



DRAFT

COLORADO HEALTH IT ROADMAP INITIATIVES WITH DESCRIPTIONS

October 11, 2017
eHealth Commission Meeting
Handout

Prepared by



MOSAICA
PARTNERS™

COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS

Read Me First

INITIATIVE NAME	
DOMAIN	Domain name
DESCRIPTION	One or two-sentence description of initiative.
BACKGROUND & FINDINGS	Context for why the initiative is included.
PURPOSE	The reason the initiative is included and what it should do.
OUTCOME(S)	Specific outcomes(s) the initiative is intended to achieve.
SUGGESTED APPROACH	Approaches to consider for undertaking the initiative. This is information gleaned from a variety of sources including workgroups, the eHealth Commission, etc.
LEADERSHIP RECOMMENDATIONS	Describes who should be accountable for completing the initiative. May also provide suggestions on whom else to involve.
TIMING	When this initiative should be started. Estimate by quarters.
INTERDEPENDENCIES	Lists the other initiatives or programs upon which this initiative is dependent. Lists other initiatives or programs that depend upon or interact with this initiative.
POTENTIAL FUNDING SOURCE(S)	Recommended sources for funding the initiative.

COLORADO HEALTH IT ROADMAP INITIATIVES WITH DESCRIPTIONS

1	Support Care Coordination in Communities Statewide
2	Promote and Enable Consumer Engagement, Empowerment, and Health Literacy
3	Harmonize and Advance Data Sharing and Health Information Exchange Capabilities Across Colorado
4	Integrate Behavioral, Physical, Claims, Social, and Other Health Data
5	Statewide Health Information and Data Governance
6	Health IT Portfolio/Program Management
7	Accessible and Affordable Health IT and Information Sharing
8	Accessible and Affordable Health Analytics
9	Best Practices for Health Information Cybersecurity Threats and Incidents
10	Consent Management
11	Digital Health Innovation
12	Statewide Health Information Technical Architecture
13	Ease Quality Reporting Burden
14	Uniquely Identify a Person Across Systems
15	Unique Provider Identification and Organizational Affiliations
16	Broadband and Virtual Care Access

COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS

STAKEHOLDER ENGAGEMENT

1. SUPPORT CARE COORDINATION IN COMMUNITIES STATEWIDE	
DOMAIN	Stakeholder Engagement & Participation
DESCRIPTION	This initiative will develop, support, and enhance technical approaches that can be used to easily share care coordination information – within and across – communities. The initiative recognizes that approaches to care coordination may be unique to individual communities.
BACKGROUND & FINDINGS	<p>Colorado's health care reform goals require care coordination across the continuum of care. Fortunately, in Colorado, there are already multiple communities and organizations providing care coordination. These efforts must continue to be supported and enhanced.</p> <p>As Colorado implements emerging models of value-based care and payment methods, the need for tools to support care coordination across communities, consumers, providers, and services, will continue to grow.</p>
PURPOSE	The purpose of this initiative is to support communities in implementing their own care coordination processes and to provide the tools and support for individuals whose care coordination needs may extend beyond their local community.
OUTCOME(S)	Strengthened statewide approach to care coordination.

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<p>Timely, appropriate, and easily accessible information is available at the point of care/care coordination – within and across communities – that supports optimal clinical, service, and cost outcomes.</p> <p>Criteria to measure care coordination capability and effectiveness by community is available and used.</p>
SUGGESTED APPROACH(ES)	<p>Discover</p> <ol style="list-style-type: none"> 1. Identify and leverage existing care coordination activities and alliances in Colorado such as: <ul style="list-style-type: none"> - Health care systems - Healthy Transitions Colorado¹ - Accountable Care Organizations (ACOs) - Regional Accountable Entities (RAEs) - Health Information Exchanges (HIEs) - Patient Centered Medical Homes (PCMHs) 2. Identify best practices and tools for care coordination <p>Plan</p> <ol style="list-style-type: none"> 3. Keep the coordination person(patient) centric 4. Identify gaps in care coordination and develop a prioritization method to determine high priority persons/population segments to address. Possible approaches include: <ul style="list-style-type: none"> - Hot spotters² - High-cost / high-utilizers - Tools to support patient-driven care coordination 5. Coordinate the project(s) with existing care teams (and care team projects) to prevent duplication 6. Ensure integration with statewide health information technical architecture 7. Provide incentives to promote the adoption and use of care coordination tools among all participants in Colorado’s health care

¹ Healthy Transitions Colorado <http://healthy-transitions-colorado.org>

² <http://www.newyorker.com/magazine/2011/01/24/the-hot-spotters>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<p>ecosystem</p> <ol style="list-style-type: none"> 8. Consider incentives to promote the sharing of health and health-related information 9. Include access to, and integration of, disease and other types of registries 10. Tools and incentives to engage patients, their families, and their proxies in helping to coordinate their own care <p>Implement</p> <ol style="list-style-type: none"> 11. Implement a standard approach to develop and use statewide care coordination tools. 12. Provide education and communication programs that meet the needs of stakeholders involved in Health IT/HIE aspects of health care transformation
<p>LEADERSHIP RECOMMENDATIONS</p>	<p>TBD</p>
<p>TIMING</p>	<p>Begin as soon as possible</p>
<p>INTERDEPENDENCIES</p>	<ul style="list-style-type: none"> Initiative #2 Promote and Enable Consumer Engagement, Empowerment, and Health Literacy Initiative #3 Harmonize and Advance Data Sharing and Health Information Exchange Capabilities Across Colorado Initiative #4 Integrate Behavioral, Physical, Claims, Social, and Other Health Data Initiative #6 Health IT Portfolio/Program Management Initiative #7 Accessible and Affordable Health IT and Information Sharing Initiative #10 Consent Management Initiative #11 Digital Health Innovation Initiative #12 Statewide Health Information Technical Architecture Initiative #14 Uniquely Identify a Person Across Systems Initiative #16 Broadband and Virtual Care Access



**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

POTENTIAL FUNDING SOURCE(S)	ARRA HITECH 90/10 funding (10% State Match) Foundations Public/private partnerships Innovators and private equity
------------------------------------	----------------------------------------------------------------------------------------------------------------------------

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

2. PROMOTE AND ENABLE CONSUMER ENGAGEMENT, EMPOWERMENT, AND HEALTH LITERACY	
DOMAIN	Stakeholder Engagement & Participation
DESCRIPTION	This initiative develops and implements tools to educate, engage, and empower consumers in their health (care) and well-being.
BACKGROUND & FINDINGS	Colorado has a long and successful history of engagement and collaboration with its residents. Colorado's goal to become the healthiest state will require leveraging and continuing to build stakeholder engagement as consumers become more engaged in actively pursuing better health and well-being.
PURPOSE	<p>The purpose of this initiative is to provide tools which support consumers becoming more knowledgeable and pro-active regarding their health, health care, and well-being.</p> <p>These tools will support achieving one's optimum level of wellness by leveraging the power of consumerism, and effectively managing costs.</p>
OUTCOME(S)	Consumers have available and accessible resources – and use them effectively – in supporting their knowledge of and pro-active engagement in their health and health care.
SUGGESTED APPROACH(ES)	<p>Discover</p> <ol style="list-style-type: none"> 1. Understand what tools, information, and services consumers want and need to become more informed, more active, and more engaged in their health and well-being.

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

2. Develop an inventory of capabilities and resources currently available, both locally and nationally

Plan

3. Develop and implement education and communication programs that meet the needs of consumers/stakeholders involved in Health IT/HIE aspects of health care transformation
4. Consider approaches for safety net and other populations (who don't have full choices)
 - Translation services for patients for whom English is not their native language.

