

Colorado Health IT Roadmap

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Colorado Health IT Roadmap

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Acknowledgments

The 2025 refresh of the Colorado Health IT Roadmap was a collaborative effort led by the Office of eHealth Innovation (OeHI) and eHealth Commission, involving state agency partners, community organizations, health care providers, and individual Coloradans. Appendix 1 includes a list of participating organizations and individuals.

OeHI team members who contributed to development and publication of this edition were:

- Matt Arment
- Gabby Burke
- Melissa Gillespie
- Karen Haneke
- Ashlev Heathfield
- Michel Jurica

- John Kennedy
- Bianca Melancon
- Stephanie Pugliese
- Karen Shimamoto Scott
- Kim Taylor

eHealth Commission members were:

- Kaakpema "KP" Yelpaala
- Rachel Dixon
- Michael Archuleta
- Toni Baruti
- Mona Baset
- Amy Bhikha
- Michael Feldmiller (Advisor)
- Patrick Gordon

- Sophia Gin
- Cory Hussain
- Micah Jones (Advisor)
- Krvstal Morwood
- Jackie Sievers (Advisor)
- Kevin Stansbury
- Parrish Steinbrecher
- Misgana Tesfaye



Fellow Coloradans,

The Polis-Primavera Administration is committed to ensuring access to high-quality, affordable health care for every Coloradan. In a rapidly evolving world, technology plays a critical role in shaping how we deliver and receive care.

As champions of the state's health information technology (IT) strategy, the Office of eHealth Innovation (OeHI) and the eHealth Commission refreshed the Colorado Health IT Roadmap informed by input from Coloradans, health care providers, and stakeholders from communities across the state.

From day one, our team engaged state and local leaders, Tribal governments, and community members as partners in innovation, policy, and technology in pursuit of our bold health care goals. By collaborating with public, private, and nonprofit organizations from all corners of the state, we have reimagined the state's health IT strategy through community- and patient-centered lenses. The goals of this 2025 Health IT Roadmap reflect our commitment to a Colorado for All.

The OeHI team has made significant progress since the 2021 Roadmap. Despite rapid advancements in technology and ambitious policy changes, there are still opportunities to provide more coordinated care. We will continue to focus on trusted and secure information, shared solutions, thoughtful policy, and intentional innovation to address these challenges and opportunities. The goals and recommendations outlined in the 2025 Colorado Health IT Roadmap accelerate this important work.

The Administration appreciates the work of all those who have invested their time and ideas as well as those who are continuing to do this work in the future. Community leadership, collaboration, and innovation play a critical role in the achievement of our health care priorities. Thank you for being our partners and champions for this important work.

Dianne Primaver

Sincerely,

Dianne Primavera

Lt. Governor of Colorado

Executive Summary

This Roadmap stems from the 2021 Roadmap values, principles, vision statements, and goals that remain critical to the work that supports a Colorado for all. These grounding elements of the 2025 Health IT Roadmap will drive the health technology and innovation for the state and be accomplished through the collaboration and work between OeHI, partners, and champions. Partners include state agencies, consumers and patients, health providers and staff, federally recognized Tribes of Colorado, community-based organizations, hospitals, health systems, coordinated care organizations and health insurance plans, and technology partners.

This Roadmap serves as the strategic plan to continue aligning efforts across these partners to work toward three main goals:

- 1. Enhance Community Engagement in Health IT Solutions: Foster a collaborative environment where community members. patients, and health care providers actively participate in the design, implementation, and evaluation of health IT solutions to ensure they meet the diverse needs of the community.
- 2. Support Secure and Appropriate Sharing of Data: Develop and implement a robust framework that enhances the interoperability of health technology, establishes and supports industry standards, and strengthens cybersecurity measures to create a secure and seamless exchange of health information.
- 3. Foster Responsible Innovation: Encourage the development and implementation of innovative health IT solutions at the local and state levels while ensuring ethical practices, stakeholder engagement, and compliance with regulatory standards.

Colorado envisions a future where the goals of the 2021 Health IT Roadmap, which now serve as vision statements, are true for ALL Coloradans:

- 1. Coloradans, providers, payers, community partners, and state, local, and Tribal agencies share data and have access to needed health and community information parity, while respecting data sovereignty.
- 2. Coloradans access high-quality in-person, virtual, and remote health services that are coordinated through information and technology systems.
- 3. Colorado improves health parity through the inclusive and innovative use of trusted health IT and digital health solutions.

OeHI, the eHealth Commission, and partners will approach the goals and vision statements through three critical strategies:

- 1. Policy Advocacy
- 2. Funding
- 3. Shared Solutions

Appendix 2 includes a list of key words and their definitions.

Interoperability:

The ability of technology systems or software to exchange and make use of information.

Data sovereignty:

Tribal Nations' inherent sovereign authority to administer the collection, ownership, and application of its own data, rooted in a Tribal nation's right to govern its people.

Introduction

Health technology serves a vital role in connecting the unique and critical aspects of our health care and health-related systems.

For providers, health information technology (IT) provides critical information and essential tools for appropriate and efficient patient care. In homes and communities, this technology streamlines the patient experience, empowers individuals and families to better understand their health, and increases their access to providers and health services. For local and state government agencies, health IT supports the enrollment and implementation of benefits programs and enables our neighbors and communities to thrive.

The Office of eHealth Innovation (OeHI) was created through Executive Order B 2015-008 and developed within the Offices of the Governor and Lieutenant Governor of Colorado to coordinate and prioritize health IT throughout the state. OeHI is advised by the eHealth Commission, which comprises private and public sector representation, including health IT entrepreneurs, health systems, state agencies, health plans, and more. Together, OeHI and the eHealth Commission drive priorities and alignment for health IT through this strategic plan, the Colorado Health IT Roadmap.

