



The Colorado Health Foundation™



**BRIEF**

# Health Information Exchange: The Health Care Data Highway

May 2009

# Health Information Exchange: The Health Care Data Highway

You can use an ATM to get cash almost anywhere in the world, even if you don't have an account at that particular bank. Imagine if your doctor could access your medical records just as easily. With a click of a mouse, he or she could retrieve up-to-the-minute, comprehensive information about your medical history, allergies, medications, x-rays and EKGs during your first office visit. While this may seem like the stuff of science fiction, health information exchange (HIE) can help make this a reality.

HIE can be thought of as the technology that allows information to be shared electronically among health care providers, clinics and hospitals. To successfully implement HIE, there must be:

- Leadership
- The organizational infrastructure (including staff) to support a large project
- The existence of and agreement on standards
- Data-sharing agreements between partners
- Privacy and security assurances
- Funding and a business model
- An organization to implement it

If there were a nationwide HIE, a doctor in Michigan could press a button and see the complete medical record of a New Yorker who became ill during a business trip to Detroit. In particular, HIE could offer tremendous benefits to safety-net clinics, where patients go on and off insurance rolls and move from provider to provider. Other advantages of HIE include:

- Better integration of patient care, including care for the growing population with chronic illnesses
- Efficiency (fewer duplicative tests and other services)
- Lower costs for patients and providers
- Fewer medical errors
- Improved health outcomes
- Infectious disease tracking and other public health benefits

## Barriers to HIE

Despite its potential, and despite hundreds of millions of dollars in government and private funding, a nationwide HIE is not on the horizon. One of the biggest problems is the lack of standardization. There are no universal standards for data and data exchange, although organizations in the United States are working on developing such standards. In addition, there is no standardization for the software and hardware purchased and used by providers and health care organizations. Other barriers include:

- Consumers' fear of security problems and providers' fear of liability
- The reluctance of providers to share information
- Insufficient leadership at the federal, state and local levels
- Relatively high costs
- Lack of a sustainable business model, particularly in the current economic environment

## Status of HIE in Colorado

Organizations in Colorado are actively pursuing HIE. Several regional HIEs are in the exploration or planning stages. Quality Health Network (QHN), which is already operating, is used by 300 providers and 1,300 consumers. Its service area spans 16 counties in Western Colorado and two counties in Eastern Utah (Figure 1). Other operational HIEs in Colorado are the North Colorado Health Care Alliance (NCHA) in Greeley, HealthTrack in Colorado Springs and Avista-integrated Physician Network (Avista-iPN) in Boulder.

# Why HIE is Important to the Colorado Health Foundation

The Foundation supports HIE because it can facilitate progress toward ensuring that all Coloradans receive quality, coordinated **Health Care**. Supporting HIE has an impact on three measurable results:

- **Health Care:** Increase number of underserved Coloradans who receive integrated care
- **Health Care:** Increase number of patients who receive evidence-based care for chronic disease
- **Health Coverage:** Increase enrollment of eligible Coloradans in Medicaid and the Child Health Plan *Plus* (CHP+)