Implement

5. Provide tools (consumer apps) that aggregate data and present it in secure, relevant, and user-friendly ways to:
 - Support longitudinal (cross-provider and cross-payer) health and health-related information
 - Support personal digital device-generated information
 - Provide easy to use tools to locate and access the resources such as a consumer self-service portal
 - Include access to a person's complete longitudinal information across payers and providers.
 - Enable consumers to shop on cost, service, and quality.
6. Resources to consider include the following
 - PEAK³ - Colorado's Medicaid eligibility platform
 - Center for Improving Value in Health Care (CIVHC)⁴
 - Connect for Health Colorado⁵ - Colorado's Health Insurance Exchange
 - HEDIS⁶ - Payer measures which make it possible to compare health plans on an equal footing

³ <http://coloradopeak.force.com/ABWEL>

⁴ <http://www.civhc.org/>

⁵ <http://connectforhealthco.com/>

⁶ <http://www.ncqa.org/hedis-quality-measurement/what-is-hedis>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<ul style="list-style-type: none"> - HealthGrades⁷ - Consumer education sites - HIE longitudinal record - Pt. advocacy – literacy and empowerment <p>7. Engage the innovation community to develop tools to improve consumer engagement, empowerment, and health literacy.</p>
LEADERSHIP RECOMMENDATIONS	TBD
TIMING	2018-2019
INTERDEPENDENCIES	<p>Initiative #4 Integrate Behavioral, Physical, Claims, Social, and Other Health Data</p> <p>Initiative #5 Statewide Health Information and Data Governance</p> <p>Initiative #11 Digital Health Innovation</p> <p>Initiative #12 Statewide Health Information Technical Architecture</p> <p>Initiative #16 Broadband and Virtual Care Access</p>
POTENTIAL FUNDING SOURCE(S)	<p>State budget</p> <p>Public/private partnerships</p> <p>Foundation funding</p>

⁷ www.healthgrades.com

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

GOVERNANCE

3. HARMONIZE AND ADVANCE DATA SHARING AND HEALTH INFORMATION EXCHANGE CAPABILITIES ACROSS COLORADO	
DOMAIN	Governance
DESCRIPTION	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.
BACKGROUND & FINDINGS	<p>Success in achieving Colorado's Triple Aim for health care reform requires that all appropriate providers have access to relevant 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 – CORHIO and 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>
PURPOSE	<p>The purpose of this initiative is to harmonize and expand health information sharing capabilities across Colorado.</p> <p>This will support improved care coordination, enhanced clinical outcomes, and better management of costs.</p>
OUTCOME(S)	Providers and residents have access to similar data sharing services and capabilities.

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<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 by eliminating duplicative testing or procedures.</p>
SUGGESTED APPROACH(ES)	<p>Discover/Plan</p> <ol style="list-style-type: none"> 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 2. Develop and implement plans that focus on harmonizing the prioritized services and capabilities. 3. Leverage work from other states and federal resources such as: <ul style="list-style-type: none"> • California State Health Information Guidance⁸ (SHIG) • Expanded Meaningful Use (MU) funding for “non-eligible” providers who connect to eligible providers. • ONC report Connecting Public Health Information, Lessons Learned⁹ to advance the connection of Colorado’s Public Health to HIE. • Carequality Interoperability Framework¹⁰ <p>Implement</p> <ol style="list-style-type: none"> 4. Promote the Patient Centered Data Home¹¹ (PCDH) approach throughout the state and beyond. 5. Implement common policies, procedures, and technical approaches that promote the expanded use of HIT/HIE in Colorado 6. Consider policy levers that require participation in HIEs, and/or that support funding for HIEs through a possible use fee or tax

⁸ <http://www.chhs.ca.gov/OHII/Pages/shig.aspx>

⁹ https://www.healthit.gov/sites/default/files/FINAL_ONC_PH_HIE_090122017.pdf

¹⁰ <http://sequoiaproject.org/carequality/resources/>

¹¹ <http://strategichie.com/patient-centered-data-home-pcdh>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<p>Qualified entities – what does that mean? Carrie send info</p> <p>Alignment for entry and exit - technology not driving Need more info</p>
LEADERSHIP RECOMMENDATIONS	TBD
TIMING	Ongoing
INTERDEPENDENCIES	<p>Initiative #4 Integrate Behavioral, Physical, Claims, Social, and Other Health Data</p> <p>Initiative #5 Statewide Health Information and Data Governance</p> <p>Initiative #16 Broadband and Virtual Care Access</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>
POTENTIAL FUNDING SOURCE(S)	<p>ARRA HITECH 90/10 through 2021</p> <p>User fees; participant use fee/tax</p>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

4. INTEGRATE BEHAVIORAL, PHYSICAL, CLAIMS, SOCIAL, AND OTHER HEALTH DATA	
DOMAIN	Governance
DESCRIPTION	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.
BACKGROUND & FINDINGS	<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"> • Colorado’s Medicaid Management Information System (MMIS) • Colorado Department of Public Health and Environment (CDPHE) • Colorado Department of Human Services (DHS) • Colorado Office of Behavioral Health (OBH) • Center for Improving Value in Health Care (CIVHC) • CORHIO • Quality Health Network (QHN) • Colorado Community Managed Care Network (CCMC) • Hospitals and health systems • Behavioral Health Centers • Commercial payers

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	There are multiple Federal ^{12,13,14,15,16,17} 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.
PURPOSE	The purpose of this initiative is to ensure that the various types of health information can be integrated and leveraged in a meaningful way.
OUTCOME(S)	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.
SUGGESTED APPROACH(ES)	<ol style="list-style-type: none"> 1. Leverage the use cases that have already been developed by various organizations and initiatives <ul style="list-style-type: none"> - HIEs - Community mental health centers (CMHC) - Hospitals and health systems - Payers

¹² 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 December 2015 at <https://www.healthit.gov/sites/default/files/hie-interoperability/nationwide-interoperability-roadmap-final-version-1.0.pdf>

¹³ The Office of the National Coordinator for Health Information Technology. “Report on Health Information Blocking.” Report to Congress, April 2015. Accessed December 2015 at https://www.healthit.gov/sites/default/files/reports/info_blocking_040915.pdf

¹⁴ The Office of the National Coordinator for Health Information Technology. “2016 Interoperability Standards Advisory.” Accessed December 2015 at https://www.healthit.gov/sites/default/files/2016interoperabilitystandardsadvisoryfinalv2_02.pdf

¹⁵ S&I Framework (Standards & Interoperability). Home page. Accessed December 2015 at <http://www.siframework.org/>

¹⁶ The Office of the National Coordinator for Health Information Technology. “Federal Health IT Strategic Plan 2015 – 2020.” September 2015. Accessed December 2015 at <https://www.healthit.gov/sites/default/files/federal-healthIT-strategic-plan-2014.pdf>

¹⁷ Health IT Standards Committee, <https://www.healthit.gov/facas/health-it-standards-committee>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<ul style="list-style-type: none"> - Criminal justice - State Innovation Model Initiative (SIM) - OBH <ol style="list-style-type: none"> 2. Determine priority areas <ul style="list-style-type: none"> - Consider public data vs. public/private data 3. Focus implementation on the high priority areas. <ul style="list-style-type: none"> - The plan should consider the use of multiple platforms and describe the process to make the data elements compatible across systems (and thus “computable”) - There should be one overall approach, but there may be multiple implementation instances - Consider impact of various State and Federal Statutes such as HIPAA, FERPA, etc. 4. Leverage the <ul style="list-style-type: none"> - State’s Interoperability Roadmap¹⁸ - Interagency data sharing agreement 5. 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. 6. Consider creating a central place to obtain legal opinions on how data can or not be shared <ul style="list-style-type: none"> - Resource for legal interpretation of HIPAA - React to use cases as they arise
LEADERSHIP RECOMMENDATIONS	TBD
TIMING	Ongoing
INTERDEPENDENCIES	<p>Initiative #5 Statewide Health Information and Data 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>

¹⁸ <https://www.acf.hhs.gov/state-of-colorado-interoperability-and-integration-project>



**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<p>Initiative #12 Statewide Health Information Technical Architecture Initiative #14 Uniquely Identify a Person Across Systems</p>
<p>POTENTIAL FUNDING SOURCE(S)</p>	<p>ARRA HITECH 90/10 through 2021 Grants State Funding Foundations Public/private partnerships</p>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

