



The Colorado Health Foundation™



Healthy Connections in Colorado:

A Primer for HIT Success

*Healthy***CONNECTIONS**



Introduction



*By Kelly Dunkin, vice president,
Philanthropy, the Colorado
Health Foundation*

Despite technological breakthroughs in diagnosis and treatment, many Colorado health care providers remain

far behind other industries in regards to managing and sharing information.

Operating under the belief that health information technology (HIT) is a powerful and necessary tool to boost health care quality, prevent medical errors, reduce health care costs, promote patient-centered care and increase efficiencies, the Colorado Health Foundation launched Healthy Connections in 2007. That same year, the Colorado Health Foundation identified accelerating the adoption of HIT as one of its seven funding strategies for achieving the vision of making Colorado the healthiest state in the nation.

Under the Healthy Connections initiative, the Foundation issued 75 grants to 43 organizations in Colorado — investing a total of \$9.4 million to build and support HIT throughout the state. Healthy Connections served a wide variety of safety net providers throughout Colorado during the course of four years. These organizations were at different stages of readiness for HIT: Some had implemented systems that completely eliminated paper charts and were looking to build their capacity. Others had limited technology resources and were starting from scratch.

Regardless of where our grant partners were on the continuum of technology, our external evaluations of the initiative showed Healthy Connections has made a substantial difference. You will learn more about Healthy Connections’ many “success stories” in this report, which provides a statistical and anecdotal overview of this forward-thinking initiative.

Much has changed since the Colorado Health Foundation first embarked on Healthy Connections. HIT is now recognized as

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an essential building block in the future of health care. As part of the American Recovery & Investment Act of 2009, the federal government began offering financial incentives for health care providers to adopt HIT systems. As additional validation to its importance in delivering quality care, HIT adoption was included in the Affordable Care Act.

Thanks in part to the pioneering work of our grantees and other partners, Colorado safety net clinics have made significant gains in adopting HIT. In fact, the Colorado Community Health network reports that 12 of the 15 federally qualified health centers in the state have fully implemented a certified electronic health records (EHR) system and the remaining three are in the midst of implementing EHR systems.

Though the Healthy Connections initiative concluded in mid-2011, there is still much work to be done — which is why the Foundation will support HIT and health information exchange (HIE) through its general grant-making to improve the quality of health services in Colorado. It's an investment that has and will reap benefits for Coloradans throughout the state.



HIT Data Points:

- Total annual spending on health care in the United States: **\$2 trillion**
- Percent of avoidable tests that could be eliminated with fully interoperable HIT systems in the United States: **95%**
- Estimated annual net savings for implementing HIT nationwide, according to two studies released by the RAND Corp. and the Center for Information Technology Leadership (CITL): **\$80 billion**

Source: "Evidence on the Costs and Benefits of Health Information Technology", Congressional Budget Office, 2008

What is HIT?

Health Information Technology (HIT) is generally understood as using computer hardware and software to store, protect, retrieve and transfer clinical, administrative and financial information electronically within health care settings.

Source: National Conference of State Legislatures

What is EHR?

Electronic Health Record (EHR) is an electronic record of health-related information on an individual that conforms to nationally recognized interoperability standards and that can be created, managed and consulted by authorized clinicians and staff across more than one health care organization.

Source: U.S. Department of Health & Human Services

What is HIE?

Health Information Exchange (HIE) is a network which allows health care information to be shared between health care providers within a community or larger region.

Source: Colorado Regional Health Information Organization

For clarification on other terms used throughout this report see the Glossary on Page 16.

A Brief History of Healthy Connections

In 2007, the Colorado Health Foundation established a number of precedents in health care delivery and in the nonprofit community when it introduced Healthy Connections, a multi-year, multi-million-dollar initiative designed to use health information technology (HIT) to increase the number of Coloradans who receive quality, integrated care. Though Healthy Connections was met with some resistance early on, the initiative ultimately proved to be successful in accelerating the implementation of technology in safety net organizations throughout the state — positioning some grantees as leaders in the growing and important field of HIT.

When Healthy Connections launched, many health care providers already incorporated some level of HIT into their practices, but the acronym wasn't yet adopted as part of the health care nomenclature as it is now. Even a few years into the 21st century, many safety net clinics still relied on printed medical records with minimal connectivity to other providers or benefit to patients

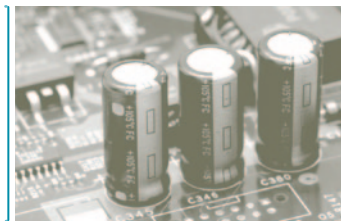
dedicating \$100 million to finance HIT — only \$50 million was ultimately approved. Unfortunately, not much of that funding was directed to safety net providers.

Vatsala Pathy, then a senior program officer at the Foundation, set out to bridge the electronic gap by championing the Healthy Connections initiative to the Foundation's leadership. "Lack of care coordination has been a very big factor in the lack of good health outcomes in our community ... IT systems are an underpinning of that ... I continue to believe that strong, robust reliable IT systems can have a strong influence on improved health," said Pathy, now an independent consultant for health-related nonprofits.