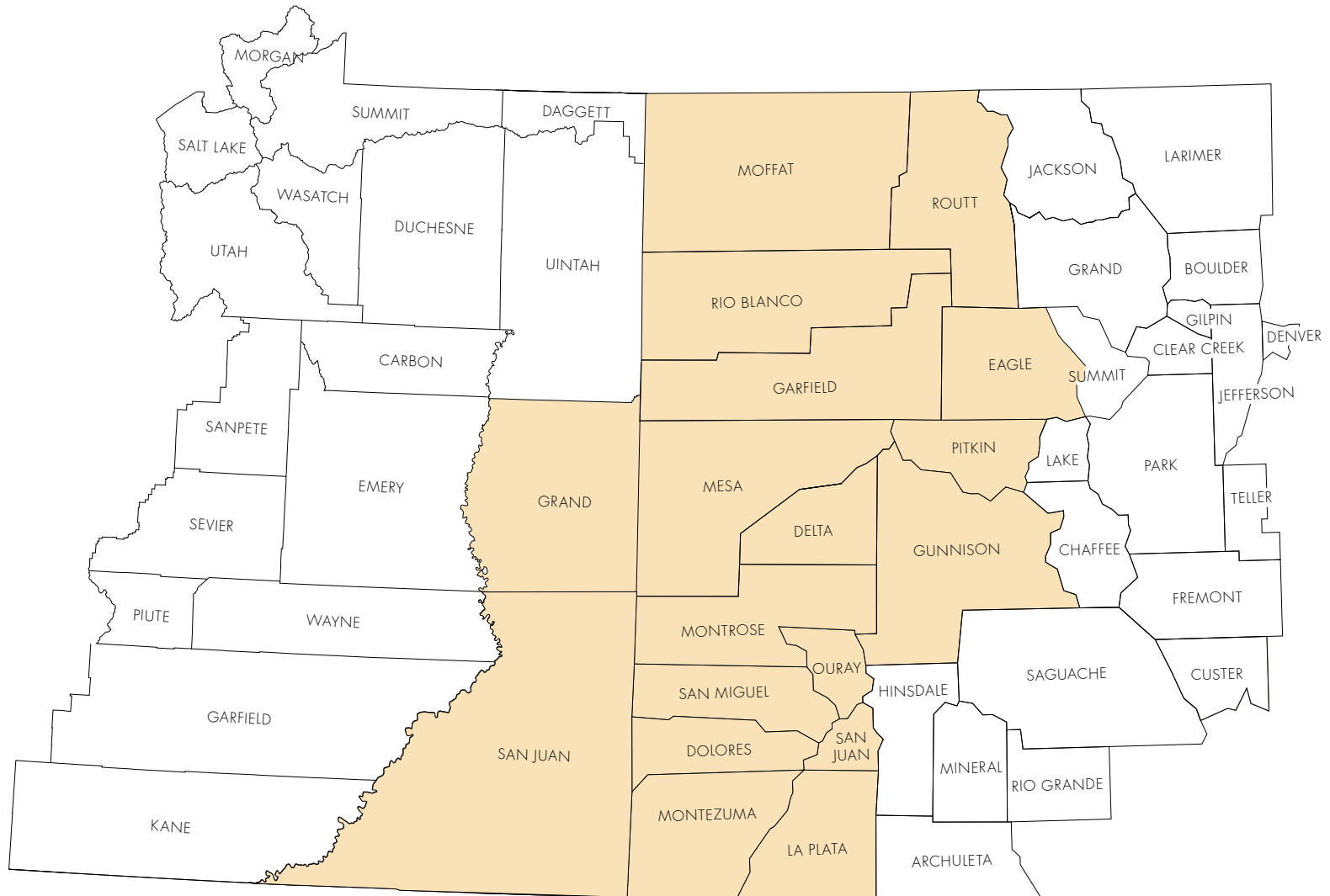
HIE most directly affects the first measurable result listed; a robust HIE at the community and/or state level is critical to integrating health care delivery.

The Foundation has supported several notable HIE efforts in Colorado (Table 1). In 2008, it awarded a three-year \$1.4 million grant to the Colorado Regional Health Information Organization (CORHIO) to help build an HIE that would make integrated care available to more Coloradans; increase access to shared clinical data within the safety net; improve the security of shared clinical data; and reduce duplicative health care services. CORHIO made Colorado a leader in HIE when, in December 2008, it demonstrated that health information could be securely exchanged between hospitals and health care organizations at the statewide level. If CORHIO goes statewide, it would improve quality and integration of care, and lower health care costs, for all Coloradans.

Marillac Clinic in Grand Junction received a \$130,000 grant to enable it and other safety-net providers to participate in QHN. The Foundation granted \$315,000 to NCHA, a partnership of nonprofit organizations dedicated to bringing quality, affordable health care to underserved residents of Northeast Colorado. NCHA is using the funds to integrate primary care and behavioral care for safety-net patients through the use of HIE.