5. STATEWIDE HEALTH INFORMATION GOVERNANCE	
DOMAIN	Governance
DESCRIPTION	This initiative puts in place a governance structure to support statewide health information sharing and use. This governance structure includes statewide health data governance.
BACKGROUND & FINDINGS	<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 – both 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</p>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<p>they are defined as follows.</p> <p>Information Governance is a business or compliance/legal driven approach to managing and controlling how all enterprise content is used, retained, and destroyed. Information governance is typically a business responsibility and provides the “rules of the road” for the information.</p> <p>Data Governance refers to the overall management of the availability, usability, integrity, and security of the data employed in an enterprise. Data governance is typically an IT responsibility and part of an overall information governance program.</p>
<p>PURPOSE</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>OUTCOME(S)</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>SUGGESTED APPROACH(ES)</p>	<p>For Information Governance</p> <p>Discover</p> <ol style="list-style-type: none"> 1. Identify the various categories of and uses for health information that is shared such as: <ul style="list-style-type: none"> - Treatment - Payment - Operations - Research <ul style="list-style-type: none"> • Clinical / outcomes

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<ul style="list-style-type: none"> • Population health • Costs <ul style="list-style-type: none"> - Clinical information - Provide support services - Care coordination - Determine and report quality measures - Access personal health records - Determine the value of care <p>2. Identify and assess data use policies at the state level and multi-organizational levels to develop recommendations to align policies statewide.</p> <ul style="list-style-type: none"> - Address issues such as data stewardship (vs. ownership) - Allowable usage - Business rules impacting the storage and use of health information - Include data relating to social determinants of health as well as direct health and social services data. <p>Plan</p> <p>3. Create a multi-stakeholder advisory council with members from both public and private sectors to advise on policy and other issues.</p> <p>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.</p> <p>5. Leverage current Colorado efforts and organizations, such as:</p> <ul style="list-style-type: none"> - eHealth Commission - Governors Data Advisory Board (GDAB) - State Innovation Model (SIM) - QHN, CORHIO, health systems - CIVHC
--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

6. Leverage other state and federal policies and tools
 - The Improving Medicare Post-Acute Care Transformation Act of 2014 (the IMPACT Act)¹⁹ .
 - Information Blocking Report²⁰
 - 2017 Interoperability Standards Advisory²¹
 - Federal Health Architecture²²

Implement

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

For Data Governance

1. Develop an inventory of all 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
3. Leverage current Colorado efforts and organizations, such as:
 - State Joint Agency Interoperability Project (**NEED CITATION**)
 - Data sharing agreements
4. Identify priority data issues, and focus on standardizing key data elements across state agencies, then across the state
5. A set of statewide standards, policies, and best practices for

¹⁹ 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>

²⁰ REPORT TO CONGRESS, APRIL 2015, Report on Health Information Blocking

²¹ www.healthit.gov/standards-advisory

²² www.healthit.gov/policy-researchers-implementers/federal-health-architecture-fha

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<p>security of health and health-related data</p> <ol style="list-style-type: none"> 6. Statewide recognized data format for longitudinal health and health-related data source(s) 7. Provide education on what data governance is and to what it applies. 8. Recognize that there are different norms for various kinds of data.
LEADERSHIP RECOMMENDATIONS	TBD
TIMING	2019
INTERDEPENDENCIES	<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>
POTENTIAL FUNDING SOURCE(S)	<p>State budget</p> <p>Subscription and user fees</p>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

6. HEALTH IT PORTFOLIO/PROGRAM MANAGEMENT	
DOMAIN	Governance
DESCRIPTION	This initiative puts in place a State-level Health IT portfolio/program management function.
BACKGROUND & FINDINGS	<p>Many projects and initiatives relating to HIT/HIE are planned or underway in Colorado. While developing this roadmap, numerous projects were identified that have some limited connection to the HIT/HIE infrastructure.</p> <p>There are approximately xx projects currently planned or underway that directly relate to HIT/HIE. These projects have a 5-year rough cost estimate for development and operations of \$xxx million.</p> <p>The responsibility for HIT/HIE oversight resides in multiple departments and organizations. There is no single oversight body that has a comprehensive view of the entire range of statewide HIT/HIE 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>
PURPOSE	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.
OUTCOME(S)	An operational entity exists that is authorized, funded, and accountable for the coordination and success of statewide HIT/HIE projects/programs/initiatives.

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<p>The Health IT initiatives identified in this Roadmap are efficiently and effectively implemented, aligned with other statewide health IT initiatives, and measurably contribute to Colorado’s health care reform goal(s).</p>
SUGGESTED APPROACH(ES)	<p>Create²³ an entity, with appropriate accountability and authority to coordinate and align the health IT priorities, activities, and resources across the state.</p> <p>Suggested responsibilities/accountabilities</p> <ol style="list-style-type: none"> 1. Ensure funding, resources, and efforts for statewide HIT/HIE initiatives are prioritized, optimized, and coordinated. 2. Ensure that initiatives related to Colorado’s Health IT Roadmap are successfully implemented. <ul style="list-style-type: none"> • This includes reducing or eliminating gaps and unnecessary overlaps among projects and capabilities. • Ensure that the projects implementing the initiatives are well run, meet their objectives, and deliver the value expected. • Acquire once, and leverage efficiencies of scale wherever possible 3. Ensure that health data resources that are not directly governed by this entity, but are crucial to statewide HIT/HIE success, are coordinated/aligned. 4. Establish advisory groups/councils (e.g. business and technical) comprised of appropriate stakeholders to ensure broad ongoing stakeholder input and support.

²³ ‘Create’ implies: fund, staff, and launch

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

LEADERSHIP RECOMMENDATIONS	TBD
TIMING	Start as soon as possible
INTERDEPENDENCIES	<p>Initiative #3 Harmonize and Advance Data Sharing and Health Information Exchange Capabilities Across Colorado</p> <p>Initiative #5 Statewide Health Information and Data 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>
POTENTIAL FUNDING SOURCE(S)	State budget

COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS

RESOURCES/FINANCIAL

7. ACCESSIBLE AND AFFORDABLE HEALTH IT AND INFORMATION SHARING	
DOMAIN	Resources/Financial
DESCRIPTION	This initiative will develop and implement approaches that address the resources, policies, processes, programs, and technology involved in making health IT and information sharing capabilities accessible and affordable.
BACKGROUND & FINDINGS	Colorado has a high rate of HIT/HIE adoption and use. However, there are large disparities around the state when it comes to the level of access, availability, capabilities, and affordability of these systems.
PURPOSE	<p>The purpose of this initiative is to remove the barriers (cost, time, talent, and other resources) to providers that prevent equitable access to health information in Colorado.</p> <p>A focus will be placed on those providers who are most in need such as rural providers, small independent practices, and those who were not eligible for meaningful use incentives (such as behavior health and long-term care providers).</p>
OUTCOME(S)	For providers across Colorado, there is equitable access to health information – so that it is available when and where needed.

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

SUGGESTED APPROACH(ES)	Plan
	<ol style="list-style-type: none"> 1. Consider developing a “think tank” where new and innovative approaches can be aired and discussed. 2. Build upon and expand programs for incenting providers to adopt and appropriately use EHRs or other tools and actively utilize the data within the HIE through additional state-based incentives for providers not eligible for the Meaningful Use incentives. 3. Consider recommending State policies and funding to assist providers not yet using EMRs and/or HIEs due to resource constraints such as: <ul style="list-style-type: none"> - Continue and expand incentive program to support providers not previously eligible for MU incentives. - Include independent psychologists, licensed counselors, and social workers as well as designated agencies and long-term supports and services providers <p style="margin-top: 20px;">Implement</p> <ol style="list-style-type: none"> 4. Leverage expansion of allowable MU payments as described in SMD # 16-003^{24,25}. 5. Leverage current programs such as: <ul style="list-style-type: none"> - Consider “REC 2.0”-like program to continue to provide support to practices such as: - CORHIO’s EMR selection and implementation services - Clinical Health Information Technology Advisors (CHITA) - Review other successful support models such as HealthArch²⁶ working in conjunction with the University of Central Florida. 6. Collaborate with college and university programs throughout Colorado to prepare workforce talent for health informatics, analytics, program management and change management. 7. Where policies are not aligned to remove barriers to the use of

²⁴ <https://www.medicaid.gov/federal-policy-guidance/downloads/SMD16003.pdf>

²⁵ Expanded Support for Medicaid Health Information Exchanges, March 2016, https://www.healthit.gov/sites/.../smd_presentation_for_learning_event_3-8-16.pdf