When Healthy Connections was first discussed, most information technology applications in clinics focused on administrative and financial transactions — rather than on delivering care. Pathy aligned herself with a then-small, but growing legion of health care professionals who believed that broad use of HIT in the safety net would be a critical tool to improve health care quality, prevent medical errors, reduce health care system costs, increase administrative efficiencies, facilitate better

"I continue to believe that strong, robust reliable IT systems can have a strong influence on improved health."

Vatsala Pathy, former senior program officer, the Colorado Health Foundation



being served. Meanwhile, very few Colorado health providers relied on HIT to evaluate health outcomes for individuals and populations. Despite a call from then-President George Bush to bolster funding in the federal budget to cover the cost of HIT initiatives, little support or funding was made available. In 2005, Bush proposed

coordination of care, decrease paperwork and expand access to affordable care. Inspired by the visionary HIT work of Colorado organizations such as the Western Slope's Quality Health Network and others, the Foundation began to explore ways to mobilize the technology throughout the state.

Healthy Connections Timeline

2006	The Colorado Health Foundation assesses the importance of health information technology (HIT) in ensuring high-quality, coordinated health care.
2007	A funding strategy to support HIT is finalized. The Board approves the Foundation's first initiative, \$2.5 million for Healthy Connections Phase I.
2008	\$6.9 million is allocated for Healthy Connections Phase II. Lessons learned from Phase I drive a comprehensive investment in the HIT of safety net providers across Colorado.
2009	Passage of the American Recovery & Reinvestment Act of 2009 includes HITECH, which supports HIT through federal agencies. Gov. Bill Ritter designates the Colorado Regional Health Information Organization (CORHIO) as the state-level entity to receive HIT funds available through ARRA.
2009	Ensuring the promise of HIT is realized and building on Healthy Connections, the Foundation invests in the Colorado Regional Health Information Organization (CORHIO) and the Quality Health Network (QHN) to build a robust health information exchange (HIE) system in Colorado.
2010	The Centers for Medicare and Medicaid Services and the U.S. Department of Health and Human Services adopt technical, privacy, governance and financing frameworks for "meaningful use" of health information technology and participation in health information exchange. Healthy Connections actively supports safety net providers in these areas. CORHIO and QHN receive additional federal funding leveraged with Foundation support.
2011	Healthy Connections concludes. HIT remains a key funding strategy of the Foundation as a critical tool for ensuring all Coloradans receive quality, coordinated health care.

2007-2008

21 organizations funded through 35 grants

2009-2011

22 organizations funded through 40 grants

Healthy Connections was a radical departure from anything the Foundation had done before. Indeed, it was the Foundation's very first initiative and the largest single investment the Foundation had made at the time. That being the case, the proposal received extensive attention and input from the Foundation's Board of Directors and leadership.

Dan Martin, then a program officer for the Foundation, said Healthy Connections was considered a risky and expensive proposition at the time. "It was bold, but it was ultimately approved," he said. "We were pretty heavily funding direct services at that point — and this was outside of that."

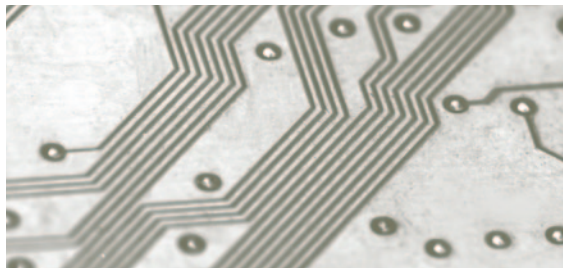
Pathy noted that among health care foundations, only the California Healthcare Foundation put significant investments in HIT in 2006. "We were sort of building the tracks while riding the train," she recalled.

As the initiative evolved, the Foundation became more flexible in how it helped clinics adopt HIT, said Suzanne Brennan, former senior program officer of *Health Care* for the Foundation. "We tried to meet [grant partners] where they were by providing support that was more tailored to their needs versus having set levels and types of support," said Brennan, now Colorado's Medicaid director.

Through Healthy Connections, the Foundation focused its funding efforts on safety net organizations with an emphasis on patient-centered primary care. Over the four-year lifespan of the initiative, Healthy Connections made 75 grants to 43 organizations — a total investment of \$9.4 million.

The first phase of Healthy Connections centered on health providers who already had HIT systems in place and were looking to raise the bar on leveraging their technology. "We started with a group of early adopters," said Martin, now director of quality for Access Community Health Centers in Madison, Wisc. "We wanted to make sure we could support them and push them to do more innovative improvement work." The second phase of funding prioritized rural health care providers with limited technological resources who otherwise could not afford the equipment or the expertise to implement an electronic health records (EHR) system.

Robyn Leone, director of the Colorado Regional Extension Center (CO-REC), credits the Foundation for getting HIT in more safety net clinics throughout Colorado and putting many of those centers ahead of the curve nationally. “Between 2006 and 2010, community health centers in Colorado really advanced in technology,” she said.