Figure 1. Quality Health Network Health Information Exchange Service Area



**Table 1.** *The Colorado Health Foundation's HIE Grants*

Organization	Project	Grant	Details
Colorado Regional Health Information Organization	Colorado Identity Management and Federated Authentication	\$1,395,000	Promote HIE among Colorado health care organizations, including safety-net facilities, to ensure that patient information is both accurate and protected from unauthorized use.
Marillac Clinic, Inc.	Mesa County – No Wrong Door Partnership	\$130,000	Expand the use of technology and information sharing among health care providers, thus improving the health status of low-income, uninsured and underinsured residents of Mesa County.
North Colorado Health Alliance	Healthy Connections Partnership Grant	\$315,000	Add three behavioral health organizations to a practice management/electronic health record system to integrate primary care and behavioral care for safety-net patients.

**Table 2.** *Federal and State Projects*

Funder	Actors	Project
<b>Federal</b>		
Agency for Healthcare Research and Quality (AHRQ)	State government agencies	Form regional HIEs as the first step in building a national HIE; AHRQ granted \$5 million to CORHIO
U.S. Department of Health and Human Services	State government agencies	FLEX Critical Access Hospital-Health Information Technology Network Implementation grants to improve the use of HIT, including HIE
Federal Communications Commission	State/local agencies	Rural Broadband Pilot Project grants help build the infrastructure necessary for rural hospitals and providers to participate in HIE
Federal government	Office of the National Coordinator for HIT, AHRQ, Medicaid, Medicare, others	Economic Stimulus Package allots \$36 billion for HIT, including architecture to support nationwide HIE

Table 2 (continued). Federal and State Projects

Funder	Actors	Project
<b>State</b>		
Delaware state agencies, Association of Delaware Hospitals, others	Delaware Health Care Commission	Delaware Health Information Network
Foundation for eHealth, Human Resources and Services Administration, BioCrossroads	Indiana Health Information Exchange	Build a statewide HIE
Indiana State Department of Health, City of Indianapolis, others	Indiana Health Information Exchange and the Regenstrief Institute	Aggregated patient repository that connects patient information electronically outside an individual health care organization
Ohio hospital systems and insurance plans	HealthBridge	HIE serving the greater Cincinnati region, including Ohio, Kentucky and Indiana
Massachusetts state public and private health care organizations	Massachusetts Health Data Consortium	Build a statewide HIE
Michigan Health Information Network	Regional organizations	Support HIE initiatives throughout Michigan
New York state	Nineteen community-based HIT projects	Create the infrastructure needed for a statewide HIE

**Table 3.** *What Other Foundations are Doing*

<b>Funder</b>	<b>Actors</b>	<b>Project</b>
The California Endowment and the Tides Foundation	California safety-net clinics	Community Clinics Initiative
California HealthCare Foundation	Public-private collaboration of California health care providers	Santa Barbara County Care Data Exchange, a countywide HIE that operated from 2003–2006; the foundation subsequently donated key components of its software to a national collaborative working to develop regional HIEs
California HealthCare Foundation, Blue Shield of California Foundation	California Regional Health Information Organization	Create a statewide HIE
Kaiser Permanente, United Healthcare, others	Colorado Regional Health Information Organization (CORHIO)	Build a statewide HIE
Maine Health Access Foundation	Maine Center for Disease Control and Prevention	Statewide HIE pilot program
Markle Foundation and Robert Wood Johnson Foundation	Local organizations	<i>Connecting for Health</i> , a prototype for a national HIE

**WRITER:**

Laura Griffin, *Communication Manager—Writer and Editor, the Colorado Health Foundation*

**EDITORS:**

Dan Martin, *Program Officer—Health Care, The Colorado Health Foundation*

Amy Latham, *Communication Officer—Community & Public Affairs, The Colorado Health Foundation*

Caren Henderson, *Director of Communications—Creative Services, The Colorado Health Foundation*

**Submitted by the Colorado Health Foundation**

501 South Cherry Street, Suite 1100 • Denver, Colorado 80246-1325

TEL: 303.953.3600 • TOLL-FREE: 877.225.0839

**[www.ColoradoHealth.org](http://www.ColoradoHealth.org)**