²⁶ <http://ucf-rec.org/>



**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	HIE, consider recommending updates. Coordinate with – and leverage – federal, state, payer, and private incentive programs.
LEADERSHIP RECOMMENDATIONS	TBD
TIMING	Start as soon as possible
INTERDEPENDENCIES	<p>Initiative #3 Harmonize and Advance Data Sharing and Health Information Exchange Capabilities Across Colorado</p> <p>Initiative #5 Statewide Health Information and Data Governance</p> <p>Initiative #16 Broadband and Virtual Care Access</p>
POTENTIAL FUNDING SOURCE(S)	<p>ARRA HITECH 90/10 funding through 2021</p> <p>Grants and Foundations</p> <p>Public/Private partnerships</p>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

8. ACCESSIBLE AND AFFORDABLE HEALTH ANALYTICS	
DOMAIN	Resources/Financial
DESCRIPTION	This initiative will develop and implement approaches for making health analytics accessible and affordable.
BACKGROUND & FINDINGS	<p>One key to successful health care reform is understanding the value and the effectiveness of the care and the services delivered. This requires a robust ability to measure and analyze both the outcomes of care and the associated cost(s) of that care.</p> <p>On a larger scale, understanding population level outcomes is necessary to both identify trends and areas for concern as well as to gauge the state's overall progress on health care reform.</p> <p>As the ability to capture, aggregate and analyze information increases, the health care system will mature in its ability to not only understand what happened – and why – but also to take actions to prevent or reduce untoward events.</p> <p>While there are multiple ongoing projects and activities in Colorado to provide analytics today, access to the tools necessary for even the basic level of analytics is out of reach of many provider organizations. As a result, there is wide disparity around the state in the ability of providers to access needed analytics capabilities.</p>
PURPOSE	The purpose of this initiative is to ensure that a meaningful and affordable level of health analytics capability – with clinical, services, and payer information – is available to Colorado stakeholders.

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

OUTCOME(S)	There are affordable and accessible analytics and reporting capabilities that support Colorado’s Triple Aim and also meet the needs of multiple providers and stakeholders.
SUGGESTED APPROACH(ES)	<p>Discover</p> <ol style="list-style-type: none"> 1. Work with providers to understand their priority needs regarding access to analytics tools and reports. Needs may include answers to questions such as the following. <ul style="list-style-type: none"> - How am I – and my practice – doing on quality measures? - In what areas do I, as a provider, need improvement? - How do my outcomes – and patient acuity – compare with other similar practices? - What are the key health needs of the population that I serve? - What is the cost of deliveries at each hospital? - Where are my patients going for care? - Which patients are attributed to my practice that we have never seen? - How much more income could we realize if we hit specific key performance indicators (KPIs)? - Which patients have had visits elsewhere that provided the necessary follow up? - What is the anticipated total cost of care for a patient? - What is (will be) the patient’s out-of-pocket expense for care? 2. Identify the types of uses/categories for analytics such as: <ul style="list-style-type: none"> - Clinical research - Population health - Individual provider/practice performance - Costs of care

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<ul style="list-style-type: none">- Quality reporting <ol style="list-style-type: none">3. Develop use cases for the areas high priority need – as defined by providers. <p>Plan</p> <ol style="list-style-type: none">4. Leverage services and resources currently available.5. Consider innovative ways of aggregating data sources such as event notification with CIVHC.6. Work with stakeholders to identify the high priority needs where there are gaps in service.7. Develop use cases based upon these priority needs and select key capabilities to focus development and implementation. <p>Implement</p> <ol style="list-style-type: none">8. Develop and implement tools to address the high priority use cases to provide (at least) a base set of statewide health and health-related information and analytics services9. Leverage the current tools and knowledge from organizations such as:<ul style="list-style-type: none">- Center for Improving Value in Health Care (CIVHC)- Department of Public Health and Environment (CDPHE)- Colorado Longitudinal Study²⁷ (COLS)- Health information Exchanges (HIEs)- Colorado Universities10. Leverage statewide resources such as:<ul style="list-style-type: none">- Colorado registries- Basic Interoperability Data Model (BIDM)11. Consider creating an advisory service to direct people where they can go to address questions/needs such as:<ul style="list-style-type: none">- What are you going to do with the information?- What changes do I need to make now that I have this information?- We need help with the analysis and developing next action steps – glean insights and change how we do
--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

²⁷ <http://www.coloradolongitudinalstudy.org/>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<p>work.</p> <ul style="list-style-type: none"> - What do I do in response to all that information? - Provide basic tools to a broad set of users. - Develop/implement standard APIs to promote easier access to data. <p>Considerations</p> <ul style="list-style-type: none"> • Must provide timely access to results (reports). • A one-size-fits-all approach is not recommended. • Include use and integration of multiple data sources like claims and clinical data to maximize cost-effectiveness analyses. • Create an environment where analytics thrives.
LEADERSHIP RECOMMENDATIONS	TBD
TIMING	
INTERDEPENDENCIES	<p>Initiative #1 Support Care Coordination in Communities Statewide</p> <p>Initiative #4 Integrate Behavioral, Physical, Claims, Social, and Other Health Data</p> <p>Initiative #5 Statewide Health Information and Data Governance</p> <p>Initiative #7 Accessible and Affordable Health IT and Information Sharing</p> <p>Initiative #9 Best Practices for Health Information Cybersecurity Threats and Incidents</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 #13 Ease Quality Reporting Burden</p>
POTENTIAL FUNDING SOURCE(S)	

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

PRIVACY & SECURITY

9. BEST PRACTICES FOR HEALTH INFORMATION CYBERSECURITY THREATS AND INCIDENTS	
DOMAIN	Privacy & Security
DESCRIPTION	This initiative promotes the identification, and statewide sharing, of cybersecurity best practices.
BACKGROUND & FINDINGS	<p>Cyber threats and incidents are becoming increasingly frequent around the country. Colorado is no exception.</p> <p>While it may not be possible to 100% prevent an attack, the State must ensure that best cybersecurity practices are widely known and applied. Broad application of best practices related to cybersecurity is a known (and recommended) approach to minimize the chances of an attack – and to minimize the damage should one occur.</p>
PURPOSE	The purpose of this initiative is to ensure that all Colorado health stakeholders have access to best practice information – and the capabilities – to protect health information from cyberattack.
OUTCOME(S)	All health-related organizations have access to current information on cybersecurity best practices, the means to implement them, and are protected from cybersecurity threats to the level of current best practices.
SUGGESTED APPROACH(ES)	<p>Discover</p> <ol style="list-style-type: none"> 1. Conduct a statewide environmental scan to determine the key vulnerabilities in Colorado’s health information. For example:

COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS

	<ul style="list-style-type: none"> - Technology - Processes - Resources - Level of understanding <p>2. Identify high priority vulnerabilities to address</p> <p>Plan</p> <p>3. Develop and implement communication and education approaches that are appropriate to various levels of understanding.</p> <p>4. Approaches should address multi-device, multi-channel access to (appropriate) sources of statewide health and health-related information and services</p> <p>5. Provider systems should be assessed regularly for security risk.</p> <p>6. Leverage the National Cybersecurity Center²⁸ (NCC) located in Colorado Springs</p> <p>7. Utilize state resources such as:</p> <ul style="list-style-type: none"> - HB 16-1453 “Colorado Cybersecurity Initiative”²⁹ signed in May 2016 - Colorado Division of Securities Final Cybersecurity Rules³⁰ <p>Develop and Implement</p> <p>8. Involve key stakeholders to develop tools including standards, policies, and best practices for security of health and health-related data that can be used statewide</p> <p>9. Use publicly available communications channels for dissemination of best practices – such as Health IT Security website³¹ in addition to state, regional, and local experts.</p> <p>10. Convene cybersecurity experts from around the state (and</p>
--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

²⁸ <https://www.nationalcybersecuritycenter.org/> , “The National Cybersecurity Center (NCC) provides collaborative cybersecurity response services with comprehensive knowledge and capabilities through training, education, and research.”