To update the 2021 Colorado Health IT Roadmap, the OeHI team led an extensive community engagement process, holding listening sessions across the state, to ground the Roadmap updates in the needs of providers, community organizations, and Coloradans and ensure that the state's efforts directly align with the feedback heard during this process. Listening sessions revealed that the cost of adopting, implementing, and maintaining health IT remains the top barrier for health care organizations, particularly those located in and serving rural communities. There is high demand for cross-program alignment at the state level and for opportunities to learn more about best practices for cybersecurity and adopting artificial intelligence (AI) and other emerging technologies.

Community members expressed a need for education centered on health IT tools, such as patient portals and telehealth platforms, as well as a need for user-centered design in the creation of health applications. Additionally, OeHI learned that language access continues to be a hurdle to accessing health care and using digital health tools for many in Colorado communities whose primary language is one other than English.

This document builds on what OeHI heard during listening sessions and the successes achieved through Colorado's previous Health IT Roadmaps and lays out the current and future direction of this work, which will be achieved in collaboration with critical partners.

Health Information Technology (IT):

A broad concept that encompasses an array of technologies. Health IT is the use of computer hardware, software, or infrastructure to record, store, protect, and retrieve clinical, administrative, or financial information.



Colorado Landscape

Progress Toward 2021 Roadmap Goals

The following section highlights OeHI-led progress toward the 2021 Roadmap goals. More information about these projects can be found on the OeHI website at oehi.colorado.gov/colorado-health-it-roadmap.

Roadmap Goal 1

Coloradans, providers, payers, community partners, state, local, and Tribal agencies share data and have access to needed health and community information parity, while respecting data sovereignty.

- In partnership with the Government Data Advisory Board (GDAB), developed and enacted the state agency data-sharing agreement template to streamline internal sharing of data
- In partnership with the Office of Information Technology (OIT), expanded the Identity Cross-Resolution Service (IDXR) across eight state source systems to link individual records
- Developed the foundation for a consent management proof of concept solution and are planning to integrate the solution into the Colorado Social Health Information Exchange (CoSHIE) unifying architecture
- Launched feasibility assessment for a centralized consent repository to support improving data-sharing foundations across Colorado as outlined in House Bill 24-1217
- Served as CancerX Founding Member
- Gathered recommendations from local public health agencies to establish data strategy for system improvements
- Deployed chatbot to promote access to women's health in Colorado

Roadmap Goal 2

Coloradans access high-quality in-person, virtual, and remote health services that are coordinated through information and technology systems.

- Managed the HB21-1289 Funding for Broadband Deployment Grant in collaboration with OIT, providing approximately \$6 million to support connectivity for telehealth services
- Completed Northwest/Western Colorado Telehealth Study
- Completed telehealth payment parity and denials analysis
- Completed landscape analysis and recommendations for updating community resource inventories
- In partnership with the Behavioral Health Administration, completed phase 1 of the provider directory interoperability initiative
- Awarded contract and completed beta launch for the CoSHIE unifying architecture
- Awarded first CoSHIE Regional Hubs
- Established CoSHIE Executive Steering Committee and Data Governance Committee

Roadmap Goal 3

Colorado improves health parity through the inclusive and innovative use of trusted health IT and digital health solutions.

- Released the Health Related Social Needs (HRSN) Vendor Guide
- Partnered with 25 rural libraries to deploy telehealth kits for constituents
- Completed feasibility analysis for Colorado Health Innovation Resource Center
- Completed initial demographic data baseline for safety net facilities
- Served as collaborator with In Full Health Initiative
- Funded a baseline connection between 100% of Critical Access Hospitals and Rural Health Centers and the health information exchange (HIE) network
- Developed and deployed the rural Community Analytics Platform (CAP), with 81% of Rural Safety Net providers connected
- Awarded \$19.9 million in American Rescue Plan Act (ARPA) funding for technology upgrades for behavioral health and home and community-based service providers
- Co-developed the Colorado Digital Access Plan and planning implementation in partnership with the Office of the Future of Work

How We Got Here — Refreshing the Health IT Roadmap

For the 2025 Roadmap, OeHI designed a strategy to hear from health care providers, community-based organizations, community members, and state agencies. This strategy aimed to connect with various audiences across the state and partnered with local, trusted organizations.

The OeHI team created three question sets for each audience - one for health care providers and health care staff, one for community-based organization staff, and one for community members. These question sets were tailored to each of the three audiences, focusing on health IT barriers and facilitators, community health information collection and processes, telehealth, and information sharing. The OeHI team also created an application process to recruit organizations across the state to host listening sessions with health care providers, communitybased organizations, and/or community members, reaching more than 500 Coloradans during 26 listening sessions with 22 organizations, which received a total of \$126,000 for their efforts.

In addition to funding organizations to host listening sessions, the OeHI team conducted 45 in-person listening sessions with health care providers and staff across Colorado.

The OeHI team created and shared facilitator resources to encourage a streamlined and consistent listening session process, including a note-taking template, question list, slide deck, sample listening session flyers, facilitation tips and tricks, and sign-in sheet. These resources were created for each audience and distributed to the internal OeHI team and awardees to use during listening sessions.

Notes from each of the listening sessions were entered into a spreadsheet according to the audience (health care providers/ health systems, community-based organizations, community members) and organized according to question. The OeHI team then took each question and separated responses by different themes. Each of these themes was then counted to assess how many times it came up in responses from listening session participants. From this, general themes for each topic area were identified, along with context for the themes. This was completed for each question and each audience spreadsheet. These results were then organized by initiative area in a document that was shared with the rest of the OeHI team.

Following the analysis of the listening session notes and associated themes, the OeHI team met with state agency partners to ensure their complementary work and perspectives were captured in this Roadmap.

