



---

## GOVERNANCE

---

<b>3. HARMONIZE AND ADVANCE DATA SHARING AND HEALTH INFORMATION EXCHANGE CAPABILITIES ACROSS COLORADO</b>	
<b>DOMAIN</b>	Governance
<b>DESCRIPTION</b>	This initiative develops and implements approaches to harmonize data sharing capabilities, increase the rate of health information sharing, and advance health information exchange across Colorado.
<b>BACKGROUND &amp; FINDINGS</b>	<p>Success in achieving Colorado's Triple Aim for health care reform requires that all appropriate providers have access to relevant, current, accurate information about those for whom they provide care and that consumers have access to their own information.</p> <p>Colorado has two (2) major health information exchange organizations – Colorado Regional Health Information Organization (CORHIO) and Quality Health Network (QHN) – as well as other regional and health systems-specific data exchange activities. However, not all providers and residents have access to the same capabilities, services, or service levels.</p>
<b>PURPOSE</b>	<p>The purpose of this initiative is to harmonize and expand health information sharing capabilities to serve Coloradans.</p> <p>This will support improved care coordination, enhanced clinical outcomes, and better management of costs.</p>
<b>OUTCOME(S)</b>	<p>Providers and residents have access to similar data sharing services and capabilities across Colorado.</p> <p>Ultimately, the result of full access to relevant health information is better outcomes for patients through better access to, and availability of, their health information; improved care team communication and coordination; and reduced health costs.</p>
<b>SUGGESTED APPROACH(ES)</b>	<p><b>Discover/Plan</b></p> <ol style="list-style-type: none"> <li>1. Convene a multi-stakeholder group to identify the 6-10 highest priority services and capabilities that need to be available across Colorado and designate those as high priority capabilities to harmonize.</li> </ol>



2. Develop and implement plans that focus on harmonizing the prioritized services and capabilities.
3. Leverage the State's policy and technology infrastructure such as:
  - Data Sharing policies from the Governor's Data Advisory Board (GDAB)<sup>38</sup>
4. Leverage work from other states and federal resources such as:
  - California State Health Information Guidance<sup>39</sup> (SHIG)
  - Expanded Meaningful Use (MU) funding for "non-eligible" providers who connect to eligible providers.
  - The ONC report Connecting Public Health Information, Lessons Learned<sup>40</sup> to advance the connection of Colorado's Public Health to HIE.
  - IHE profiles<sup>41</sup>
  - Carequality Interoperability Framework<sup>42</sup>

### Implement

5. Promote the Patient Centered Data Home<sup>43</sup> (PCDH) approach throughout the state and beyond.
6. Implement common policies, procedures, and technical approaches that promote the expanded use of health IT in Colorado.
7. Consider policy levers that require provider and payer participation in HIEs, and/or that support funding for HIEs through a possible use fee or tax.
8. Consider policy or other levers that require HIE participation for all reference laboratories in the state.

Consider implementing a program that qualifies entities to function as HIEs in Colorado. Leverage the work of other states such as Michigan,<sup>44</sup> New York,<sup>45</sup> and Minnesota.<sup>46</sup>

---

<sup>38</sup> Colorado's Governor's Office of Information Technology website, Government Data Advisory Board page accessed October 2017 at <http://www.oit.state.co.us/cto/cim/government-data-advisory-board>

<sup>39</sup> State of California Office of Health Information Integrity website, State Health Information Guidance (SHIG) on Sharing Sensitive Health Information page accessed October 2017 at <http://www.chhs.ca.gov/OHII/Pages/shig.aspx>

<sup>40</sup> Office of the National Coordinator of Health Information Technology. "Connecting Public Health Information Systems and Health Information Exchange Organizations, Lessons from the Field." September 2017. Accessed October 2017 at [https://www.healthit.gov/sites/default/files/FINAL\\_ONC\\_PH\\_HIE\\_090122017.pdf](https://www.healthit.gov/sites/default/files/FINAL_ONC_PH_HIE_090122017.pdf)

<sup>41</sup> IHE Profiles, <https://www.ihe.net/Profiles/>

<sup>42</sup> Sequoia Project website, Carequality Resources page accessed October 2017 at <http://sequoiaproject.org/carequality/resources/>