“Those who received Healthy Connections grants really understood that this laid the groundwork for what came next — it wasn’t the end-all-be-all.”

Robyn Leone, director of the Colorado Regional Extension Center (CO-REC)

Martin notes the Foundation did not envision the federal government would end up making such a significant investment in essentially the same area as Healthy Connections by offering financial incentives for health care organizations to adopt technology. Through the Health Information Technology for Economic and Clinical Health (or HITECH) Act, the government earmarked \$17 billion for providers that apply “meaningful use” of EHR systems to improve health care quality and delivery. That government funding proved to be a positive twist of fate for many Healthy Connections grant partners. Ultimately, Healthy Connections funding positioned grant partners to take advantage of the federal incentive payments.

Evaluation results (see Page 6) indicate that Healthy Connections met its goal of accelerating the adoption of health information technology systems in Colorado. Steve Lesky, a *Health Care* program officer for the Foundation, said Healthy Connections phased out in large part because the program accomplished its goals. “Healthy Connections was set up to serve as many clinics as possible with education, self assessment and ultimately, implementation for those who really were ready to be leaders in this area,” Lesky said. “It set the stage for the use of HIT to become a standard practice within many of the organizations that we fund.”

Leone added that Healthy Connections continues to make a difference in Colorado as the state’s health care providers prepare themselves to share health data across different organizations through health information exchange (HIE). Colorado Regional Health Information Organization (CORHIO), another Foundation grantee, is collaborating with partners throughout the state of Colorado with the goal of deploying the health technology to every community in the state by 2015.

“Those who received Healthy Connections grants really understood that this laid the groundwork for what came next — it wasn’t the end-all-be-all,” Leone said. “I know a lot of safety net clinics are working better today than they did three years ago on group purchasing, and open-source EHR systems ... There’s a lot of collaborative efforts taking place now.”

Healthy Connections: Evaluating the Results

The Colorado Health Foundation's Healthy Connections initiative met its goal of accelerating the adoption of health information technology (HIT) systems in Colorado, according to an analysis from Full Circle Projects, Inc., an independent consulting firm. Through grants for HIT assessment, planning and implementation, Healthy Connections expanded the use of HIT among Colorado's safety net providers.

Full Circle evaluated grant partners' experience with implementing electronic health records (EHR) systems through case studies. The firm also conducted a grantee survey about the use of HIT. A total of four case studies were conducted in 2010 and 32 of the 43 grant partners completed a survey in late 2010 or early 2011.

Fast facts about HIT in Colorado

- Percentage of Healthy Connections grantees that serve populations in rural counties: **63%**
- Number of Coloradans who will now benefit from EHR systems because of the Healthy Connections initiative: **439,321**
- Number of health care providers in Colorado signed up to participate in the federal government's "meaningful-use" incentive program to demonstrate they are using EHR in ways that can be measured significantly in quality and quantity: **2,183**
- Percentage of CO-REC providers with EHR systems: **50%**
- Percentage of CO-REC providers who already qualify for the federal government's "meaningful use" incentives for providers who adopt HIT: **70%**

Source: Full Circle Projects, Inc. evaluation results, Colorado Health Foundation grant-making records, CORHIO, CO-REC

Here are the key findings from the evaluation:

Funding Reach

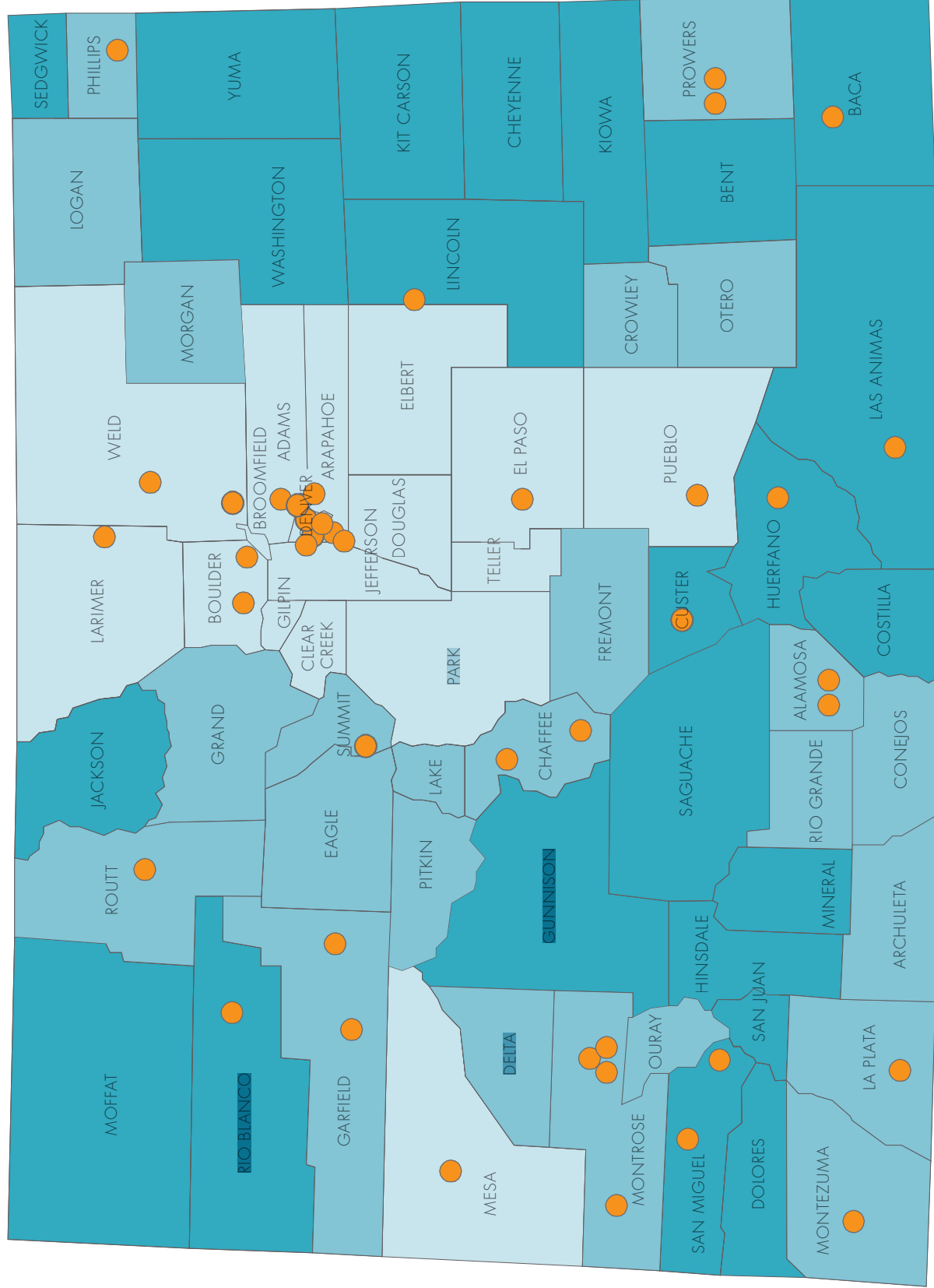
- Number of grants made in the Healthy Connections initiative: **75**
- Number of organizations that benefitted from Healthy Connections: **43**
- Total dollars spent by the Colorado Health Foundation on Healthy Connections: **\$9.4 million**
- Total number of patients served by Healthy Connections partners at the time of grant approval: **439,321**

Technical Capacity

- Percentage of Healthy Connections partners with a technology infrastructure consisting of computers, a local area network and peripherals supporting the effective operation of HIT systems at the end of the Healthy Connections initiative: **77%**
- Percentage of Healthy Connections grantees surveyed who had effective policies and procedures in place and technology being utilized to help achieve strategic goals and operational efficiencies: **90%**
- Percentage of Healthy Connections grantees surveyed who implemented an EHR system or planned to do so within 18 months: **100%**

Source: Full Circle Projects, Inc. evaluation results, Colorado Health Foundation grant-making records

Healthy Connections Grantees by Urban/Rural/Frontier County, Colorado, 2011



Legend:

Grantee of the Colorado Health Foundation



Urban/rural/frontier Designation

- Urban
- Rural
- Frontier

Data source information:

Urban, rural and frontier designations are from the Colorado Rural Health Center as of August 2011.

Map prepared by the Colorado Health Institute
Map created August 22, 2011



Profile: North Colorado Health Alliance

A partnership of safety net health care providers in Northern Colorado, the North Colorado Health Alliance's (NCHA) mission is to ensure that "all underserved residents of the region have access to affordable, comprehensive and quality health care." Yet, that mission was somewhat hampered by an archaic computer system, said Mark Wallace, MD, MPH, president of NCHA and director of the Weld County Department of Public Health and Environment.

"We were sort of hanging onto systems that were barely considered electronic," Wallace said. "We had aging systems that didn't work well or allow us to integrate or connect at all." The dilemma was especially vexing given the alliance's focus on integrating care, collaborating with partners and agencies, promoting evidence-based practice and leveraging resources. Continuing a long tradition of collaboration among health care providers, NCHA partners include the Weld County Department of Public Health and Environment, Sunrise Community Health Center, the North Colorado Family Medicine Residency Program and North Range Behavioral Health. The alliance's partners serve a combined population of about 175,000 people — many of whom are likely to be uninsured or underinsured.

Because of the outdated system, NCHA's partner organizations could not pull together the health information for patients it served across the alliance's network, Wallace said. On top of that, delays in appointments and duplication of services were occurring on a regular basis — simply because the providers' systems were not adjoined. "We would repeat [procedures] on individuals because we didn't know what had already been done someplace else," Wallace said.

Prior to joining Healthy Connections, Wallace said the alliance had already started down the path of

integrated care. In 2003, the group embarked on a \$1.8 million project to improve its HIT. "We knew we would have to find different electronic solutions for the work we do. And we knew that would include a different record-keeping system, different reporting system, different appointment calendars, etc.," he said. "As a result of going through our options, we learned about Healthy Connections."