History of Colorado's **Health IT Roadmaps**

2015

Governor John Hickenlooper signed Executive Order B 2015-008 to create the Governor's Office of eHealth Innovation and the eHealth Commission

2017

Published the first Colorado Health IT Roadmap under Hickenlooper-Lynne Administration

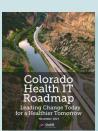


2019

Updated and released the 2019 Roadmap under the Polis-Primavera Administration

2021

Engaged the community to update the Colorado Health IT Roadmap; released the 2021 Colorado Health IT Roadmap



2024

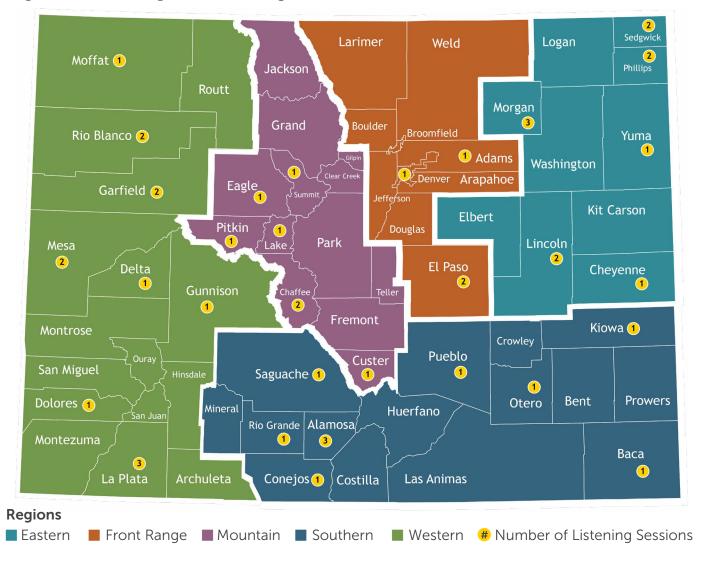
Engaged the community to update and revise the 2021 Colorado Health IT Roadmap

2025

Released the 2025 Colorado Health IT Roadmap



Map 1. OeHI Roadtrips and Listening Sessions



| The Combined Effort of | |
|-----------------------------|----|
| Data Collection Resulted in | n: |

| 159 | People Reached | (OeHI visits) |
|------------|----------------|---------------|
|------------|----------------|---------------|

- 237 **Community Members Reached** (Funded Listening Sessions)
- 88 **Health Care Staff Reached** (Funded Listening Sessions)
- 46 **CBO Staff Reached** (Funded Listening Sessions)
- **530 Total People Reached**
 - 45 **Organizations Reached (OeHI visits)**
- 22 **Organizations Funded** for Listening Sessions
- **67 Total Organizations Reached**

| | Total Funding Per Region | Total Organizations Per Region |
|-------------|--------------------------------|--------------------------------------|
| Eastern | \$9,367.06 | 12 |
| Front Range | \$68,439.9 | 9 |
| Mountain | \$9,586.62 | 17 |
| Southern | \$15,149.00 | 11 |
| Western | \$36,728.21 | 18 |

What We Heard

Health care partners reported that their top health IT adoption barrier was cost, ranging from the cost of electronic health record (EHR) systems and other vendor fees to patient outreach and rising technology costs. Other leading barriers included state and federal program requirements, lack of interoperability and disjointed technology, challenges with EHRs (such as poor vendor service, a lack of reporting ability, and integration challenges), insurance and reimbursement issues, and patient digital access.

The top health IT requests from health care partners included:

- Funding, particularly for rural organizations and those with fewer resources, for technology, HIE access, EHRs, and pilot programs
- Better data-sharing practices and alignment with national and state standards
- Advocacy, policy, and partnership around issues with health insurers, increasing purchasing power of smaller organizations
- Support and technical assistance with AI, telehealth, state programs and reporting, and cybersecurity

The biggest takeaway from listening sessions with community members was the need for education and assistance using and learning how to use health IT tools such as patient portals and telehealth. This was followed by how important trust, privacy and security, and protecting a person's information is in health care. Access to health IT and health care in languages other than English was also a central need for many communities.

The Work

Changes from the 2021 Roadmap

Two main principles — accessibility and outcomes — drove the 2025 Roadmap refresh. The OeHI team strove to make the updated Roadmap more brief, direct and targeted, and measurable. The major changes from the 2021 Roadmap include:

- Developing new goals to work toward the vision statements
- Revising values and principles
- Detailing how OeHI will measure progress toward the vision statements and goals

Directly tying in OeHI initiatives and state projects

- Incorporating a more intentional and robust community engagement strategy, led by the OeHI team
- Integrating a more patient-centered approach



Values and Principles



Accountability: Commit to transparency, fairness, and standards in vendor and community partnerships, ensuring that health IT solutions effectively serve the needs of Coloradans.



Collaboration: Engage and coordinate across state and local agencies, providers, payers, and community partners to strategically leverage efforts and maximize impact to Coloradans.



Parity: Facilitate individual-, community-, and systems-level solutions that measure, address, and reduce disparities for all Coloradans.



Reusability: Leverage existing, affordable solutions that support end users' needs when feasible and appropriate.



Sustainability: Promote solutions that provide value and encourage and justify long-term financial support.

Vision Statements

The 2025 Colorado Health IT Roadmap vision statements stem from the 2021 Roadmap goals, as they remain critical to the work of health technology in Colorado. These statements, both separately and together, paint a future that we continue to work toward and center our work on achieving.

- 1. Coloradans, providers, payers, community partners, and state, local, and Tribal agencies share data and have access to needed health and community information parity, while upholding data sovereignty.
- 2. Coloradans access high-quality, inperson, virtual, and remote health services that are coordinated through information and technology systems.
- 3. Colorado improves health parity through the inclusive and innovative use of trusted health IT and digital health solutions.





The Colorado Office of eHealth Innovation went on several site visits across Colorado during summer 2024 to hear what Coloradans had to say about the state of the health IT landscape in Colorado. Through these visits, the OeHI team reached 67 organizations and 530 people, including health care workers, community based organization staff, and community members.