<sup>43</sup> Strategic Health Information Exchange Collaborative (SHIEC) website, Patient Centered Data Home page accessed October 2017 at <http://strategichie.com/patient-centered-data-home-pcdh>

<sup>44</sup> Michigan Shared Services (MiHIN) Website accessed October 2017 at [www.mihin.org/faqs/](http://www.mihin.org/faqs/)

<sup>45</sup> New York eHealth Collaborative (SHIN-NY) Website accessed October 2017 at [www.nyehealth.org/shin-ny/qualified-entities/](http://www.nyehealth.org/shin-ny/qualified-entities/)

<sup>46</sup> Minnesota e-Health Webpage accessed October 2017 at <http://www.health.state.mn.us/e-health/hie/certified/index.html>

<b>SUGGESTED INITIATOR</b>	OeHI, CORHIO, and QHN
<b>TIMING</b>	Continue and accelerate ongoing efforts
<b>INTERDEPENDENCIES</b>	<p>Initiative #4 Integrate Behavioral, Physical, Claims, Social, and Other Health Data</p> <p>Initiative #5 Statewide Health Information Governance</p> <p>Initiative #7 Accessible and Affordable Health IT and Information Sharing</p> <p>Initiative #10 Consent Management</p> <p>Initiative #11 Digital Health Innovation</p> <p>Initiative #12 Statewide Health Information Technical Architecture</p> <p>Initiative #14 Uniquely Identify a Person Across Systems</p> <p>Initiative #16 Broadband and Virtual Care Access</p>
<b>POTENTIAL FUNDING SOURCE(S)</b>	<ul style="list-style-type: none"> <li>• ARRA HITECH 90/10</li> <li>• Subscription/User fees;</li> <li>• Participant use fee/tax</li> </ul>



## 4. INTEGRATE BEHAVIORAL, PHYSICAL, CLAIMS, SOCIAL, AND OTHER HEALTH DATA

<b>DOMAIN</b>	Governance
<b>DESCRIPTION</b>	This initiative will develop and implement holistic approaches to harmonize, prioritize, and enable the integration and aggregation of relevant health information on an individual in a meaningful way.
<b>BACKGROUND &amp; FINDINGS</b>	<p>Health care reform requires the integration of physical health, behavioral health, social services, and payer information to support the coordinated care of an individual.</p> <p>Nationally, the integration and sharing of multiple types of health-related data is still in its early stages. Colorado has made strides in the integration of behavioral and physical health information through its SIM initiative, but multiple siloes of health, services, and payer information remain.</p> <p>Examples of organizations/systems housing health or services information in Colorado include:</p> <ul style="list-style-type: none"> <li>• Colorado's Medicaid Management Information System (MMIS)</li> <li>• Colorado Department of Public Health and Environment (CDPHE)</li> <li>• Colorado Department of Human Services (DHS)</li> <li>• Colorado Office of Behavioral Health (OBH)</li> <li>• Center for Improving Value in Health Care (CIVHC)</li> <li>• Colorado Regional Health Information Organization (CORHIO)</li> <li>• Dental/oral care providers</li> <li>• Quality Health Network (QHN)</li> <li>• Colorado Community Managed Care Network (CCMC)</li> <li>• Regional Accountable Entities (RAEs) (formerly Regional Collaborative Care Organizations (RCCOs))</li> <li>• Rural Health Clinics</li> <li>• Hospitals and health systems</li> <li>• Behavioral Health Centers</li> <li>• Managed Services Organizations</li> <li>• Clinically Integrated Networks</li> <li>• Commercial payers</li> <li>• Prescription Drug Monitoring Program (PDMP)</li> </ul>

