Case Study
Arkansas Charts a Course for HIE and Quality Reporting

Like many states, Arkansas is looking to advance its use of health information technology (HIT) to link public and private health care stakeholders and transform chronic care delivery. In alignment with HIT meaningful use incentives of the American Recovery and Reinvestment Act of 2009 (ARRA), the state has sought to: (1) enhance health information exchange (HIE) to help providers share patient information and better manage chronic illnesses; and (2) measure provider-level performance across payers and give aggregated feedback to physicians. The state’s participation in the Center for Health Care Strategies’ (CHCS) Regional Quality Improvement (RQI) initiative, launched three years prior to passage of ARRA, was critical to that commitment.

CHCS designed RQI to align purchasers — Medicaid, state employers, commercial, and self-insured — and health plans to target common chronic conditions, adopt shared performance measures, and develop consistent reimbursement to support a uniform set of provider interventions. The multi-state program, funded by the Robert Wood Johnson Foundation (RWJF), also included North Carolina, Rhode Island, and Rochester, NY.

This case study describes Arkansas’ RQI program, which entailed designing a common HIE strategy, and calculating shared chronic care performance measures for providers in the state.

Project Overview
The key elements of Arkansas RQI were (see Figure 1):

1. Business Plan and Roadmap for Statewide HIE
   Arkansas explored creation of a statewide HIE, identified as critical to future quality data exchange. This resulted in the 2008 publication of the Arkansas Roadmap for Health Information Exchange, a comprehensive business plan that can utilize HIT-related ARRA funding.

2. Multi-Payer Quality Measurement Reporting System
   Arkansas developed a multi-payer, quality measurement reporting system for key chronic care measures, enabling multi-payer aggregation by region.

3. Compendium of Quality Improvement Interventions and Educational Materials
   Lastly, Arkansas produced a compendium of quality improvement interventions and educational materials developed by payers in the state, to share with practices. Supporting chronic disease management, the compendium helped lay the groundwork for future regional quality improvement efforts.
The Arkansas RQI Team

The Arkansas Department of Human Services, Division of Medicaid Services, and the Arkansas Foundation for Medical Care (AFMC) applied jointly to participate in RQI to improve chronic care across the state. Under leadership of AFMC Vice President for Clinical Quality Improvement William Golden, MD, Arkansas created a multi-stakeholder partnership that included Blue Cross/Blue Shield; the Employers' Health Coalition; Community Health Centers of Arkansas; the American Academy of Family Physicians; the Arkansas Medical Society; the Office of Rural Health and Primary Care; Walmart; NovaSys; Area Health Education Centers; the Office of Long Term Care; the state's Insurance Commission; the Arkansas Pharmacists Association; the Arkansas Hospital Association; the governor's office; and the regional chamber of commerce. This diverse participation established precedence for collaboration among key stakeholders across the state.

Arkansas RQI in Practice: “The Seven C’s”

As described below, the Arkansas team identified numerous elements —the “seven C’s”— essential to the program’s success. These included: 1) convening a multi-payer stakeholder group; 2) collaboration; 3) conferring; 4) consensus-building; 5) communicating; 6) addressing concerns; and 7) continuation.
1. **Convening a Multi-Payer Stakeholder Group**

An initial challenge of any regional initiative is engaging pertinent stakeholders. In Arkansas, this effort was supported by the leadership team’s history of organizing successful regional quality improvement projects, including a statewide effort to promote physician adoption of electronic medical records. Furthermore, Arkansas health care leaders already had been meeting quarterly to review emerging trends in regional HIE and database management. These relationships provided a solid foundation for the new regional quality improvement project.

2. **Collaboration**

A key goal of the initiative was the aggregation of performance measures across payers to drive quality improvement. This required agreement among parties to share data in a common format — a task requiring intense collaboration and cooperation, undertaken by a data aggregation workgroup.

The workgroup chose administrative-based measures using national criteria such as the Healthcare Effectiveness Data and Information Set, then identified technically feasible measures into a final set. While payers were reluctant to adopt common reporting procedures, and disagreed over sharing provider- or practice-level data, they ultimately agreed to: (1) use a common format for data-sharing and release; (2) generate patient-specific data stratified by county of residence; and (3) make data unidentifiable by plan in project materials. Following aggregation, the workgroup reviewed the information, presentation formats, and distribution plans. Each payer received its own measures and the aggregate data set.

Following weeks of legal analysis and deliberation, the group created a mutually satisfactory data-sharing document — demonstrating that diverse and competitive entities could work together to create common data analysis.

3. **Conferring**

An important step in developing a framework for statewide activities is the exploration of models and experiences of other regions to better understand “what works” and what does not. Through RQI, Arkansas collected documents from other states, participated in national webinars, and subcontracted with the eHealth Initiative (eHi), a national organization familiar with other regional programs. eHi gave the state access to consultants and information relevant to HIE and data-sharing, revealing the challenges associated with different HIE business models and aggregated data warehouses. In addition, the Arkansas team monitored and shared with stakeholders developments in regional quality improvement initiatives such as the Center for Medicare and Medicaid Services’ Chartered Value Exchanges, and RWJF’s Aligning Forces for Quality program.