²⁹ HB 16-1453 Colorado Cybersecurity Initiative, <https://leg.colorado.gov/bills/hb16-1453>

³⁰ https://drive.google.com/file/d/0BBymCt_FLs-RGdTBjRUZ4UI92UDA/view

³¹ <https://healthitsecurity.com/tag/cybersecurity-best-practices>



**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<p>nation) regularly to discuss cybersecurity, share best practices, and identify common issues relevant to Colorado.</p> <p>11. Work with smaller health organizations to assist them in their cybersecurity efforts.</p> <ul style="list-style-type: none"> - Consider forming a team that can be devoted to the smaller/rural organizations and provide virtual support
LEADERSHIP RECOMMENDATIONS	TBD
TIMING	
INTERDEPENDENCIES	<p>Initiative #3 Harmonize and Advance Data Sharing and Health Information Exchange Capabilities Across Colorado</p> <p>Initiative #5 Statewide Health Information and Data Governance</p>
POTENTIAL FUNDING SOURCE(S)	

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

10. CONSENT MANAGEMENT	
DOMAIN	Privacy & Security
DESCRIPTION	This initiative develops and implements a statewide approach to consent management that aligns and harmonizes the consents required for health information sharing in Colorado.
BACKGROUND & FINDINGS	<p>Health care reform requires the integration of physical health, mental health, social services, and payer information to enable the coordinated care of an individual. Currently, an individual may need to provide his/her consent for their information to be shared multiple times – and to multiple providers.</p> <p>Providers in Colorado have adopted various approaches, and use different forms, to obtain consent to share health information. Various organizations have different tolerance for risk and their consent forms are often a tangible indication of these differences.</p> <p>This inconsistency in both understanding and process contributes to a lack of complete patient information readily and appropriately available at the point of care.</p> <p>The sharing and integration of health information is further inhibited by multiple interpretations of HIPAA, State requirements for sharing protected health information, and the specific rules of disclosure found in 42 CFR Part 2³².</p>

³² U.S. Government Publishing Office. "Title 42, Chapter 1, Subchapter A, Part 2: Confidentiality of Alcohol and Drug Abuse Patient Records," January 13, 2016. Accessed January 2016 at <http://www.ecfr.gov/cgi-bin/text-idx?rgn=div5;node=42%3A1.0.1.1.2>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

PURPOSE	<p>The purpose of this initiative is to remove the barriers to, uncertainties around, and wide variance in practices used for consent to share an individual's health information.</p> <p>The initiative will develop and implement common policies and procedures for obtaining consent that can be used consistently and regularly by providers statewide.</p>
OUTCOME(S)	<p>There is a common understanding – and consistent implementation – of consent policies and procedures for sharing health information.</p> <p>The consents to share health information are harmonized across Colorado.</p> <p>Implemented automated consents that enable data sharing.</p>
SUGGESTED APPROACH(ES)	<p>Develop a common consent process and tools – usable statewide – for obtaining consent for sharing health information. Ensure this process supports person-directed care.</p> <p>Discovery</p> <ol style="list-style-type: none"> 1. Conduct environmental scan to identify variations in consents used statewide. 2. Obtain provider, consumer, legal, and other expert opinions as foundation for developing the approach <p>Plan</p> <ol style="list-style-type: none"> 3. Leverage Colorado resources such as: <ul style="list-style-type: none"> - Advanced Interoperability Grant ³³ work done by CORHIO and QHN. - Colorado's State Innovation Model (SIM) ^{34,35} grant

³³ <http://www.corhio.org/news/2016/7/13/732-colorado-advanced-interoperability-initiative--making-behavioral-health-data-available-to-community-providers>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<ul style="list-style-type: none"> - HIEs ability to query consent - “Behavioral Health Data Exchange in Colorado,” a white paper published in June 2017³⁶ <ol style="list-style-type: none"> 4. Harmonize consents to develop common process/forms that can be used statewide. 5. Ensure that the process for obtaining consent is well-integrated into providers’ workflow. 6. Incorporate mental health/substance use data when appropriate. 7. Consider creating incentives to adopt the statewide consent approach. 8. Research the consent processes that other states have developed for statewide use. 9. Include considerations for consent requirements for cross-state sharing of information 10. Involve key stakeholders in coming to consensus around a consent approach that would be used statewide. <ul style="list-style-type: none"> - Draft a proforma consent and vet with stakeholders statewide – revising as necessary. <p>Education</p> <ol style="list-style-type: none"> 11. Provide education and outreach to providers and consumers relating to consent processes, options, and the impact of choices. 12. Continue to use REC-like resources to implement across providers where appropriate. <p>Implementation</p> <ol style="list-style-type: none"> 13. Continue with the physical and behavioral health consent processes. 14. Consider offering automated consent management tools as a service.
LEADERSHIP	TBD

³⁴ www.colorado.gov/healthinnovation
³⁵ drive.google.com/file/d/0BxUiTIOwSbPUYkhmMFpPc210ZWs/view
³⁶ CORHIO and QHN. “Behavioral Health Data Exchange in Colorado,” June 2017. Retrieved October 2017 from <https://drive.google.com/file/d/0B23Qq7mWJrhxcGdnMDVGdFpuM2s/view>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

RECOMMENDATIONS	
TIMING	
INTERDEPENDENCIES	<p>Initiative #1 Support Care Coordination in Communities Statewide</p> <p>Initiative #2 Promote and Enable Consumer Engagement, Empowerment, and Health Literacy</p> <p>Initiative #3 Harmonize and Advance Data Sharing and Health Information Exchange Capabilities Across Colorado</p> <p>Initiative #4 Integrate Behavioral, Physical, Claims, Social, and Other Health Data</p> <p>Initiative #5 Statewide Health Information and Data Governance</p> <p>Initiative #7 Accessible and Affordable Health IT and Information Sharing</p> <p>Initiative #14 Uniquely Identify a Person Across Systems</p> <p>Initiative #15 Unique Provider Identification and Organizational Affiliations</p>
POTENTIAL FUNDING SOURCE(S)	

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

INNOVATION

11. DIGITAL HEALTH INNOVATION	
DOMAIN	Innovation
DESCRIPTION	This initiative facilitates programs, processes, and partnerships that foster health-related innovation in Colorado.
BACKGROUND & FINDINGS	Colorado has one of the nation’s leading health, and digital health, innovation ecosystems. Several hundred innovative companies have formed and solutions have been developed that are changing the healthcare landscape. Longstanding companies and health providers are also innovating. Colorado’s innovation community is one of the state’s most significant digital health assets.
PURPOSE	<p>The purpose of this initiative is to engage and focus Colorado’s digital health innovation community, leverage innovation, and accelerate transformation of health care within the state – and the nation.</p> <p>Realize Roadmap Objectives through innovative approaches; deliver higher value to Coloradans.</p>
OUTCOME(S)	<p>Continued measurable progress on the Governor’s Dashboard for Health.</p> <p>Significantly reduce barriers for digital health innovators in accessing requirements, markets, capital, and supports.</p> <p>Accelerate progress on Colorado’s Triple Aim: improved care,</p>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	improved health, improved value.
SUGGESTED APPROACH(ES)	<p>Develop and implement a program to foster health care and health-related innovation between and among digital innovation centers/incubators, private and public/private organizations, state agencies, and other public organizations.</p> <p>Facilitate Innovation</p> <ol style="list-style-type: none"> 1. Partner with and leverage work in the innovation community such as Prime Health³⁷, 10.10.10³⁸, Healthy Transitions Colorado³⁹, and others. 2. Assist innovators to break through barriers such as the resistance of health care providers and State agencies to use small vendors or to try innovative ways of doing things. <ul style="list-style-type: none"> - Consider provider/payer/other incentives - Publish a “road map” for innovators to more easily and more rapidly navigate the State’s procurement processes - Support efforts to create a “test bed” of health data so innovators can access and test novel solutions 3. Support the work that is underway to develop a test bed of community data for innovation that can be used for innovation. <p>Provide Guidance</p> <ol style="list-style-type: none"> 4. The eHealth Commission, with broad stakeholder input, should identify Colorado’s top three (3) priorities for health innovation and consider hosting an “Innovation Challenge” focused on these priorities <ul style="list-style-type: none"> - Prioritize results of the 2017 Prime Health Innovation Summit to guide innovators in their efforts - Develop actionable next steps and consider the need for multi-device, multi-channel access to (appropriate)