Goals

The newly established goals make progress toward achieving the vision statements in alignment with the Roadmap values and principles. These goals focus on the pillars of people, technology, and innovation to support the health technology ecosystem in Colorado.

- 1. Increase Community Engagement in **Health IT Solutions:** Foster a collaborative environment where community members, patients, and health care providers actively participate in the design, implementation, and evaluation of health IT solutions to ensure they meet the various needs of the community.
- 2. Support Secure and Appropriate Sharing of Data: Develop and implement a robust framework that enhances the interoperability of health technology, establishes and supports industry standards, and strengthens cybersecurity measures to create a secure and seamless exchange of health information and resilient technology solutions.
- Foster Responsible Innovation: Encourage the development and implementation of innovative health IT solutions at the local and state level while ensuring ethical practices, stakeholder engagement, and compliance with regulatory standards.



Bolstered by the feedback gathered from extensive listening sessions across the state, OeHI, the eHealth Commission, and state partners will continue to utilize the strategies outlined in the 2021 Roadmap to work toward the goals outlined in this Roadmap.

Policy Advocacy: Policymaking at all levels of government plays a significant role in the adoption and implementation of health IT. Examples of OeHI's work include identifying policy gaps, working with lawmakers to support health IT parity, engaging with federal partners, coordinating on public comments to federal policies, and managing data-sharing and consent agreements.

Directed Funding: Investment in health IT parity strategies ensures health care and community-based partners across the state can benefit from health IT. Examples of OeHI's work include state agency investments, Centers for Medicare and Medicaid Systems (CMS) funding allocation and management, nongovernmental funding, grantmaking, federal funding applications, and financial support for providers and community organizations in adopting health IT.

Shared Solutions: Collaborating across state agencies and initiatives is essential to leveraging different resources strategically. Examples of OeHI's work include coordination and collaboration in building a scalable, data-sharing platform for community health information and co-designing reporting platforms and health IT solutions with rural providers.

Figure 1. The 2025 Colorado Health Information Technology Roadmap

Values and Principles

Based on the learnings from the listening sessions, OeHI outlined the Roadmap work using the following vision, values, goals, and strategies.







Reusability



Vision Statements

The 2025 Colorado Health IT Roadmap vision statements stem from the 2021 Roadmap goals, as they remain critical to the work of health technology in Colorado. These statements, both separately and together, paint a future that we continue to work toward and center our work on achieving.

Coloradans, providers, payers, community partners, and state, local, and Tribal agencies share data and have access to needed health and community information parity, while upholding data sovereignty.

Coloradans access highquality, in-person, virtual, and remote health services that are coordinated through information and technology systems.

Colorado improves health parity through the inclusive and innovative use of trusted health IT and digital health solutions.

Goals

The newly established goals guide progress toward achieving the vision statements in alignment with the Roadmap values and principles. These goals focus on the pillars of people, technology, and innovation to support the health technology ecosystem in Colorado.



Increase Community **Engagement in Health IT Solutions:**

Foster a collaborative environment where community members, patients, and health care providers actively participate in the design, implementation, and evaluation of health IT solutions to ensure they meet the various needs of the community.



Support Secure and Appropriate **Sharing of Data:**

Develop and implement a robust framework that enhances the interoperability of health technology, establishes and supports industry standards, and strengthens cybersecurity measures to create a secure and seamless exchange of health information and resilient technology solutions.



Foster Responsible Innovation:

Encourage the development and implementation of innovative health IT solutions at the local and state level while ensuring ethical practices, stakeholder engagement, and compliance with regulatory standards.

Championing the Work

Accomplishing the Roadmap goals requires collaboration to align strategies, policies, funding, and technology in the service of health care affordability, reducing health disparities, and increasing access for underresourced populations. Meeting these goals cannot be achieved by one organization or entity, but must rely on public, nonprofit, and private sector champions that bring unique capabilities and expertise. These champions all play a role in aligning and operationalizing policy, funding, and service decisions, community engagement, governance, and accountability.

Community partners are other important champions in these efforts. Community partners, including local government agencies, health care providers and systems, payers, community members, and technical vendors, can offer pragmatic feedback on the benefits and limitations of services and solutions.

Champions also include state agencies that play critical roles, especially those promoting health and health-related services. These agencies already or can steward many of the efforts outlined in the Roadmap and foster alignment and efficiency. These agencies include the Office of Information Technology, Colorado Broadband Office, Department of Health Care Policy and Financing, Department of Public Health and Environment, Department of Labor and Employment, Office of the Future of Work, Department of Human Services, and the Behavioral Health Administration. The following list highlights projects led by some of these champions:



- Colorado Broadband Roadmap
- Digital Government Strategic Plan



Department of Health Care Policy and Financing (HCPF)

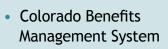
- Rural Connectivity Program Sustainability Payments
- Medicaid eConsult Program
- Medicaid Prescriber Tools (Real-Time E-Prescribing, Real-Time Benefits Inquiry, Real-Time Prior Authorization, Opioid Risk Module)
- Medicaid Care and Case Management System
- All Payer Claims Database
- Medicaid Value Based Payments
- Accountable Care Collaborative Phase III enhanced health plan IT best practices for Regional Accountable Entities
- Colorado Certified Community Behavioral Health Clinics (CCBHC) Planning Grant Awarded



Colorado Department of Human Services (CDHS)

Interoperability Roadmap

HCPF and CDHS









 Colorado Trusted Interoperability Platform



Behavioral Health Administration (BHA)

- Data Lakehouse
- Administrative Burden Initiative
- **OwnPath**



- TeleORALhealth training and resources for the oral health workforce
- Oral health integration project to improve referral tracking between medical and dental
- Public Health Data Modernization Initiative
- Provider Directory



Colorado Department of Labor and Employment (CDLE), Office of the Future of Work (OFW)

 Colorado Digital Access Plan and implementation



Colorado Department of Regulatory Agencies, Division of Insurance

- Provider Directory
- Price Transparency work
- Primary Care and Value Based **Payments**

