon Committee grantee, NHIN contractor, HISPC
SRDs on the National Scene

- RIQI – State HIE grantee, REC grantee, Beacon Community grantee, HISPC
- TN – SHARP grant participant, Staff now ED of eHealth for the State
- UT – State HIE participant, REC partner, HISPC
SRDs on the National Scene

- HIT Standards Committee Members
  - J. Marc Overhage (IN)
  - Gina Perez (DE)

- HIT Policy Committee
  - Art Davidson (CO)

ONC Consultant
  - Mark Frisse (TN)

- National eHealth Collaborative (NeHC)
  - Art Davidson (CO)
  - Laura Adams (RI)
What Have We Learned?

- There is no “one-size fits all” or a “how to” manual
- Engage a broad range of stakeholders
- Have a sound business plan – understand what your community and stakeholders are interested in
- Secure funding early in the planning process
- Keep participation costs as low as possible
What Have We Learned?

- Each type of architecture has its own set of pros and cons – know what works for your community
- Patient identification and matching is a core challenge in HIE
- Technology development is influenced by policy and operational considerations, and vice versa
- Identify clinical settings that are expected to have high impact
What Have We Learned?

- Set realistic expectations for quality and cost metrics
- Develop evaluation metrics early on
- Incorporate flexibility into evaluation approaches
- Include liability insurance costs in your planning
AHRQ National Resource Center for Health IT [http://www.healthit.ahrq.gov]

- Liability Coverage for Regional Health Information Organizations
- Lessons Learned from AHRQ’s State and Regional Demonstrations in Health IT (coming soon)
- Synthesis of AHRQ State and Regional Demonstrations in Health IT (coming September 2010)
Search for AHRQ-Funded Health IT Projects
QUESTIONS???

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