	There are multiple Federal <sup>47,48,49,50,51,52</sup> national, and multi-State efforts underway to address the integration and interoperability of health data. However, so far there is no agreed upon solution to the problem.
<b>PURPOSE</b>	The purpose of this initiative is to ensure that the various types of health information can be integrated and leveraged in a meaningful way.
<b>OUTCOME(S)</b>	Readily available access (as appropriate) to holistic information on an individual – when and where needed – resulting in both improved individual care and improved population health.
<b>SUGGESTED APPROACH(ES)</b>	<ol style="list-style-type: none"> <li>Leverage the use cases that have already been developed by various organizations and initiatives such as: <ul style="list-style-type: none"> <li>Health Information Exchanges (HIEs)</li> <li>Community Mental Health Centers</li> <li>Federally Qualified Health</li> <li>Hospitals and health systems</li> <li>Payers</li> <li>Center for Improving Value in Health Care (CIVHC)</li> <li>Rural Health Clinics</li> <li>Colorado Rural Health Center</li> <li>HCPF Business Intelligence and Data Management (BIDM)</li> <li>Criminal justice</li> <li>State Innovation Model Initiative</li> <li>Colorado Office of Behavioral Health</li> </ul> </li> </ol>

<sup>47</sup> The Office of the National Coordinator for Health Information Technology. “Connecting Health and Care for the Nation – A Shared Nationwide Interoperability Roadmap”. October 2015. Accessed October 2017 at <https://www.healthit.gov/sites/default/files/hie-interoperability/nationwide-interoperability-roadmap-final-version-1.0.pdf>

<sup>48</sup> The Office of the National Coordinator for Health Information Technology. “Report on Health Information Blocking”. Report to Congress, April 2015. Accessed October 2017 at [https://www.healthit.gov/sites/default/files/reports/info\\_blocking\\_040915.pdf](https://www.healthit.gov/sites/default/files/reports/info_blocking_040915.pdf)

<sup>49</sup> The Office of the National Coordinator for Health Information Technology. “2016 Interoperability Standards Advisory”. Accessed October 2017 at [https://www.healthit.gov/sites/default/files/2016interoperabilitystandardsadvisoryfinalv2\\_02.pdf](https://www.healthit.gov/sites/default/files/2016interoperabilitystandardsadvisoryfinalv2_02.pdf)

<sup>50</sup> The Office of the National Coordinator for Health Information Technology. “Standards and Interoperability Framework”. Accessed October 2017 at <https://www.healthit.gov/sites/default/files/pdf/fact-sheets/standards-and-interoperability-framework.pdf>

<sup>51</sup> The Office of the National Coordinator for Health Information Technology. “Federal Health IT Strategic Plan 2015 – 2020”. September 2015. Accessed October 2017 at <https://www.healthit.gov/sites/default/files/federal-healthit-strategic-plan-2014.pdf>

<sup>52</sup> Health IT.gov website, Health IT Standards Committee web page accessed October 2017 at <https://www.healthit.gov/facas/health-it-standards-committee>



	<ul style="list-style-type: none"> <li>· Regional Accountable Entities</li> <li>· Local Public Health Agencies</li> </ul> <ol style="list-style-type: none"> <li>2. Determine priority areas.</li> <li>3. Focus implementation on the high priority areas.</li> <li>4. The plan should consider that there are multiple platforms that store data. It should describe the process to make (and keep) the data elements compatible even while stored in different systems. Consider using a systems architect/integrator to help with assessment and planning.</li> <li>5. Consider impact of various State and Federal Statutes such as HIPAA, FERPA, 42CFR Part 2, and others.</li> <li>6. Leverage the             <ul style="list-style-type: none"> <li>· State's Interoperability Roadmap<sup>53</sup></li> <li>· Interagency data sharing agreement</li> <li>· State's common infrastructure</li> <li>· Actionable Intelligence for Social Policy initiative (AISP)<sup>54</sup></li> </ul> </li> <li>7. Identify (not create) the standards that will be used for health information sharing in Colorado.</li> <li>8. Review and assess the policies and statutes related to the integration and sharing of diverse types of information and make recommendations to align those policies where needed.</li> <li>9. Consider creating a central place to obtain legal opinions on how data can or cannot be shared.             <ul style="list-style-type: none"> <li>· Resource for legal interpretation of HIPAA</li> <li>· Provide advice to use cases as they arise</li> </ul> </li> </ol>
<b>SUGGESTED INITIATOR</b>	OeHI, HCPF, CIVHC, SIM
<b>TIMING</b>	Continue and accelerate ongoing efforts
<b>INTERDEPENDENCIES</b>	<p>Initiative #5 Statewide Health Information Governance</p> <p>Initiative #6 Health IT Portfolio/Program Management</p> <p>Initiative #7 Accessible and Affordable Health IT and Information Sharing</p> <p>Initiative #10 Consent Management</p> <p>Initiative #12 Statewide Health Information Technical Architecture</p> <p>Initiative #14 Uniquely Identify a Person Across Systems</p>