"What this project has allowed us to do is to take those first very important steps at changing the health care delivery system and the way we provide care as a community."

Mark Wallace, MD, MPH, president of the North Colorado Health Alliance, Greeley

With help from a \$300,000 Healthy Connections grant, NCHA augmented its local HIT system to include three new organizations and added comprehensive behavioral health to the mix of services. "What Healthy Connections did was to force us to focus on those components that were about integrating our care," Wallace said.

Because of the upgraded technology and technical assistance from Healthy Connections, Wallace said NCHA partners can now integrate their practices and leverage medical data in ways that were not previously possible. “We have achieved a level of integration that enabled us to do several things from a care perspective,” he said. “For one, it allowed us to think about populations in a way we couldn’t before. Now that we have about 110,000 people in our database, there is a way we can go in and look at our asthmatics, those who have diabetes, smokers and actually understand the population ... On a population basis, we can finally begin to evaluate our progress. We were never able to really get there before.”

On a personal level, Wallace said improved HIT and networking has lowered the anxiety level for many patients served by NCHA partners. For example, he said one Weld County patient chose to attend a different clinic in Larimer County for a visit. “In the old days, it would have taken at least a couple of weeks to put the information together, but we were able to pull up information on the spot and reassure the patient without any repeated testing,” Wallace said. “To me, that’s a remarkable advancement.” He also notes because NCHA partners can look at each other’s schedules, patients can get vaccinations outside of their home clinics.



Wallace said the initiative not only improved the alliance’s technical capacity, but it changed the very nature of how the partnership operated. “We believed by forcing ourselves to work around this integrating infrastructure, it would force us organizationally to behave differently — and that’s exactly what it did,” Wallace said. “Through this project, we are now very different partners: We think differently as organizations, we do our strategic planning together, we do our budgeting in a way that we attempt not to think where the dollars are coming from — we attempt to flow them from whatever organization to the right place.”

“What this project has allowed us to do is to take those first very important steps at changing the health care delivery system and the way we provide care as a community,” Wallace concluded. “We are embarking on an ambitious undertaking with our mental health, community health partners, pediatrics and public health ... I attribute the progress we’ve made to the work of this project.”

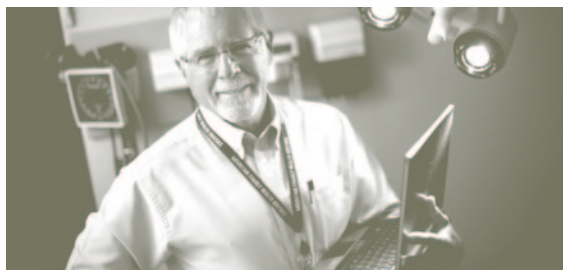
Key Lessons: Connecting the HIT Dots

- When collaborating with other organizations on HIT or HIE projects, it’s important to move the conversation from “what’s in it for me?” to “how can we improve our patients’ lives?” Focus on shared success and accomplishment.
- It takes time to build a common language, which also helps to build trust. With each new partner comes a different language and perspective.
- Work first with the organizations that are ready for the technology and don’t wait until everyone gets there.

Profile: Mountain Family Health Centers

Prior to becoming a grant recipient of the Foundation's Healthy Connections initiative, Mountain Family Health Centers was already building a strong reputation as an "early adopter" of health information technology (HIT).

But David Adamson, executive director of Mountain Family, said \$500,000 in grants from the initiative helped the community health center "raise the bar" in how it used the data to improve health care services. Based in Glenwood Springs, Mountain Family operates three centers on Colorado's Western Slope and one in the Front Range, serving nearly 12,000 people.



"There's a big gap between the potential [of HIT] and the reality ... None of us can really fathom the amount of money it will take to close that gap."

David Adamson, executive director, Mountain Family Health Centers, Glenwood Springs

"We already had good individual patient information, but we had a problem with determining how people with certain conditions — such as asthma and diabetes — were doing with certain doctors and [with] particular sites," Adamson said. In an effort to take its technology to the next level of practical application, Mountain Family

applied for a Healthy Connections grant to complete the development of a "data warehouse." The warehouse would store data extracted from actual patient electronic health records (EHR) system — with the purpose of keeping track of chronic-disease population trends and monitoring health outcomes.

Adamson, who came to Mountain Family with a background in technology, said the community health center was already poised to be a "pioneer" in HIT. In 2004, the center received a \$157,000 grant from the Colorado Department of Local Affairs to obtain high-speed servers to host a high-performance electronic health records (EHR) system. Adamson said the emphasis on technology separates Mountain Family from similar facilities throughout the state. "We had a different sort of skill set than what you'd find in the average health center," Adamson said. "We had good IT support and we were already ahead of the curve."

