
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 in health care are becoming increasingly frequent around the country. Colorado is no exception.</p> <p>While it may not be possible to totally 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 resources and 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, Assess: <ul style="list-style-type: none"> • Technology • Processes • Resources • Level of understanding 2. Identify the barriers that providers face in implementing security best practices. <p>Plan</p> <ol style="list-style-type: none"> 3. Identify high priority vulnerabilities and identify key barriers to address. 4. Develop and implement communication and education

approaches that are appropriate to various levels of understanding.

5. Approaches should address multi-device, multi-channel access to (appropriate) sources of statewide health and health-related information and services.
6. Provider systems should be assessed regularly for security risk.
7. Leverage state resources such as:
 - Secure Colorado, Colorado's Strategy for Information Security and Risk Management, Fiscal Years 2017-2019⁶⁶
 - Office of Information Security in OIT⁶⁷
 - Governor's Cybersecurity Council⁶⁸
 - Colorado Division of Securities Final Cybersecurity Rules⁶⁹
8. Leverage the National Cybersecurity Center⁷⁰ (NCC) located in Colorado Springs.

Develop and Implement

9. Involve key stakeholders to help develop tools including standards, policies, and best practices for security of health and health-related data that can be used statewide.
10. Use publicly available communications channels for dissemination of best practices – such as the Health IT Security website⁷¹
11. Convene cybersecurity experts from around the state (and nation) regularly to discuss cybersecurity, share best practices, and identify common issues relevant to Colorado.
12. Consider cybersecurity needs based on assessment of community infrastructure (urban versus rural versus frontier), income levels (ability to access information securely from lower cost technology), access to resources, etc.
13. Work with smaller provider organizations to develop ways to improve their cybersecurity efforts.
 - Consider forming a team that can be devoted to the smaller/rural organizations and provide virtual support.

⁶⁶ State of Colorado Governor's Office of Information Technology. "Secure Colorado, Colorado's Strategy for Information Security and Risk Management, Fiscal Years 2017-2019," January 1, 2017. Accessed October 2017 at <https://drive.google.com/file/d/0B0IQVOYmWcOoa2dadGQwZURUdVU/view>

⁶⁷ State of Colorado Governor's Office of Information Technology website, Office of Information Security (OIS) web page accessed October 2017 at <http://oit.state.co.us/ois>

⁶⁸ State of Colorado website, Governor's Cybersecurity Council web page accessed October 2017 at www.colorado.gov/pacific/dhsem/governors-cybersecurity-council

⁶⁹ Colorado Department of Regulatory Agencies, Division of Securities. "Rules Under the Colorado Securities Act," May 15, 2017. Accessed October 2017 at https://drive.google.com/file/d/0BBymCt_FLs-RGdTBjRUZ4UI92UDA/view

⁷⁰ National Cybersecurity Center website, Home page accessed October 2017 at <https://www.nationalcybersecuritycenter.org/>. ("The National Cybersecurity Center (NCC) provides collaborative cybersecurity response services with comprehensive knowledge and capabilities through training, education, and research".)

⁷¹ HealthIT Security website, Cybersecurity Best Practices web page accessed October 2017 at <https://healthitsecurity.com/tag/cybersecurity-best-practices>



SUGGESTED INITIATOR	OeHI, CCMCN
TIMING	Continue ongoing efforts – intensify/optimize Q2 2018
INTERDEPENDENCIES	Initiative #3 Harmonize and Advance Data Sharing and Health Information Exchange Capabilities Across Colorado Initiative #5 Statewide Health Information Governance
POTENTIAL FUNDING SOURCE(S)	<ul style="list-style-type: none">• State budget, expertise, staffing, and resources• ONC, NIST, and other national resources• Service/use/consulting fees

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 multiple times – and to multiple providers – for their information to be shared.</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 tangle of those differences.</p> <p>This inconsistency in both understanding and process contributes to a lack of complete patient information that is 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 2⁷².</p>
PURPOSE	<p>The purpose of this initiative is to remove the barriers to, uncertainties around, and wide variance in practices used for obtaining 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>

⁷² US Department of Health & Human Services Website, "State of Colorado Interoperability and Integration Project." Accessed October 2019 at <https://www.acf.hhs.gov/state-of-colorado-interoperability-and-integration-project>.

<p>OUTCOME(S)</p>	<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>Automated consents are available and used.</p>
<p>SUGGESTED APPROACH(ES)</p>	<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>Discover</p> <ol style="list-style-type: none"> 1. Conduct environmental scan to identify variations in consents used around the state. 2. Obtain provider, consumer, legal, and other expert opinions as a 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 Grant⁷³ work done by CORHIO and QHN. • Colorado's State Innovation Model (SIM)^{74,75} grant. • Colorado Children and Youth Information Sharing (CCYIS) Initiative⁷⁶ • How Colorado's HIEs are able to query on consent. • "Behavioral Health Data Exchange in Colorado," a white paper published in June 2017⁷⁷ 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 behavioral health data when appropriate. 7. Consider creating incentives to adopt the statewide consent approach.

⁷³ CORHIO eNewsletter, "Colorado Advanced Interoperability Initiative – Making Behavioral Health Data Available to Community Providers," July 13, 2016. Accessed October 2017 at <http://www.corhio.org/news/2016/7/13/732-colorado-advanced-interoperability-initiative--making-behavioral-health-data-available-to-community-providers>

⁷⁴ State of Colorado website, SIM (State Innovation Model) web page, accessed October 2017 at www.colorado.gov/healthinnovation

⁷⁵ State of Colorado Governor's Office of Information Technology. "Secure Colorado, Colorado's Strategy for Information Security and Risk Management, Fiscal Years 2017-2019," January 1, 2017. Accessed October 2017 at <https://drive.google.com/file/d/0B0IQVOYmWcOoa2dadGQwZURUdVU/view>

⁷⁶ State of Colorado website, Division of Criminal Justice, Department of Public Safety web page accessed October 2017 at www.colorado.gov/pacific/dcj/ccyis

⁷⁷ CORHIO and QHN. "Behavioral Health Data Exchange in Colorado", June 2017. Retrieved October 2017 from <https://drive.google.com/file/d/0B23Qq7mWJrhxcGdnMDVGdFpuM2s/view>

	<ol style="list-style-type: none"> 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 Regional Extension Center-like resources to implement across providers where appropriate. <p>Implementation</p> <ol style="list-style-type: none"> 13. Consider creating policies or statutes that facilitate/promote the sharing of health information. 14. Consider offering automated consent management tools as a service.
SUGGESTED INITIATOR	CORHIO, QHN, SIM
TIMING	Begin immediately
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 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)	<ul style="list-style-type: none"> • ARRA/HITECH 90/10 • User/subscription fees • Public/private partnerships • Foundations