While OeHI, with the support of the eHealth Commission, is tasked with maintaining Colorado's Health IT Roadmap and leading the coordination and collaboration around health IT initiatives and strategies, the Roadmap belongs to all champions of health IT in our state. OeHI:

- Provides leadership in advancing Colorado's health IT priorities and supports system integration across state agencies and community partners
- Aligns, integrates, and coordinates the policy, funding, and technology investments for the state's health agencies through intentional partnership
- Supports health IT adoption, implementation, and maintenance through the facilitation of the eHealth Commission, coordination with state agencies, and intentional community engagement with community partners and Coloradans
- Advises state agencies on their health IT implementation efforts, and offers avenues for investing in innovative solutions that hold promise and promote policy solutions at the state level
- Leads health IT efforts through effective collaboration and project and contract management

As OeHI plays a lead role in health IT coordination, this Roadmap will guide OeHI's work in advancing health IT in Colorado. However, the success of the goals and outcomes in this Roadmap and health IT progress in Colorado depends on the leadership, accountability, innovation, and partnerships from all of the champions of this work.

Initiatives

While many organizations and agencies contribute to achieving health IT adoption and implementation at parity in Colorado, the OeHI team focuses specifically on aligning, integrating, and coordinating the policy, funding, and technology investments for the state through collaboration and strong working relationships. OeHI has three main initiatives: care coordination, digital inclusion and community engagement, and health data governance. These initiatives encompass a variety of projects, ranging from building the Colorado Social Health Information Exchange to collaborating on improving digital parity for under-resourced

communities to building consent and data-sharing standards. These initiatives and projects are guided by the eHealth Commission and are all connected by their aim to achieve the overarching vision statements and goals. This section contains information on each of OeHI's initiatives, including an initiative overview; overarching goals; how the initiative utilizes the three strategies of policy, shared solutions, and funding; key community feedback relevant to that initiative; future opportunities; and other state projects that the initiative works in collaboration with. More information on each of the initiatives can be found on OeHI's website.

Care Coordination

Care Coordination is an overarching strategy that contains several key OeHI projects, including the Colorado Social Health Information Exchange (CoSHIE), provider directory, and community resource inventory projects. The purpose of this work is to guickly connect people to the services they need to bring about a healthier Colorado for all.

Goals of the CoSHIE project

- Remove data silos.
- Work with existing infrastructure throughout the state to complement strengths and fill gaps.
- Promote whole-person health through securely sharing physical, behavioral, and community health information between providers.
- Eliminate the need for individuals seeking care to recount complex medical and community histories repeatedly when visiting a provider.

Strategy Alignment

| Policy | Shared Solutions | Funding |
|------------------------|---|---|
| Consent Management | Provider Directory and Community Resource Inventory | Regional CoSHIE Proof of Concept Projects |
| Identity Resolution | CoSHIE Statewide Unifying Architecture | Regional CoSHIE Proof of Concept Projects |
| | Data Governance | Regional CoSHIE Proof of Concept Projects |



Key Community Feedback

Health care providers said they wished they had access to previous referrals and outcomes, homelessness data, benefits eligibility information, and information on behavioral health and substance use data for patients. Duplication of data entry was a common and consistent problem - for example, reporting the same data to different entities and internal duplication. Most referrals are done via phone or email, then tracked in the EHR due to many different systems being used and low participation in community care platforms.

Community-based organizations reported challenges with complexity and dissatisfaction with referral platforms due to many different systems being used. Duplication of data entry was very frustrating and typically due to multiple programs requesting the same data in different formats, a lack of compatibility and interoperability between systems, and limited staff capacity to think through improving internal processes.

Future Opportunities

- Sharing coordinated entry data from Homeless Management Information System (HMIS) with care coordinators
- Sharing housing voucher status data between state systems and care coordinators
- Implementing consent into the CoSHIE environment
- Working in partnership with state agencies and OIT toward unified identity and access management
- Sharing booking and release data between detention centers and care coordinators

Other Related State Projects

- Provider Directory coordination and inclusion of additional provider types
- Department of Corrections, HMIS, and Harvard Kennedy School Government Performance Labs Initiative

Digital Inclusion and Community Engagement

Digital Inclusion and Community Engagement is an overarching effort to support safety net providers in providing telehealth services, implement innovative solutions; connect to the Colorado Health Information Exchange (HIE), Contexture; and improve Colorado's ability to measure health parity. It includes the statewide Telehealth, Digital Inclusion, and Parity initiative as well as the Rural Connectivity initiative.

Goals of Telehealth, Digital Inclusion and Parity Initiative

- Improve parity of telehealth access for Coloradans through improved digital access
- Support community providers in offering telehealth services
- Support health care providers in aligning with changing demographic data requirements
- Support more accurate health parity analysis to inform policy and initiatives

The main strategies for working toward these goals include research, funding to health care providers and community-based organizations, and partnerships with community organizations like libraries.

Strategy Alignment

| Policy | Shared Solutions | Funding |
|--|--|---|
| Telehealth Payment | Colorado Digital Access Plan creation and implementation | Connect to Health @Your Library |
| Parity Analysis Reports | Reproductive and Sexual Health Chatbot | Lead applicant for Digital Parity Competitive Grant |
| | Telehealth Parity Analysis Dashboard | Lead applicant for Digital Parity Competitive Grant |
| Effects of Remote Patient Monitoring Research | Northwest/Western Colorado Telehealth Study | Telehealth + Broadband Request for Application (RFA) |
| | eConsult Community of Practice | Telehealth + Broadband Request for Application (RFA) |
| Demographic Data, Community Engagement, and Policy Framework | Cancer Diagnoses, Treatment, and Mortality Analysis | Support to safety net organizations in improving demographic data |

Key Community Feedback

Health care providers reported that the lack of training for patient portals and the lack of support for patients to adopt telehealth were among their top health IT barriers. They also cited a challenging insurance reimbursement landscape for telehealth. The biggest provider needs for telehealth included better connectivity for facilities and patients, funding and resources for telehealth equipment, embedding telehealth workflows, reduced vendor fees, and support for patients to adopt and use digital tools. Providers expressed interest in using eConsults and Remote Patient Monitoring (RPM) services, but they needed more support to implement.