4. **Consensus-Building**

Successful regional initiatives require transparency, trust, and ongoing stakeholder engagement. Arkansas’ RQI provided a forum for a diverse group of health care stakeholders to gather and plan the implementation of HIE and data aggregation. The project’s steering committee used an open, consensus-driven process to address various participant perspectives. Members were actively engaged in defining elements of HIE and data-sharing. A web-based, document-sharing mechanism allowed for open review of work products and free exchange of comments and concerns.

This consensus-building approach led to strong support from stakeholders throughout the state, and the rapid adoption of performance measures for statewide data aggregation. After completion of the project pilot, participants supported the continuation of the steering committee, noting its value in shaping the state’s evolving HIE strategy. Moving forward, the team also suggested that a formal governance group be formed for certain operational, time-sensitive, or controversial issues.
5. Communicating
To alert the broader health care community to its efforts and promote adoption of program recommendations and deliverables, the Arkansas team:

- Incorporated RQI concepts into talks by project leaders with regional and medical staff;
- Published papers on emerging projects in regional professional journals;
- Held a statewide invitational conference as the capstone to the project;
- Shared aggregated data with various stakeholder groups through presentations, stakeholder websites, the project website, and other community and professional channels; and
- Helped participants incorporate project messages and data in ongoing communications with their provider networks and beneficiaries.

6. Addressing Concerns
Arkansas reports attaining a level of maturity in its approach to organizing regional data-sharing that many states have attained only through legislative action or large government expenditures. Nearly every state that has embarked on HIE and integrated data-sharing has faced problems related to financing, governance, and proprietary interests. Arkansas’ prescient planning process identified and helped to avoid many of these. Nevertheless, the project encountered a number of obstacles — or concerns — that have required continued attention, including:

- The large size of one payer made data aggregation quite cumbersome. In addition, this payer was reluctant to engage in practice-level data due to existing contracts with its provider network;
- There was a lack of agreement on a common standard for patient attribution;
- There was a limited business case for health care providers to invest in HIE networks;
- The state had not addressed stable, long-term financing, or established a common budget;
- The state had not formalized the governance process for operational decisions; and
- Rapid technology change hampered HIE-related software purchasing decisions.

7. Continuation
Arkansas achieved its initial goals, and is well-positioned to make effective investments in HIT, data aggregation, and HIE. Next steps to advance the project include:

- Stakeholder Involvement:
  The team will continue to foster strong participation from regional stakeholders by:
  » Recruiting consumer groups;
  » Holding an ongoing forum for project stakeholders to discuss trends and opportunities;
  » Working with partners who embrace collection and reporting of practice-level data; and
  » Creating a decision-making group to guide policy on privacy, priorities, and data stewardship.

- Analysis and Measurement
  Arkansas will build upon its work in this area by:
  » Striving to get closer to physician- or practice-level reporting; and
  » Continuing to assess regulations, laws, and data management efforts in other states.

- Project Expansion
  Efforts to expand the scope and impact of the project will include:
  » Monitoring the effectiveness and costs of emerging HIT;
Harnessing electronic data to facilitate portable health information;
Creating a statewide e-prescribing system (initiated January 2009); and
Increasing the adoption and use of electronic health information by clinical professionals.

Conclusion

The ARRA legislation passed in 2009 provides an unprecedented amount of federal funding to support the spread of electronic health records throughout the U.S. health care system, specifically targeting high-volume Medicaid providers. The RQI project laid the foundation for Arkansas' plans to utilize this funding, contributing to the governor’s formal recognition of an HIT coordinator and a stakeholder engagement process that will accelerate statewide advancements in HIE.

In short, the quality improvement groundwork that the Arkansas team established prior to passage of ARRA has positioned the state to be a leader in the spread and meaningful use of HIT, supporting chronic care delivery in primary care practices throughout the state.

Endnotes

1 American Recovery and Reinvestment Act of 2009, Title XIII - Health Information Technology, Subtitle B—Incentives for the Use of Health Information Technology, Section 3013, State Grants to Promote Health Information Technology; State Health Information Exchange Cooperative Agreement Program; Funding Opportunity Announcement.
3 Note: William Golden was Vice President for Clinical Quality Improvement at AFMC when the initiative began in July 2006, and Medical Director of the Department of Human Services at its completion in December 2008.
4 For more information, visit: http://www.ncqa.org/tabid/59/Default.aspx.
5 eHi is an independent, non-profit organization whose mission is to drive improvement in the quality, safety, and efficiency of health care through information and information technology. For more information, visit: http://www.ehealthinitiative.org/.
6 For more information, visit: http://archive.hhs.gov/valuedriven/communities/valueexchanges/exchanges.html.
7 For more information, visit: http://www.rwjf.org/qualityequality/af4q/.