Adamson said Mountain Family's data warehousing is already benefitting patients, but he admits the project is still something of a work in progress. "It's not perfect, but it's better than where we've been." For example, Adamson said Mountain Family is able to generate information to determine which doctors in its system have the best outcomes in treating diabetes. To better leverage data from the warehouse, the center modified job descriptions for clinical support staff to incorporate duties related to the EHR system. Adamson said Mountain Family has trained medical assistants intensively on "registry management" — with frequent training sessions planned for the foreseeable future. He added, as health care professionals become more familiar with the information available in the warehouse, they will be able to work with support staff and administrators to adjust clinical workflow to improve patient care by paying more attention to quality processes. He notes that one

employee — an internist — is already setting the pace for others within the organization. “Her data [are] better than what is being generated by a lot of the other providers,” Adamson said. “The efficacy of her diabetic care is verified by the data.”

The second goal of Mountain Family’s grant was to work with the Colorado Associated Health Information Exchange and Clinica Family Health Centers to use the data warehouse as a foundation for a disease-management program which could be shared by all community health centers. Clinica now uses the data warehouse developed in the project. The data center also will be used as a model by the Metro Community Provider Network to help other health centers with their HIT efforts as funds are available.

In conducting the project, Adamson said the partners overcame significant challenges. “When we started working in a collaborative way, we had to figure out what we were willing to give up,” he said. Adamson added that meeting the needs of different providers while adhering to the data needs of different federal insurance programs, was more time-consuming than expected and caused the project to run four months longer than what was originally anticipated.

While Adamson continues to believe that HIT has “enormous potential” for improving health care delivery and outcomes, he cautions “there’s a big gap between the potential [of HIT] and the reality ... None of us can really fathom the amount of money it will take to close that gap.”

Adamson credits the Healthy Connections program for helping to narrow that gap in Colorado and for helping Mountain Family in particular. “Healthy Connections catapulted us much closer to the kind of HIT experience we had in mind when we set out on this journey,” Adamson said. “It helped us to approach our potential.”

Key Lessons: Connecting the HIT Dots

- HIT has profound impacts on every aspect of a health care organization. It represents a sizeable cost, places new demands on staff and requires continuing education in addition to training which is already required for health care professionals.
- Quality HIT systems must be expanded and utilized by multiple safety net providers to be cost-effective in the long run.
- HIT has enormous potential for positive impacts on health care delivery and outcomes and thus must remain a high strategic priority for health care organizations.



Profile: High Plains Community Health Center

High Plains Community Health Center needed technology and support to keep up with its rapid growth while improving health services throughout southeastern Colorado.

Since it was founded in 1995, High Plains grew from a small, six-person clinic to a state-of-the-art health center with 55 full-time employees. In addition to its main facility at the campus of Prowers Medical Center in Lamar, High Plains also operates a full-time satellite office at Lamar Community College, a school-based health clinic, a seasonal migrant clinic and services for the county jail. In 2008, High Plains provided health care services to about 8,400 patients and roughly 31,000 visits — representing an 8 percent increase in total users and a 17 percent increase in total visits from the previous year.

With a sharp focus on improving quality and efficiency at the center, High Plains implemented a new practice management system and added an electronic health records, an electronic dental records and an electronic laboratory ordering and results systems in 2006. Though some members of High Plains' staff resisted the changes, participation was not optional. "Everyone needed to change the way they worked," said Jay Brooke, executive manager of High Plains. Brooke recalls telling the staff that "the dogs may bark, but the wagon train is moving on with you or without you." While High Plains lost several staff members in the transition, those who remained or who were hired have become enthusiastic advocates for the new system.

To support the gains made in HIT, High Plains received a \$166,452 implementation grant from the Foundation's Healthy Connections initiative. The grant supported the salary of an HIT resource manager to manage clinical outcome reports, support implementation of the center's

quality-improvement plan, provide training for new and existing staff and support optimization of HIT systems. Brooke said the new position was designed for "troubleshooting" and "to keep things moving as smoothly as possible."



"You need to look at what's next on the horizon . . . We may need to go a different direction based on what's coming up."

Jay Brooke, executive director, High Plains
Community Health Center

Brooke said the new position has been an invaluable addition for High Plains. Along with training staff to improve the quality of care through technological opportunities, the HIT resource manager maintains the integrity of the system. The manager also creates reports to improve quality care and improve performance standards with multiple medical collaboration teams. "We hired someone who can get almost anything we need out of the system," Brooke said.

High Plains quantified results from its efforts to upgrade its technology. For example, care continuity improved from 78 percent to 93 percent between March 2010 and June 2010 — the timeframe from which a new EHR system was implemented. In defining care continuity, High Plains strives for “seamless service” through integration, coordination and the ability to share information between different providers in a patient-centered model. High Plains also saw dramatic improvements in timeliness in return calls to patients due to its efforts.

Brooke said High Plains is “in a pretty good spot” as a result of the Healthy Connections grant, but he cautioned the organization can’t afford to rest on its laurels in the fast-moving world of HIT. “You need to look at what’s next on the horizon,” he said. “We do a constant surveillance. So far, our vendor has stayed on top of things.”

He notes that federal “meaningful use” requirements that offer health providers financial incentives for investing in HIT could dramatically change the game for High Plains and other community health centers in Colorado and elsewhere. “In terms of meaningful use, we may need to go a different direction based on what’s coming up.”