Community members reported mixed use of patient portals — about half of those participating in listening sessions had never used one. For those who had used portals, their experiences were positive, and they were enthusiastic about them. For people who had never used a patient portal, low digital literacy and a lack of awareness or support for using the portal were among the top reasons. It's important to note that digital literacy could also represent a lack of usability of patient portal platforms, versus a lack of an end user's digital skills. Similarly, community members who had used telehealth generally had positive experiences and found it helpful. For those who had never used telehealth or were uncomfortable with it, barriers included digital literacy and a lack of awareness of what telehealth is and how it is used. Most important to community members was their need for education and assistance with using health IT tools such as patient portals and telehealth. They also emphasized the importance of trust, privacy and security, and protection of a person's information in health care.

Future Opportunities

- Support for community providers for telehealth equipment, vendors, and the development of telehealth workflows
- Campaigns to increase community trust and confidence in telehealth services
- Continued focus on digital inclusion and access
- Support local innovation, targeting smaller grassroots and community organizations and providers

Other Related State Initiatives

- Colorado Digital Access Plan
- Colorado Broadband Roadmap

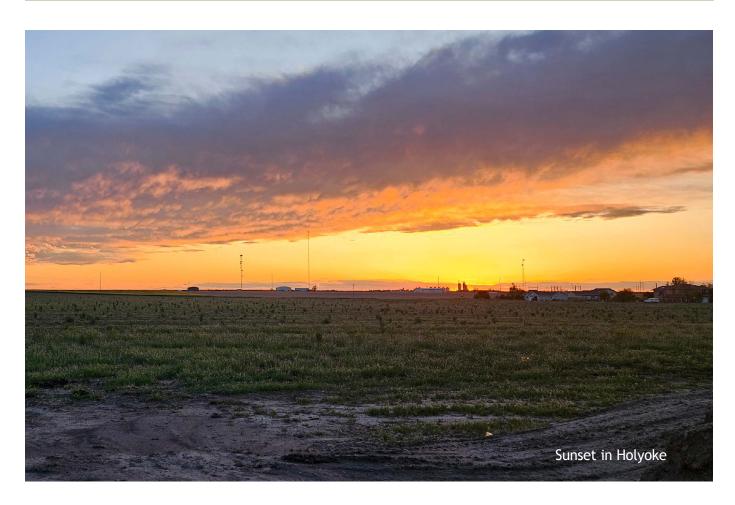


Goals of the Rural Connectivity Initiative

- Establish a sustainable model for rural technical connectivity, including:
 - Connecting providers to Colorado's HIE network
 - Supporting rural providers to adopt health IT, data-sharing and security, and analytics tools
 - Technical assistance to support care coordination and quality measurement
- The Rural Steering Committee guides and champions this work

Strategy Alignment

| Policy | Shared Solutions | Funding |
|---|---|---|
| Rural Connectivity Program Sustainability Payment | Community Analytics Platform | Rural Connectivity Program Sustainability Funding |
| | Rural Data Mapping to analyze the reporting efforts within the HIE network | Management of Rural Connectivity Program Implementation Funding |
| Rural Data Analytics Project | Rural Environmental Scan to identify providers not participating in the Rural Connectivity Programs | Management of Rural Connectivity Program Implementation Funding |
| | Cybersecurity and Network Security work group | Centers for Medicare and Medicaid Systems funding match |



Key Community Feedback

Health care provider barriers

- Health care providers reported that the top health IT barrier was cost, specifically for EHRs, other vendor fees, and HIE.
- Providers also reported redundant reporting requirements across state programs as a barrier and a particularly large burden on smaller facilities.
- Other top barriers involved challenges with EHRs, including poor vendor service, lack of accountability, a lack of reporting ability/analytics, integration challenges, lack of support and training, data gaps, and inefficient processes due to workarounds created when working in the EHR.
- Providers also reported challenges with disjointed systems that don't work well together —
 such as HIEs and EHRs and HIE to HIE and data gaps within the HIE network due to facility/
 provider types that are missing or not contributing data, such as nursing homes, behavioral
 health, and midwives.

Health care providers' needs

- Health care providers' top needs included funding for health IT, particularly funds supporting small and rural organizations, interoperability between systems, and data standardization.
- Additionally, providers needed better coordination of reporting for state programs, one
 central state point of contact for data needs, funding to get reports built, and training on
 program requirements.
- Other top needs included funding for upgrading and implementing new EHRs, as well as funding and training for cybersecurity, AI, and telehealth.

Future Opportunities

- Exploring the potential of a centralized reporting entity in response to streamlining one central point of contact for data needs and reporting to the state.
- Researching additional funding opportunities to implement and/or expand cyber, physical, and network integrity in rural facilities.
- Exploring a statewide EHR solution with technical assistance to help ease the administrative and financial burden on health care providers.
- Collaborating with the Colorado Perinatal Care Quality Collaborative (CPCQC) to address disparities among newborns and maternity deserts in rural Colorado.
- Working with the Department of Corrections to connect facilities to the HIE network.

Other Related State Initiatives

- Rural Connectivity Program Sustainability Payments
- Medicaid eConsult Program
- Hospital Transformation Program (HTP)
- CDPHE Colorado Immunization Information System (CIIS)

Health Data Governance

Governance is an approach to manage availability, quality, integrity, and security of health-related data. The purpose of health information governance is to develop and implement policies, common processes, standards, and procedures to improve the accuracy and interoperability of health information. This initiative includes OeHI's Health Data Governance and Consent Management initiatives.