<sup>53</sup> US Department of Health & Human Services website, Administration for Children & Families, State of Colorado Interoperability and Integration Project web page accessed October 2017 at <https://www.acf.hhs.gov/state-of-colorado-interoperability-and-integration-project>

<sup>54</sup> AISP Website, Home Page accessed October 2017 at <https://www.aisp.upenn.edu/>



---

**POTENTIAL FUNDING  
SOURCE(S)**

- ARRA HITECH 90/10
  - SIM funding
  - Grants
  - State Funding
  - Foundations
  - Public/private partnerships
-





## 5. STATEWIDE HEALTH INFORMATION GOVERNANCE

<b>DOMAIN</b>	Governance
<b>DESCRIPTION</b>	This initiative puts in place a governance structure to support statewide health information sharing and use. This governance structure includes statewide health data governance.
<b>BACKGROUND &amp; FINDINGS</b>	<p>The success of health care reform depends – at least partially – on high quality, trusted data, which can be readily and appropriately accessed and shared.</p> <p>In Colorado, there are multiple organizations and systems – public and private – housing health information. Many of these organizations share information, but there are many that cannot effectively and efficiently share their health-related data outside their own organization.</p> <p>This often results in multiple inconsistent “sources of truth” for health data – the consequences of which include lack of trust in the data, overlap of requests for data, incomplete information available, lack of integration of clinical and claims (and other) data, and overall difficulty in sharing health information and obtaining the information necessary for improving the quality and cost of care.</p> <p>Health information governance includes the overall management of the availability, quality, integrity, and security of the data being used. Sound health information governance includes a governing body or council, a defined set of policies and procedures, and a plan and resources to execute those procedures.</p> <p>Many times, the terms information governance and data governance are used interchangeably. For the purpose of clarifying this initiative, they are defined as follows.</p> <p><b>Information Governance provides the business context in which data is controlled.</b> It is a business or compliance/legal driven approach to managing and controlling how all enterprise content is used, retained, and destroyed.</p> <p>Where and when possible, it should also define “unambiguous sources of truth” for health information. Information governance is typically a business responsibility and provides the “rules of the road” for the information.</p>

	<p><b>Data Governance</b> refers to the overall management of the availability, usability, integrity, and security of the data in an enterprise. Data governance is typically part of an overall information governance program.</p>
<p><b>PURPOSE</b></p>	<p>The purpose of this initiative is to develop and implement policies, common processes, and procedures to improve the accuracy and interoperability of health information so that there is a common statewide approach to managing health information that is shared across organizations.</p>
<p><b>OUTCOME(S)</b></p>	<p>High quality, trusted health data – across the spectrum of health and social services – that can be readily accessed and used when and where needed.</p>
<p><b>SUGGESTED APPROACH(ES)</b></p>	<p><b>For Information Governance</b></p> <p><b>Discover</b></p> <ol style="list-style-type: none"> <li>1. Identify the various categories of and uses for health information that is shared such as: <ul style="list-style-type: none"> <li>• Treatment</li> <li>• Payment</li> <li>• Operations</li> <li>• Research</li> <li>• Clinical information</li> <li>• Support services</li> <li>• Population Health</li> <li>• Social Services</li> <li>• Behavior Health</li> <li>• Care coordination</li> <li>• Quality measures</li> <li>• Personal health records</li> <li>• Determine the value of care</li> </ul> </li> <li>2. Identify and assess data use policies at the state level and multi-organizational levels to develop recommendations to align policies statewide. <ul style="list-style-type: none"> <li>• Address issues such as data stewardship (vs. ownership)</li> <li>• Allowable usage</li> <li>• Business rules impacting the storage and use of health information</li> <li>• Include data relating to social determinants of health as well as specific health and social services data.</li> </ul> </li> </ol>