One staff member put High Plains’ HIT evolution into perspective this way: “Everything we are doing now in our quality improvement efforts, we were doing before an [EHR] system. But now, we can do it more efficiently and as a result, do more of it and do it better.”

Key Lessons: *Connecting the HIT Dots*

- Having a clinic staff member dedicated to coordinating quality improvement is a key to the effective utilization of technology.
- Ensuring leadership buy-in is critical to the implementation of an electronic health records system.
- Cross-training staff in various job responsibilities has a high pay off. Having staff learn various job tasks built a strong sense of teamwork and made High Plains more nimble in responding to staffing shortages and IT crises.



HIT and the Foundation: What's next?



*By Steve Lesky, program officer
for Health Care, the Colorado
Health Foundation*

The Colorado Health Foundation's Healthy Connections initiative came at a time when health information technology and electronic health records were still very much in the conceptual phase. It was a time when HIT wasn't an option for most of our organizations because of finances, lack of knowledge or both.

So in many respects, Healthy Connections needed to create a movement — particularly with health care providers and safety net clinics to help make HIT an essential part of delivering quality health services. Healthy Connections really ushered in that movement in Colorado — while building a format and structure in which organizations could learn about HIT and the resources available to them. With all due credit to our partners in Healthy Connections, the goals of this forward-thinking initiative were truly met.

Though Healthy Connections ended in mid 2011, the Foundation's role in supporting HIT and HIE in Colorado is far from finished. Though there is no specific initiative at the present time, we recognize HIT is a vital tool for improving the quality of health care and promoting best practices in the delivery of a wide variety of health services. The Foundation continues to support health information technology as a key component of its funding priorities and strategies.

Moving forward, the Foundation will continue to support HIT efforts in Colorado. For many health care organizations in Colorado and nationwide, HIT is no longer a "luxury" or a "special project" — it is an essential part of operations.

To a large extent, the growth of HIT throughout the United States has been driven by the cost and efficiency benefits of the technology (not to mention the federal government's financial incentives for organizations that adopt HIT). Looking ahead, it will be important for health care organizations to balance the "clinical case" with the "business case" in determining how HIT is adopted and utilized.

Working with our partner organizations, the Foundation remains committed to supporting HIT as a strategic tool to meet their missions that contribute to high-quality health care services of the future. Together, we can take HIT to the next level in Colorado while serving as a model for other states.



information
program throughout
electronic improve meaningful organization
partnership
federal improved building

Plains system grant important
improving next Center

one Mountain HIT record many
added significant Regional
implementation incentives

warehouse group
administrative professionals
technology

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primary investment Pathy
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Colorado

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Foundation's North project HIE delivery first
members patient Family outcomes grantees strong role use
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Connections

Health Healthy
much medical training needs better resources
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state net support NCHHA
grants Brooke high way
Department partners
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organizations

patients level clinic
Foundation providers

HIT Word Cloud

This "word cloud" is a visual representation of the text and data included in this report. The size and font of a particular term indicates its prominence within the report.

Glossary

data warehouses: Computer-based information systems that are home for “secondhand” data that originated from either another application or from an external system or source. (Office of Information Technology, Minnesota State University)

electronic health record (EHR): An electronic record of health-related information on an individual that conforms to nationally recognized interoperability standards and that can be created, managed and consulted by authorized clinicians and staff across more than one health care organization. (U.S. Department of Health & Human Services)

health information exchange (HIE): A network which allows health care information to be shared between health care providers within a community or larger region. HIE lets clinical information move electronically between the different health care information systems that may be used by a patient’s different providers (e.g., specialists, labs) while maintaining the privacy, security and accuracy of the information being exchanged. (Colorado Regional Health Information Organization)

health information technology (HIT): Generally considered to be the use of computer hardware and software to store, protect, retrieve and transfer clinical, administrative and financial information electronically within health care settings. (National Conference of State Legislatures)

integrated care: The provision of comprehensive, coordinated and continuous services that provide a seamless process of care. (Institute of Medicine)

meaningful use: Simply put, “meaningful use” means providers need to show they’re using certified EHR technology in ways that can be measured significantly in quality and in quantity. (Centers for Medicare & Medicaid Services)

primary care: The provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients and practicing in the context of family and community. (Institute of Medicine) Note: The Colorado Health Foundation’s definition of primary care includes primary physical, oral and behavioral health care needs.

quality health care: The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge. To achieve quality health care, the system must focus on six specific aims for improvement, built around the core need for health care to be safe, effective, patient-centered, timely, efficient and equitable. (Institute of Medicine)

regional health information organization: An organization that brings together health care stakeholders within a defined geographic area and governs health information exchange among them for the purpose of improving health and care in that community. (U.S. Department of Health and Human Services)

safety net: Health care providers that deliver a significant level of health care and other related services regardless of a patient’s ability to pay. Safety net providers serve individuals who are primarily uninsured, publicly insured or who are otherwise vulnerable. Vulnerable individuals include those with chronic diseases, the elderly and those living in rural or low-income urban areas. (Institute of Medicine)