Goal of the Health Data Governance Initiative

Develop and implement policies, common processes, standards, and procedures to improve the accuracy and interoperability of health information and to form a community-centered health information governance model that aligns with nationwide standards. This initiative will result in high-quality, trusted data that can be readily and appropriately accessed and shared. This initiative includes leading the CoSHIE Data Governance Committee (DGC).

Strategy Alignment

| Policy | Shared Solutions | Funding |
|--|--|---|
| Advises other state agencies, health care providers, and community care organizations on policies and regulations, and ensures OeHI compliance. These regulations include: • Health Insurance Portability and Accountability Act (HIPAA) | CoSHIE Data Governance Model: Includes governing committees, policies, data sharing practices, and legal agreements | Included in specific initiative funding streams |
| Confidentiality of Substance Use Disorder Patient Records (42 CFR Part 2) Personal Identifying Information (PII) (2 CFR 200.79) Colorado Information Security Policies (CISPs) and Technical Standards National Institute of Technical Standards (NIST) Security Policies Office of the National Coordinator (ONC) Cures Act Health Level 7 (HL7) Fast Healthcare Interoperability Resources (FHIR) | eHealth Commission Data Governance Workgroup: An OeHI-led workgroup that includes state agencies, health insurance companies, Regional Accountable Entities (RAEs), health care and community organizations, and patient advocates | Included in specific initiative funding streams |

Key Community Feedback

Health care providers expressed a need to adopt national standards for data and support interoperability between systems.

Future Opportunities:

- Partnerships with CoSHIE Regional Proofs of Concept for localized governance models
- Collaboration with statewide health technology partners to adopt national standards for data and interoperability
- Explore supporting AI best practices in the health care setting

Other Related **State Initiatives**

- Government Data Advisory Board (GDAB) Subcommittees
- Generative Artificial Intelligence (GenAI) Community of **Practice**

Goal of the Consent Management Initiative

Create a solution that gives Colorado residents granular control over their health and community data, empowering them to selectively share information while maintaining access to care.

Strategies

| Policy | Shared Solutions | Funding |
|--|---|---|
| Provides guidance and support to state agencies, health care providers, and community care organizations to implement consent-based solutions that align with state and federal policies These policies include: | Leveraging the CoSHIE to support secure, streamlined data sharing | Included in specific initiative funding streams |
| Health Insurance Portability and Accountability Act (HIPAA) | | |
| • House Bill 24-1217 | | Included |
| • <u>42 CFR Part 2</u> | Consent Proof | in specific |
| Colorado Data Privacy Act | of Concept for CoSHIE | initiative funding streams |
| Interoperability and Patient Access Final Rule (CMS-9115-F) ONC Cures Act | | |

Key Community Feedback

Community members expressed a high preference for being able to provide consent to share their health information, with many preferring to limit information sharing.

Future Opportunities:

- Statewide Consent Repository Feasibility Study
- Work with state systems to implement consent into state benefits programs to allow seamless data sharing with CoSHIE
- Pursue consent pilots with different types of organizations to reduce fears around data sharing
- Develop a consent system that allows for the legally appropriate sharing of medical, behavioral, and community data to allow participants to give, edit, and revoke organization or provider access

Other Related State Initiatives

- BHA's Friends and Family Form
- CDPHE's Colorado Women, Infants, and Children (WIC) Program new management information system (MIS)

Measuring Progress

In alignment with OeHI values of accountability and transparency, this section describes the key activities to measure progress toward the three 2025 Roadmap goals. These key activities are informed by the feedback collected during OeHI's community engagement process. A forthcoming implementation plan will be released with further details to track measurable progress toward these goals.

Goal 1: **Increase Community Engagement in Health IT Solutions**

- Establish community advisory panels comprising of diverse stakeholders to gather input on health IT initiatives.
- Develop a framework for a feedback loop that supports continuous improvement based on community insights for OeHI projects and share with other state agencies.
- Develop a dashboard that visualizes OeHI projects at various stages and the connection to other relevant state agency goals, data, and projects for transparency.

Goal 2: Support Secure and **Appropriate Sharing of Data**

- Establish an eHealth Commission subgroup to identify and adopt relevant HIT standards to facilitate interoperability across systems in alignment with national efforts.
- Develop a comprehensive data mapping strategy to ensure consistent data integration and sharing across platforms.
- Implement advanced cybersecurity protocols and training programs to protect sensitive health information, build trust among users, and support resilient technology systems.
- Collaborate with stakeholders to create a unified health data exchange framework that aligns with national and local regulations.
- Establish a working group of state agency programs to identify shared data requests from health care and community partners, with the goal of aligning ways this information is collected and identifying opportunities to decrease burden on community partners.

Goal 3: Foster Responsible **Innovation**

- Develop a framework for evaluating the ethical implications and societal impact of new health technologies.
- Engage various stakeholders, including patients, providers, and community organizations, in co-designing health IT solutions to address real-world needs.
- Explore the creation of an AI community of practice (in partnership with OIT's Chief Data Office) for health care professionals, health innovators, and other partners to share best practices and resources for successful implementation in the health care setting.
- Provide ongoing training and resources on responsible innovation practices for health IT professionals and organizations.
- Explore opportunities to support local innovation for under-resourced health care organizations and community partners.
- Develop a framework for future OeHI projects and funding.
- One of OeHI's biggest assets is flexibility to adapt to changing health IT needs in the state. However, with flexibility comes responsibility to ensure projects fit within OeHI's vision and mission. The team will develop a decision workflow for considering its new projects in an effort to help those looking for funding and partnership understand what is within OeHI's scope.