³⁷ <http://www.primehealthco.com/>

³⁸ www.101010.net

³⁹ <http://healthy-transitions-colorado.org/innovation-in-colorado>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<p style="text-align: center;">sources of statewide health and health-related information and services</p> <ol style="list-style-type: none"> 5. Encourage innovative approaches to the tools called for in this Roadmap 6. Continue to align the innovation community with the state’s key health priorities (via Summits, Meet Ups, communications, etc.) <p>Assist with Communication/Marketing</p> <ol style="list-style-type: none"> 7. Highlight and communicate programs and sources that can help fund innovation 8. Highlight Colorado innovations both locally and nationally
LEADERSHIP RECOMMENDATIONS	TBD
TIMING	This initiative started in 2017 (Work Group, Summit)
INTERDEPENDENCIES	<p>This initiative is dependent upon key partnerships in the innovation community and engaged stakeholders</p> <ul style="list-style-type: none"> Initiative #1 Support Care Coordination in Communities Statewide Initiative #2 Promote and Enable Consumer Engagement, Empowerment, and Health Literacy Initiative #5 Statewide Health Information and Data Governance Initiative #6 Health IT Portfolio/Program Management Initiative #7 Accessible and Affordable Health IT and Information Sharing Initiative #8 Accessible and Affordable Health Analytics Initiative #9 Best Practices for Health Information Cybersecurity Threats and Incidents Initiative #10 Consent Management Initiative #13 Ease Quality Reporting Burden Initiative #14 Uniquely Identify a Person Across Systems Initiative #15 Unique Provider Identification and Organizational



**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	Affiliations
POTENTIAL FUNDING SOURCE(S)	Private sector funding, grants, state, and federal funds

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

TECHNOLOGY

12. STATEWIDE HEALTH INFORMATION TECHNICAL ARCHITECTURE	
DOMAIN	Technology
DESCRIPTION	This initiative investigates, develops, and implements approaches to optimize Colorado’s health information technical architecture.
BACKGROUND & FINDINGS	<p>In Colorado, there are many organizations and systems – both public and private – that collect, house, and disseminate health information. The result is gaps and overlaps in the information as well as differences in the quality of the information.</p> <p>This often results in multiple inconsistent “sources of truth” for 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>With the massive and ever-increasing amount of digital (health) information, an information architecture is essential to ensure that people can access the information they need when and where they need it.</p> <p>Having a complete and well documented Health Information Technical Architecture will enable the state to make effective decisions about which projects to pursue and the technology or products to use in the implementation.</p> <p>This may also be referred to as an Enterprise (Reference)</p>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	Architecture.
PURPOSE	The purpose of this initiative is to develop and document agreed upon technical approaches and processes to capture, store/manage, and disseminate health information in Colorado. Where and when possible, it should also define “unambiguous sources of truth” for health information.
OUTCOME(S)	An agreed upon statewide logical technical architectural model that optimizes how health information in Colorado is captured, managed, and disseminated and supports the “fully connected participant”.
SUGGESTED APPROACH(ES)	<p>A statewide Health Information Technical Architecture encompasses all the characteristics of a general information architecture/enterprise architecture, but is focused on health information. It includes common policies, procedures, and technical approaches that both support and promote the expanded use of HIT/HIE in Colorado</p> <p>Discover</p> <ol style="list-style-type: none"> 1. Conduct an environmental scan to understand the current statewide and state agency health information technical infrastructure/architecture(s) to: <ul style="list-style-type: none"> - Gain an understanding of the categories and characteristics of the various participants in the health care ecosystem in Colorado - Understand what components are already in place - Identify interfaces already in place, and those planned - Understand what’s available to effectively and efficiently leverage 2. Work with key stakeholder groups to understand their needs for – and contributions to – health information. <p>Plan</p> <ol style="list-style-type: none"> 3. Create a vision of how the pieces fit together as well as how the “services” will be made available. Include supporting services that are optimized for [large-scale] multiple uses and multiple users

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<p>4. Identify and develop high priority use cases for development</p> <p>5. Involve key stakeholders to develop and evaluate various pro forma models – especially of high priority use cases – to optimize the collection, management, and dissemination of health information across organizations.</p> <p>Implement</p> <p>6. Involve key stakeholders to develop/select the model to implement.</p> <p>7. Educate stakeholders on how to use the model.</p> <p>8. Involve key stakeholders in the on-going development and maintenance of the model.</p> <p>9. Explore creating a permanent governing body for the information architecture as part of overall information governance.</p> <p>Considerations</p> <ul style="list-style-type: none"> • The architecture must be scalable and able to evolve over time. • The approach should be to use a “capture once, store simply, disseminate as required”. • The architecture should support care being delivered in the most appropriate, mutually convenient, cost effective manner • Need to determine the scope of what is included in the information architecture. • Design the infrastructure components to keep pace with health advances • Architecture must accommodate multi-device, multi-channel access to (appropriate) sources of statewide health and health-related information and services including: <ul style="list-style-type: none"> - Statewide health care price and quality information - Access to, and integration of, disease and other types of registries
LEADERSHIP RECOMMENDATIONS	TBD

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

TIMING	
INTERDEPENDENCIES	<p>Initiative #3 Harmonize and Advance Data Sharing and Health Information Exchange Capabilities Across Colorado</p> <p>Initiative #4 Integrate Behavioral, Physical, Claims, Social, and Other Health Data</p> <p>Initiative #5 Statewide Health Information and Data 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 #8 Accessible and Affordable Health Analytics</p> <p>Initiative #9 Best Practices for Health Information Cybersecurity Threats and Incidents</p> <p>Initiative #10 Consent Management</p> <p>Initiative #11 Digital Health Innovation</p> <p>Initiative #13 Ease Quality Reporting Burden</p> <p>Initiative #14 Uniquely Identify a Person Across Systems</p> <p>Initiative #15 Unique Provider Identification and Organizational Affiliations</p> <p>Initiative #16 Broadband and Virtual Care Access</p>
POTENTIAL FUNDING SOURCE(S)	

COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS

13. EASE QUALITY REPORTING BURDEN	
DOMAIN	Technology
DESCRIPTION	This initiative provides technology support to ease the capture, aggregation, and reporting of agreed upon, quality reporting measures.
BACKGROUND & FINDINGS	<p>Providers are inundated with, and over-burdened by, the multiple reporting requirements from State and Federal programs – as well as various commercial payers. Many of these requirements request the same or similar data, but in different formats and on different schedules. This lack of coordination causes an increased workload, with little or no recognized return, for the providers.</p> <p>In addition to these varied reporting requirements, providers still need to enter much of the data manually because not all providers' EHRs capture (or calculate) the data necessary for quality reporting.</p> <p>Providers are typically willing to provide the data but are seeking relief from the multiple, sometimes redundant, requests by multiple entities such as ACOs, commercial payers, Medicaid, Medicare, and other State programs.</p>
PURPOSE	<p>The purpose of this initiative is to ease the burden on providers for submitting quality measures.</p> <p>This initiative should provide tools that streamline the processes used to report on quality measures.</p>
OUTCOME(S)	Reduced reporting workload for providers.

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<p>Simplified and streamlined processes for reporting required measures.</p> <p>Affordable tools readily available to assist providers with the capture and reporting of their quality data.</p>
<p>SUGGESTED APPROACH(ES)</p>	<p>Discover</p> <ol style="list-style-type: none"> 1. Conduct environmental survey to understand providers' s various reporting requirements, formats, and schedules. 2. Assess EHRs and other technologies for their ability to capture and report on required measures. <p>Plan</p> <ol style="list-style-type: none"> 3. Identify the top priority areas by obtaining input from providers regarding their "pain points". <ul style="list-style-type: none"> - Involve key stakeholders as advisors to ensure their top priority areas are addressed early 4. Identify the reporting requirements that are within the State's purview – such as health care reform efforts that are currently underway – and identify ways to streamline the types, formats, and schedules for reporting. 5. Agree upon a set of quality and performance data required (and collected) by State and State programs <p>Implement</p> <ol style="list-style-type: none"> 6. Harmonize measure definitions, reporting schedules, and data formats where possible and feasible 7. Provide tools to enhance the capture, analysis, and reporting of quality data.
<p>LEADERSHIP RECOMMENDATIONS</p>	<p>TBD</p>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

TIMING	
INTERDEPENDENCIES	<p>Initiative #3 Harmonize and Advance Data Sharing and Health Information Exchange Capabilities Across Colorado</p> <p>Initiative #6 Health IT Portfolio/Program Management</p> <p>Initiative #7 Accessible and Affordable Health IT and Information Sharing</p> <p>Initiative #8 Accessible and Affordable Health Analytics</p> <p>Initiative #14 Uniquely Identify a Person Across Systems</p> <p>Initiative #15 Unique Provider Identification and Organizational Affiliations</p> <p>Initiative #16 Broadband and Virtual Care Access</p>
POTENTIAL FUNDING SOURCE(S)	