Healthy Connections Partners List

Organization Name	City	Clinic Type	# of Patients
Basin Clinic	Naturita	RHC	2,392
Community Foundation Serving Boulder County	Boulder	Network	NA*
Chaffee People's Clinic	Salida	CFSNC	700
Clinica Family Health Services	Lafayette	FQHC	34,257
Clinica Tepeyac	Denver	CFSNC	5,000
Colorado Asian Health Education and Promotion (CAHEP)	Aurora	CFSNC	3,000
Colorado Association of School Based Health Centers	Statewide	Network	NA*
Colorado Coalition for the Homeless - Stout St. Clinic	Denver	FQHC	12,293
Community Health Services - Commerce City	Commerce City	SBHC	3,493
San Luis Valley HIE (CORHIO)	Alamosa	Network	NA*
Doctors Care	Littleton	CFSNC	6,000
East Phillips County Hospital District - Melissa Memorial	Holyoke	RHC	6,400
Fort Collins Family Medicine Residency	Fort Collins	FMR	12,000
Grand River Hospital District	Rifle	RHC	8,000
High Plains Community Health Center	Lamar	FQHC	8,407
Howard Dental Center	Denver	CFSNC	620
Huerfano County Hospital District	Walsenberg	RHC	8,000
Inner City Health Center	Denver	CFSNC	7,000
Marillac Clinic	Grand Junction	CFSNC	7,600
MCPN	Englewood	FQHC	40,086
Midwestern Colorado Mental Health Center	Montrose	MHC	5,200
Montrose County School District - Northside Elementary SBHC	Montrose	SBHC	200
Mountain Family Health Centers	Glenwood Springs	FQHC	8,694
North Colorado Health Alliance	Greeley	Network	NA*
Northwest Colorado Visiting Nurses Association	Steamboat Springs	FQHC	11,128
Peak Vista Community Health Centers	Colorado Springs	FQHC	46,585
Pioneers Medical Center	Meeke	RHC	12,659
Plains Medical Center	Limon	FQHC	8,478
Prowers Medical Center - Prowers Medical Group	Lamar	RHC	7,000
Pueblo Community Health Center	Pueblo	FQHC	19,818
Salud Family Health Centers	Fort Lupton	FQHC	65,225
Senior CommUnity Care	Montrose	PACE	140
SIGNAL Behavioral Health Network	Denver	Network	NA*
Southeast Colorado Hospital District	Springfield	RHC	4,300
Southwest Colorado Mental Health Center	Durango	MHC	7,600
Southwest Memorial Hospital	Cortez	RHC	10,000
St. Vincent General Hospital District - Buena Vista Family Practice	Buena Vista	RHC	4,250
Summit Community Care Clinic	Frisco	CFSNC	4,700
Telluride Medical Center	Telluride	RHC	6,000
Trinidad Area Health Association - Mt San Rafael RHC	Trinidad	RHC	8,000
Uncompahgre Medical Center	Norwood	FQHC	2,200
Valley-Wide Health Systems, Inc.	Alamosa	FQHC	37,896
West Custer County Hospital District	Westcliffe	RHC	4,000
Total			439,321

Clinic Types:

RHC = Rural Health Clinic

Network = Collaborative not providing direct services

CFSNC = Community Funded Safety Net Clinic

FQHC = Federally Qualified Health Center

SBHC = School Based Health Clinic or Center

MHC = Mental Health Center

PACE = Programs for All Inclusive Care for the Elderly

NA* = These organizations do not provide direct service

Note: Reported at the time of grant approval

About this Report

“**Healthy Connections in Colorado: A Primer for HIT Success**” was written and edited by **Bob Mook**, editorial manager of the Colorado Health Foundation, with support from the following members of the Foundation team: **Marisa Allen**, director — Research and Evaluation; **Colleen Church**, program officer — *Health Care*; **Kelly Dunkin**, vice president — Philanthropy; **Caren Henderson**, director of Communications Creative Services; and **Steve Lesky**, program officer — *Health Care*.

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The Foundation also would like to thank **Sara Overby**, senior administrative assistant; **Kaye Boeke**, evaluation officer — Research and Evaluation; **Mark Wallace, MD, MPH**, president of the North Colorado Health Alliance; **David Adamson**, executive director of the Mountain Family Health Centers; and **Jay Brooke**, executive manager of the High Plains Community Health Center, for their help with this project.

About Healthy Connections

In 2006, the Foundation began planning for the Healthy Connections initiative, designed to accelerate the adoption of health information technology (HIT) systems in Colorado by supporting partners who provide quality, evidence-based and integrated care. Under the initiative, the Foundation made 75 grants to 43 organizations in Colorado — investing a total of \$9.4 million to build and support HIT around the state.

About the Colorado Health Foundation

The Colorado Health Foundation works to make Colorado the healthiest state in the nation by increasing the number of Coloradans with health insurance, ensuring they have access to quality, coordinated care and encouraging healthy living. The Foundation invests in the community through grants and initiatives to health-related nonprofits that focus on these goals, as well as operating medical education programs to increase the health care workforce. For more information, please visit www.ColoradoHealth.org.



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