Conclusion

OeHI and the State of Colorado appreciate all of the engaged stakeholders who provided feedback in virtual and in-person listening sessions and contributed to refreshing the Roadmap. The calls for funding, interoperability, support for secure and appropriate sharing of data, fostering responsible innovation, and enhancing community engagement for health IT solutions are ways in which OeHI will meet the affordability. access, and parity goals. OeHI will continue to utilize the strategies outlined in the 2021 Roadmap to work toward these goals. Strategies from 2021 included identifying and collaborating on federal policies, data-sharing and consent policies, as well as making strategic financial investments in responsible health IT strategies and shared solutions.

Colorado's updated Health IT Roadmap will continue to focus on a statewide and coordinated health technology landscape, digital tools and services, and opportunities to leverage different funding streams and policies. This roadmap is charting a path forward and driving innovative approaches to reduce costs, increase access, and address health parity issues across our state. The Office of eHealth Innovation will lead efforts and be effective champions of innovative health IT solutions that advance community health priorities to achieve a Colorado for all.

Appendix 1: Participating Organizations

The following agencies and organizations participated in the 2025 Roadmap refresh process through interviews, presentations, listening sessions, in-person site visits, and public comments.

- A. Philip Randolph Institute (APRI), **Denver Chapter**
- AllHealth Network
- Arkansas Valley Regional Medical Center
- Aspen Community Health
- Aspen Valley Hospital
- Axis Health System
- Bright by Text
- Buena Vista Public Library
- Conejos Library District
- Delta Health
- Denver Health and Hospital Authority
- Diversus Health
- Dolores Library District/Montezuma County
- East Morgan County Hospital
- Envida
- Family Health West
- Fort Morgan Public Library
- East Morgan County Hospital
- East Morgan County Library District
- Front Range Area Health Education Center
- Gateway to Success
- Grand River Health Hospital
- Gunnison Valley Family Physicians
- Haxtun Health
- Health District of Northern Larimer County
- Heart of the Rockies Regional Medical Center (HRRMC)
- Hugo Public Library
- Ignacio Community Library
- InnovAge
- International Survivors and Families Empowered (iSAFE)
- Julesburg Public Library
- Keefe Memorial Hospital

- Kids First Health Care
- Kiowa Community Hospital
- Kiowa County Memorial Hospital
- Lincoln Health Community Hospital
- Meeker Family Health Center
- Melissa Memorial Hospital
- Memorial Regional Health
- Mesa County Collaboration for the Unhoused
- Metamorphosis Pain Management
- Northern Saguache County Library District
- Northwest Colorado Community Health Partnership (The Health Partnership)
- Pioneers
- Poudre River Public Library District
- Pueblo Community College Health Information Technology
- Rangely Family Medicine/Rangely District Hospital
- Rio Grande Hospital
- San Luis Valley Behavioral Health Group
- San Luis Valley Health Regional Medical Center
- Sedgwick County Memorial Hospital
- Silver Key Senior Services
- Silverton Public Library
- Southeast Colorado Hospital
- Southern Ute Health Center
- St. Vincent Family Health Center
- Summit County Community Health Collaborative
- Therapy Thursday
- Ute Mountain Ute Health Center
- Vail Health
- Valley View Hospital
- West Custer County Library District
- Wezesha Dada Center
- Yuma District Hospital

Appendix 2: Definitions

Critical Access Hospital (CAH): A rural hospital that has been certified by the Centers for Medicare and Medicaid Services (CMS) to meet certain requirements:

- Location: Located at least 35 miles from another hospital or CAH, or 15 miles if the area has mountainous terrain or only secondary roads
- Inpatient beds: No more than 25 acute care inpatient beds
- Emergency care: 24-hour emergency department services
- Length of stay: Average stay of no more than 96 hours for acute inpatient care

Cybersecurity: Protecting networks, devices, and data from unauthorized access or criminal use and the practice of ensuring confidentiality, integrity, and availability of information.

Data sovereignty: A Tribal Nations' inherent sovereign authority to administer the collection, ownership, and application of its own data, rooted in a Tribal nation's right to govern its people.

Digital inclusion: Activities necessary to ensure that all individuals and communities have access to information, communication, and affordable technologies and the skills and resilience to use them. Digital inclusion ultimately leads to digital parity.

Digital literacy: The ability to use digital technologies to find, evaluate, create, and communicate information.

eConsult: Also known as electronic consultations or interprofessional consults, are communications between health care providers.

Health Information Exchange (HIE): Electronic health information exchange allows doctors, nurses, pharmacists, other health care providers, and patients to appropriately access and securely share a patient's vital medical information electronically — improving the speed, quality, safety, and cost of patient care.

Health Information Technology (IT): A broad concept that encompasses an array of technologies. Health IT is the use of computer hardware, software, or infrastructure to record, store, protect, and retrieve clinical, administrative, or financial information.

Interoperability: The ability of technology systems or software to exchange and make use of information.

Remote Patient Monitoring (RPM): The use of digital devices to monitor a patient's health.

Rural health clinic (RHC): A designation by the Centers for Medicare and Medicaid Services to receive enhanced reimbursement rates for providing Medicare and Medicaid services. An RHC is an outpatient facility that provides primary care and other services to rural and underserved communities:

- Location: RHCs are located in rural areas that are designated as Health Professional Shortage Areas (HPSAs) or Medically Underserved Areas (MUAs).
- Services: RHCs provide primary care and routine laboratory services. They must use a team approach with physicians, nurse practitioners, physician assistants, and certified nurse midwives.
- Reimbursement: RHCs receive cost-based reimbursement for their services, which is a flat fee per visit. They can also collect higher reimbursement rates for government-funded individuals.
- Ownership: RHCs can be public, nonprofit, or forprofit. Independent RHCs are owned by physicians, while provider-based RHCs are operated by health care providers as part of a hospital or other facility.

Social Health Information Exchange (SHIE): A network to securely share physical, behavioral, and community health information between providers involved in whole-person care.

Telehealth: A broad term that encompasses a variety of telecommunications technologies and tactics to provide health services from a distance. It is not a specific clinical service, but rather a collection of means to enhance care and education delivery.