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

14. UNIQUELY IDENTIFY A PERSON ACROSS SYSTEMS

DOMAIN	Technology
DESCRIPTION	This initiative develops and implements a comprehensive approach – that includes both health and social services information – that will be used across Colorado to uniquely identify a person across multiple systems and points of care.
BACKGROUND & FINDINGS	<p>Achieving health care reform and the Triple Aim requires the unambiguous identification of a person and links to their relevant health related information.</p> <p>Throughout Colorado’s health and social services community there are many siloed Master Patient/Person Index (MPI) implementations. Most of these MPIs are focused on patient identification and are typically used by a single organization or system.</p> <p>Knowing that the information presented for an individual is accurate, complete, and current is critical to appropriate care. Today, each of these siloed systems has its own unique way of identifying a person. These individual systems identifications are rarely, if ever, compatible with other organizational systems. This makes the effort to correctly identify a patient across organizations – and ensure that the data retrieved is accurate – both cumbersome and expensive.</p> <p>Due, in part, to the differences in these MPIs, information about a person cannot easily be shared across systems.</p> <p>It will continue to be difficult for Colorado to integrate information from various systems and points of care – so that a person’s complete health information and the services provided to an individual can be</p>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	easily known and coordinated – until a single common approach to identity is implemented statewide.
PURPOSE	The purpose of this initiative is to uniquely identify a person across a variety of health systems and settings. This will facilitate accurate and appropriate data sharing, care and service coordination, value based payment information, and accurate analytics.
OUTCOME(S)	<p>An agreed upon approach is implemented in Colorado to accurately and unambiguously identify an individual across multiple systems and settings.</p> <p>This will result in easily obtaining complete health information about an individual.</p> <p>Optimally, person identification “as a service” is available, accurate, reasonably priced, and widely used.</p>
SUGGESTED APPROACH(ES)	<p>The scope for this initiative should be broader than the state’s current HIT/HIE infrastructure to ensure maximum interoperability statewide.</p> <p>This requires understanding the broad and diverse requirements needed for health and social services information linking throughout the state.</p> <p>Discover</p> <ol style="list-style-type: none"> 1. Conduct an environmental scan to determine the current environment related to person identity capabilities. 2. Inventory the number, types, capabilities, sources, and resources expended on multiple MPIs. 3. Determine the extent and cost of unnecessary duplication. <p>Harmonize</p> <ol style="list-style-type: none"> 4. Develop an approach for implementing a common person identity that can be used by multiple systems statewide.

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

5. Consult with providers and consumers regarding what data should (could) be used for harmonization
6. Use Statewide social advocates to assist in gaining provider and consumer input such as:
 - Colorado consumer health initiative
 - Center for patient advocacy
7. Identify the benefits of a harmonized approach and use to educate providers and consumers
8. Develop and prioritize use cases
9. Align and consolidate identity-matching approaches into a common statewide approach.
10. Leverage and align the approach with federal direction and capabilities/systems on statewide common services approach.^{40,41}
11. Utilize record locator services that can be federated across information source systems.
12. Consider the use of biometrics

Implement

13. Develop and implement the tools and processes identified.
14. Consider Incentives to promote the sharing of health and health-related information
15. Develop tools and processes to support statewide identify matching
16. Consider a “state recognized master person identity approach that is required to communicate with state agencies.

Considerations

- Approach should be scalable and extensible
- Align with My Colorado’s client index, to the extent possible
- Should be able to be used by external to organizations (not just within the State agencies)

⁴⁰ The Sequoia Project. “A Framework for Cross-Organizational Patient Identity Management.” November 10, 2015 (draft for public review and comment). <http://sequoiaproject.org/framework-for-cross-organizational-patient-identity-matching/>

⁴¹ ONC’s Patient Identification Safer Guide, www.healthit.gov/policy-researchers-implementers/safer/guide/sg006

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<ul style="list-style-type: none"> • May be use-case specific algorithms – but the approach should be able to be broadly used
LEADERSHIP RECOMMENDATIONS	TBD
TIMING	
INTERDEPENDENCIES	<p>Initiative #1 Support Care Coordination in Communities Statewide</p> <p>Initiative #3 Harmonize and Advance Data Sharing and Health Information Exchange Capabilities Across Colorado</p> <p>Initiative #5 Statewide Health Information and Data Governance</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 #13 Ease Quality Reporting Burden</p> <p>Initiative #15 Unique Provider Identification and Organizational Affiliations</p>
POTENTIAL FUNDING SOURCE(S)	

COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS

15. UNIQUE PROVIDER IDENTIFICATION AND ORGANIZATIONAL AFFILIATIONS

DOMAIN	Technology
DESCRIPTION	This initiative develops and implements an electronic (digital) approach that will be used across Colorado for uniquely identifying a health care provider and their organizational affiliations – and ultimately their patient relationships.
BACKGROUND & FINDINGS	<p>Provider directories are critical tools for implementing value-based payment. Providers may practice at multiple locations, hold different roles in various organizations, be compensated by multiple payers, and have different relationships with different patients.</p> <p>These multiple roles and affiliations must be able to be readily and correctly identified as Colorado moves towards value based care. Provider directories can support several components of value based care models. Examples of these are provided below.</p> <p style="margin-left: 40px;">Patient Attribution</p> <p style="margin-left: 40px;">Value based care models compensate providers based on the providers meeting certain quality metrics – many of which are patient centric. To this effectively proper attribution of patients to providers is essential. Provider directories can support attribution by supplying accurate, up to date information on providers. Accurate attribution is important so that the results of patient related quality metrics can be linked to the appropriate provider and the provider can then be compensated appropriately.</p> <p style="margin-left: 40px;">Care Coordination/Transition</p> <p style="margin-left: 40px;">Provider directories can provide much needed information for referring providers ranging from contact information to</p>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<p>organizational affiliations.</p> <p>Research Support</p> <p>The information in provider directories can provide the information to conduct research and policy development in support of improved access for medically underserved populations, especially as it relates to health professional workforce</p> <p>In Colorado there are many health care organizations, state agencies, and other entities that support multiple provider directories. These directories have been created and maintained to meet the needs specific to an organization.</p> <p>Colorado does not have a statewide provider directory. As a result, the costs to maintain the directories are duplicated and not cost effective, accuracy is not assured, and the benefits remain isolated.</p>
PURPOSE	The purpose of this initiative is to provide a single statewide “source of truth” for provider information and their organizational affiliations, that will support accurate attribution models and value-based care.
OUTCOME(S)	There is a recognized, current, and accurate statewide “source of truth” for provider information available to – and used by – all who require the information. Provider Directory “as a service” is available, accurate, reasonably priced, and used statewide.
SUGGESTED APPROACH(ES)	<p>Ultimately this system should be able to link providers in the following ways.</p> <div style="border: 1px solid gray; border-radius: 15px; padding: 10px; background-color: #f0f0f0; margin: 10px auto; width: fit-content;"> <p>Provider → Unique ID</p> <p>Provider → Practice(s)</p> <p>Provider → Payer Plan(s)</p> <p>Provider → Patient(s)</p> </div>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS****Discover**

1. Determine the current capabilities related to provider identity and their associated organizations.
2. Inventory the number, types, capabilities, sources, and resources expended on the use of multiple sources of data for provider information.
3. Determine the extent and cost of potentially unnecessary duplication.

