Colorado Regional Health Information Organization (CORHIO) is a nonprofit, public-private partnership working to improve healthcare for all Coloradans through health information technology and the implementation of electronic Health Information Exchange (HIE).

Designated in 2010 as the state of Colorado’s entity for administering statewide HIE, CORHIO immediately began building a system that allows care providers to securely access patient health information—an important step toward delivering more efficient, higher quality care.

CORHIO knew it would need to focus on three distinct areas to build a successful HIE network:

- Gaining trust and participation from providers and other stakeholders throughout the state
- Establishing a sustainable business model
- Implementing the right technology infrastructure to meet the needs of all stakeholders

The Right Solution for Health Information Exchange

Selecting a vendor to build its HIE technology infrastructure was one of CORHIO’s first steps. The organization sought an HIE solutions vendor with:

- Open and flexible, state-of-the-art patented technology, which includes a patient identity resolution component for accurately matching patient records
- Experience in statewide HIE implementations
- Adherence to national interoperability standards and certifications
- An advanced security model and compliance with all HIPAA requirements

Following a rigorous RFP process—with a selection committee that included more than 100 community participants representing various stakeholder types from different areas of the state—CORHIO identified Medicity as the vendor that could best meet the needs of the Colorado healthcare community.

Implementation Strategy

CORHIO and Medicity devised a phased approach for implementing HIE functionality—one that would focus on different regions at a time and deliver quick time-to-value to providers and other stakeholders, community by community. CORHIO began by securing letters of intent from healthcare organizations in Boulder, Colorado Springs, Northern Colorado and Denver.
Initial functionality rolled out to each community included:

- Electronic transmission of hospitals’ clinical results (including laboratory, radiology, pathology and transcribed reports)
- Care provider access to patients’ community-wide longitudinal health records through clinical point-of-care inquiry

HIE functionality was rolled out to each defined community in phases—first establishing clinical messaging and results delivery to ensure a significant volume of data was flowing through the HIE and amongst providers, before deployment of the longitudinal community health record. CORHIO engaged hospital stakeholders, as the first entities joining the network, to ensure a critical mass of clinical information was available to community providers. As a subsequent phase and ongoing today, CORHIO engaged and continues to engage community providers for contribution of clinical summaries to the HIE.

**Results**

**Gaining Participants and Trust**

CORHIO has been very successful in gaining the trust and participation of providers across Colorado. The organization has focused on convening often and collaborating with diverse groups of healthcare organizations and providers. CORHIO’s board of directors and partners include members from hospitals; physician practices; safety net clinics; behavioral health providers; patient advocacy groups; state health agencies; health plans; and healthcare associations.

All Colorado hospitals with more than 100 licensed beds have signed on to participate in CORHIO’s HIE and most have already connected to the network. In addition, all major laboratories in the state, including LabCorp and Quest Diagnostics, are connected. CORHIO estimates that more than 60 percent of all medical lab tests performed in the state can be exchanged through its network, and this percentage continues to grow. Smaller hospitals and both large and small physician practices continue to sign up to participate in the HIE.

**Successful Rollout of HIE Technology**

CORHIO connected its first HIE participant—Boulder Community Hospital—in late February 2011. Since then, the number of connected participants has skyrocketed. The following highlights both the number of connected stakeholders in the CORHIO network and those currently in the process of connecting:

**47 Hospitals**
31 already connected, participating hospitals represent 93% of all hospital beds in the region

**121 Long-Term Post-Acute Care Facilities**
One of the highest LTPAC connection rates in the entire country

**1,700+ Office Based Physicians/Providers**
More than 1,100 connected

**2,775,000+ Unique Patients**
Represents 52% of Colorado’s total population

As of November 1, 2013

We are very pleased with the network of trust we have been able to establish here in Colorado. We make sure that every stakeholder in our healthcare ecosystem knows that we advocate for them. Our goal when making decisions about statewide information exchange is to gain consensus from everyone that contributes data. With a third party like us facilitating the process, everybody wins.”

Brian Braun
Chief Financial and Corporate Operations Officer, CORHIO
Integration with Electronic Health Records

A significant initiative of the implementation has been integrating CORHIO’s network directly with physicians’ electronic health records (EHRs). This means that HIE participants with an EHR can receive results directly into their respective EHRs. More than 25 unique EHR products are currently integrated with the network, with nearly a dozen more working toward integration. Participants who don’t have an EHR or want to connect before implementing an EHR do so via a secure, web-based workflow tool.

Integrating the Post-acute Care Continuum

As the Centers for Medicare and Medicaid Services puts more and more pressure on providers to reduce readmission rates, improving transitions of care with post-acute providers is more important than ever. However, long-term and post-acute care (LTPAC) providers have long faced the challenge of getting up-to-date information about a patient who has been discharged into their care. CORHIO has placed a significant focus on connecting these LTPAC providers to the network to improve care transitions. Because of this focus, Colorado boasts one of the highest LTPAC connection rates in the United States.

Establishing a Sustainable Business Model

CORHIO received two substantial grants to cover its startup costs, but its leaders knew that grants would not be sufficient to sustain operations in the long term. The organization has successfully established a fee-for-service revenue model that covers 100 percent of its current operating costs.