### Plan

3. Create a multi-stakeholder advisory council with members from both public and private sectors to advise on policy and other issues.
4. Prioritize which categories should be addressed early such as those which have a patient safety component, promote better patient care, and care coordination, apply statewide, etc.
5. Leverage current Colorado efforts and organizations, such as:
  - eHealth Commission
  - Governors Data Advisory Board
  - State Innovation Model
  - QHN, CORHIO
  - CIVHC
  - Health systems, clinically integrated networks, and managed care organizations
6. Leverage state and federal policies and tools, such as:
  - The Improving Medicare Post-Acute Care Transformation Act of 2014 (the IMPACT Act)<sup>55</sup>
  - Information Blocking Report<sup>56</sup>
  - 2017 Interoperability Standards Advisory<sup>57</sup>
  - Federal Health Architecture<sup>58</sup>

### Implement

7. Develop/modify statewide rules/guidelines for how health information that is shared will be used.
8. Communicate to health providers, payers, and the public on these updated guidelines.

### For Data Governance

1. Develop an inventory of key health and health-related information collected and/or used by the state.
2. Use this inventory to understand the categories and characteristics of the various participants in the health care ecosystem in Colorado and what data needs to be shared

---

<sup>55</sup> The IMPACT Act requires the submission of standardized data by Long-Term Care Hospitals (LTCHs), Skilled Nursing Facilities (SNFs), Home Health Agencies (HHAs) and Inpatient Rehabilitation Facilities (IRFs) Centers for Medicare and Medicaid. "Summary of Feedback from the Technical Expert Panel (TEP) Regarding Cross-Setting Measures Aligned with the IMPACT Act of 2014". April 2015. Accessed September 2017 at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Post-Acute-Care-Quality-Initiatives/Downloads/SUMMARY-OF-FEEDBACK-FROM-THE-TECHNICAL-EXPERT-PANEL-TEP-REGARDING-CROSS-SETTING-MEASURES-ALIGNED-WITH-THE-IMPACT-ACT-OF-2014-Report.pdf>

<sup>56</sup> The Office of the National Coordinator for Health Information Technology. "Report on Health Information Blocking". Report to Congress, April 2015. Accessed October 2017 at [https://www.healthit.gov/sites/default/files/reports/info\\_blocking\\_040915.pdf](https://www.healthit.gov/sites/default/files/reports/info_blocking_040915.pdf)

<sup>57</sup> HealthIT.gov website, Standards Advisory web page accessed October 2017 at [www.healthit.gov/standards-advisory](http://www.healthit.gov/standards-advisory)

<sup>58</sup> HealthIT.gov website, Federal Health Architecture (FHA) web page accessed October 2017 at [www.healthit.gov/policy-researchers-implementers/federal-health-architecture-fha](http://www.healthit.gov/policy-researchers-implementers/federal-health-architecture-fha)

	<p>across systems and organizations.</p> <ol style="list-style-type: none"> <li>3. Leverage current Colorado efforts and organizations, such as: <ul style="list-style-type: none"> <li>• State Joint Agency Interoperability Project<sup>59</sup></li> <li>• Data sharing agreements</li> </ul> </li> <li>4. Identify priority data issues, and focus on standardizing key data elements across state agencies, then across the state.</li> <li>5. Develop and implement a set of statewide standards, policies, and best practices for sharing of health and health-related data.</li> <li>6. Develop a statewide recognized data format for longitudinal health and health-related data source(s).</li> <li>7. Provide education on what data governance is and to what it applies.</li> <li>8. Recognize that there are different norms for various kinds of data.</li> </ol>
<b>SUGGESTED INITIATOR</b>	OeHI
<b>TIMING</b>	Q4 2017
<b>INTERDEPENDENCIES</b>	<p>Initiative #4 Integrate Behavioral, Physical, Claims, Social, and Other Health Data</p> <p>Initiative #9 Best Practices for Health Information Cybersecurity Threats and Incidents</p> <p>Initiative #10 Consent Management</p> <p>Initiative #12 Statewide Health Information Technical Architecture</p> <p>Initiative #14 Uniquely Identify a Person Across Systems</p> <p>Initiative #15 Unique Provider Identification and Organizational Affiliations</p>
<b>POTENTIAL FUNDING SOURCE(S)</b>	<ul style="list-style-type: none"> <li>• State budget</li> <li>• Subscription and user fees</li> <li>• Foundation funding</li> <li>• ARRA/HITECH 90/10</li> </ul>