Harmonize

4. Develop an approach for a common provider identity that can be used by multiple systems statewide.
5. Determine the various sources of information for provider identification, organization identification and relationships, providers, and patients
6. Identify the benefits of a harmonized approach and providing a single “source of truth” for provider identify and relationships.
7. Develop and prioritize use cases
8. Align and consolidate identity-matching approaches into a common statewide approach.
9. Consider broad statewide use of the Provider Directory currently under development in CDPHE
10. Develop a long-term sustainability approach
11. Develop policies that drive the use of the Provider Directory

Implement

12. Consider offering this as a utility or a service
11. Consider mandating the use of this directory for all state-related business

How this directory could be used:

- As a recognized, unambiguous, and relied upon identifier of providers when doing business with the state
- As a resource for provider/patient attribution in value based payment models

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<ul style="list-style-type: none"> • Associate providers to payer plans. • Understand provider relationships: person, associated with one of many organizations
LEADERSHIP RECOMMENDATIONS	TBD
TIMING	
INTERDEPENDENCIES	<p>Initiative #1 Support Care Coordination in Communities Statewide</p> <p>Initiative #4 Integrate Behavioral, Physical, Claims, Social, and Other Health Data</p> <p>Initiative #5 Statewide Health Information and Data Governance</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>
POTENTIAL FUNDING SOURCE(S)	

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

16. BROADBAND AND VIRTUAL CARE ACCESS	
DOMAIN	Technology
DESCRIPTION	This initiative develops and supports approaches that lead to ubiquitous, redundant, reliable, and affordable broadband access for health organizations and consumers.
BACKGROUND & FINDINGS	<p>Achieving health care reform and the Triple Aim will require continuous investment in new modes and models of care. These may include virtual patient visits and patient-generated/patient-captured information accomplished through multiple evolving technologies.</p> <p>Colorado has already made significant inroads into providing remote access to care through telehealth services. But, broadband access is limited or non-existent in many of Colorado's rural communities. The lack of access severely inhibits effective participation in telehealth and other emerging capabilities.</p> <p>In Colorado's rural areas, only 7 in 10 people have access to broadband. The state wants to raise rural broadband availability from 70 percent to 85 percent by the end of 2018, and pave the path to achieve 100 percent access for all of Colorado by 2020.⁴²</p> <p>Telehealth is an important avenue to support health care reform and is increasingly seen as an acceptable alternative to many types of in-person provider visits.</p> <p>While providing care remotely using telehealth technologies is not a new method of care, there are significant discussions and initiatives relating to key issues; among them are reimbursing providers for</p>

⁴² <https://www.colorado.gov/governor/news/gov-hickenlooper-announces-executive-director-broadband-office>

COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS

	<p>services rendered via telehealth, and addressing licensure requirements when the patient and the provider are in different states.</p> <p>Colorado’s Medicaid program, Health First Colorado⁴³, covers reimbursements for live video telemedicine for both medical and mental health services at the same rate as in-person services. Remote Patient Monitoring is reimbursed, but only on a flat fee basis for chronic disease management.</p> <p>Similarly, Medicare has updated its payment structure to broaden the telehealth services it covers.⁴⁴</p> <p>Significant attention is also being given by the Veterans’ Administration⁴⁵ (VA) on using telehealth to improve access to care by veterans.</p> <p>The Veterans E-health and Telemedicine Support Act of 2017 allows a licensed healthcare professional of the Department of Veterans Affairs to practice his or her profession using telemedicine at any location in any state, regardless of where the professional or patient is located. The proposed rule “Authority of Health Care Providers to Practice Telehealth”⁴⁶. was published in the Federal Register on October 2, 2017. This is significant for Colorado as there are 399,458⁴⁷ veterans living in the state. These veterans, located around the state, reside in communities ranging from urban to the very rural.</p>
PURPOSE	<p>The purpose of this initiative is to ensure equitable access to high speed connectivity.</p>

⁴³ www.colorado.gov/pacific/hcpf/telemedicine

⁴⁴ Centers for Medicare and Medicaid, Telehealth Services. “Rural Health Fact Sheet Series.” <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/TelehealthSrvcsfctsht.pdf>

⁴⁵ U.S. Department of Veterans Affairs. “VA Telehealth Services” web page. <http://www.telehealth.va.gov/>

⁴⁶ Authority of Health Care Providers To Practice Telehealth <https://www.federalregister.gov/documents/2017/10/02/2017-20951/authority-of-health-care-providers-to-practice-telehealth>

⁴⁷ U.S. Census Bureau, Veterans Statistics - Veterans Day 2015 www.census.gov/library/visualizations/2015/comm/veterans-statistics.html

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<p>High speed connectivity is critical for widespread use of virtual care capabilities – such as telehealth and digital health.</p>
<p>OUTCOME(S)</p>	<p>All Coloradans have access to high speed connectivity sufficient for participating in virtual care programs.</p> <p>Access to high speed connectivity will decrease disparities of care across Colorado by providing residents with broader availability of telehealth and other emerging technologies for care.</p>
<p>SUGGESTED APPROACH(ES)</p>	<p>Broadband</p> <ol style="list-style-type: none"> 1. Leverage existing resources such as: <ul style="list-style-type: none"> - Governor's Office of Broadband - Colorado Broadband Data and Development Program⁴⁸ (CBDDP) which is a statewide broadband mapping and planning initiative (Broadband Mapping Team⁴⁹) led by the Office of Information Technology (OIT) Office of OIT - Department of Local Affairs (DOLA) Broadband Program⁵⁰ which includes the Broadband Strategy Team⁵¹ - Knowledge and members of the Colorado Rural Health Center⁵² - FirstNet⁵³ statewide wireless broadband from exclusively emergency management to supporting healthcare transactions 2. Consider innovative alternatives (e.g. satellite, 5G, etc.) to address key barriers such as cost and availability.

⁴⁸ <http://www.oit.state.co.us/broadband>

⁴⁹ The Broadband Mapping Team develops and maintains a database and an interactive online map of broadband service in Colorado <http://broadband.co.gov/about/>

⁵⁰ DOLA supports the efforts of local governments to improve Broadband service to their constituents to achieve enhanced community and economic development.

⁵¹ The Broadband Strategy Team focuses on organizing, facilitating, and educating stakeholder groups to increase awareness of the importance of broadband and help communities in identifying broadband solutions.

⁵² <http://coruralhealth.org/>

⁵³ FirstNet is an independent authority within the U.S. Department of Commerce. Authorized by Congress in 2012, its mission is to develop, build and operate the nationwide, broadband network that equips first responders to save lives and protect U.S. communities www.firstnet.gov and www.firstnet.com

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

	<p>3. Address issues associated with connectivity that could be available (is in place), but is inhibited by easement or other issues.</p> <p>Virtual Care</p> <p>1. Leverage existing organizations and resources such as:</p> <ul style="list-style-type: none"> • Colorado Telehealth Network • Colorado Rural Health Center • Colorado Telehealth Network Environmental Scan⁵⁴ • Colorado Telehealth Alliance⁵⁵ <p>2. Leverage innovation partners to develop/enhance telehealth capabilities</p> <p>3. Prioritize key needs that can be addressed through the broader use of telehealth and focus on meeting those needs.</p> <p>4. Identify and address licensing issues that limit how providers can provide services across state lines.</p>
LEADERSHIP RECOMMENDATIONS	TBD
TIMING	
INTERDEPENDENCIES	<p>Initiative #1 Support Care Coordination in Communities Statewide</p> <p>Initiative #2 Promote and Enable Consumer Engagement, Empowerment, and Health Literacy</p> <p>Initiative #7 Accessible and Affordable Health IT and Information Sharing</p> <p>Initiative #8 Accessible and Affordable Health Analytics</p> <p>Initiative #11 Digital Health Innovation</p> <p>Initiative #12 Statewide Health Information Technical Architecture</p> <p>Initiative #13 Ease Quality Reporting Burden</p>

⁵⁴ Environmental Scan of Colorado's Telehealth Services, October 2016, Colorado Telehealth Network

⁵⁵ The goal of the alliance is to inform, educate, and promote the adoption of telehealth across Colorado.
<http://cotelehealth.com/ctwg/>

**COLORADO HEALTH IT ROADMAP
INITIATIVES WITH DESCRIPTIONS**

POTENTIAL FUNDING SOURCE(S)	Federal and state broadband funding opportunities ^{56,57,58} HRSA telehealth funding opportunities ⁵⁹ SIM funding
------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------

⁵⁶ National Telecommunications & Information Administration (NTIA) www.ntia.doc.gov/grants-combined

⁵⁷ <http://broadband.co.gov/funding-opportunities-update-august-2017/>

⁵⁸ Connect America Fund, FCC, www.fcc.gov/general/connect-america-fund-caf

⁵⁹ HRSA Telehealth Programs, <https://www.hrsa.gov/rural-health/telehealth/index.html>