<sup>59</sup> US Department of Health & Human Services website, Administration for Children & Families, State of Colorado Interoperability and Integration Project web page accessed October 2017 at <https://www.acf.hhs.gov/state-of-colorado-interoperability-and-integration-project>



<b>6. HEALTH IT PORTFOLIO/PROGRAM MANAGEMENT</b>	
<b>DOMAIN</b>	Governance
<b>DESCRIPTION</b>	This initiative puts in place a State-level Health IT Portfolio/Program Management function.
<b>BACKGROUND &amp; FINDINGS</b>	<p>The Office of eHealth Innovation (OeHI) as part of developing this <i>Roadmap</i>, in collaboration with other state agencies and Colorado's State Innovation Model (SIM) initiative conducted an environment scan in 2017 to identify the number, types, and scope of health IT projects across state agencies and statewide.</p> <p>This scan revealed over 90 individual health IT projects. This number includes several projects that are focused on integrating or leveraging health information exchanges, five electronic health record projects, several data sharing and interoperability efforts, legacy system upgrades and enhancements, and several innovation projects within the SIM initiative.</p> <p>Currently, the responsibility for health IT oversight resides in multiple departments and organizations. There is no single oversight body that has a comprehensive view of the entire range of statewide health IT needs and activities – that is authorized to set priorities, ensure collaboration among programs, optimize spending and resources, and minimize gaps and overlaps – on a statewide basis.</p>
<b>PURPOSE</b>	The purpose of this initiative is to design, develop, and operate a function that provides overall program management and coordination for the state's various health IT projects and initiatives.
<b>OUTCOME(S)</b>	<p>An operational entity exists that is authorized, funded, and accountable for the coordination and success of statewide health IT projects/programs/initiatives.</p> <p>The Health IT Initiatives identified in this <i>Roadmap</i> are efficiently and effectively implemented, aligned with other statewide health IT initiatives, and measurably contribute to Colorado's health care reform goal(s).</p>

<p><b>SUGGESTED APPROACH(ES)</b></p>	<p>Create<sup>60</sup> an entity, with appropriate accountability and authority to coordinate and align the health IT priorities, activities, and resources across the state.</p> <p><b>Suggested responsibilities/accountabilities</b></p> <ol style="list-style-type: none"> <li>1. Ensure funding, resources, and efforts for statewide health IT Roadmap Initiatives are prioritized, optimized, and coordinated.</li> <li>2. Ensure that initiatives related to <i>Colorado's Health IT Roadmap</i> are successfully implemented. <ul style="list-style-type: none"> <li>· This includes reducing or eliminating gaps and unnecessary overlaps among projects and capabilities.</li> <li>· Ensure that the projects implementing the initiatives are well run, meet their objectives, and deliver the value expected.</li> <li>· Acquire once, and leverage efficiencies of scale wherever possible.</li> </ul> </li> <li>3. Ensure that health data resources that are not directly governed by this entity, but are crucial to statewide health IT success, are coordinated/aligned.</li> <li>4. Establish advisory groups/councils (e.g. business and technical) comprised of appropriate stakeholders to ensure broad ongoing stakeholder input and support.</li> </ol>
<p><b>SUGGESTED INITIATOR</b></p>	<p>OeHI – as accountable organization Colorado Office of Information Technology (OIT) – as resource and managing organization</p>
<p><b>TIMING</b></p>	<p>Q3 2018</p>
<p><b>INTERDEPENDENCIES</b></p>	<p>Initiative #3 Harmonize and Advance Data Sharing and Health Information Exchange Capabilities Across Colorado</p> <p>Initiative #5 Statewide Health Information Governance</p> <p>Initiative #7 Accessible and Affordable Health IT and Information Sharing</p> <p>Initiative #8 Accessible and Affordable Health Analytics</p> <p>Initiative #12 Statewide Health Information Technical Architecture</p>
<p><b>POTENTIAL FUNDING SOURCE(S)</b></p>	<p>State budget</p>

<sup>60</sup> Create implies: fund, staff, and launch