# Colorado's
# State Health Innovation Plan

**December 13, 2013**

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# EXECUTIVE SUMMARY

## Introduction

Colorado's SIM team tapped a wide range of experts and innovators from throughout the state to help craft the State Health Care Innovation Plan. The overarching goal was to take advantage of Colorado's best thinking while building the widespread support necessary to achieve transformation of the health care system. In order to gather as much input and stakeholder engagement as possible, the SIM team convened a variety of both large and small meetings. There were three large "Advisory Committee Meetings," averaging roughly 150 stakeholders, where we shared progress and solicited input on the direction we were heading. There was also a chance for smaller break out groups to address more specific components of the State Healthcare Innovation Plan, including the Public Health Perspective Workgroup, Children and Youth Perspective, and Provider/Workforce Prospective Workgroup. We also met with several key constituents, consumers and insurers, on a regular basis in order to develop models and visions that would be supported and achieve the change we collectively wanted. There were also Steering Committee meetings, which were comprised of 25 stakeholders representing consumers, providers, insurers, agencies, academia, technology, business and behavioral health that were able to provide in-depth feedback and direction on the State Healthcare Innovation Plan.

The SIM team made a concerted effort to include stakeholders from a variety of perspectives so as to have a robust stakeholder process, as well as to generate conversation and excitement around Colorado's plans of integration. More information on the stakeholder process and engagement can be found in the appendix.

To put ourselves in the best possible place to reach this goal, we tried to engage as many different populations, including outreaching to special populations (tribal, homeless, and children/youth) to also look at how care is paid for and delivered in these settings, so as to better address integration across several focal populations. For the State Healthcare Innovation Plan, we have put these special populations into "call out" boxes, so as to highlight the unique circumstances that currently dictate how care is delivered and paid for within these groups.

Colorado's State Health Innovation Plan lays out a shared vision for making Colorado the healthiest state in the nation by:

- **Creating** coordinated, accountable systems of care that give Coloradans access to integrated primary and behavioral health services regardless of their insurance payer or status
- **Ensuring that** each Coloradan has access to a trusted home for care that meets them where they are
- **Integrating** physical and behavioral health
- **Leveraging** the power of our public health system to support the delivery of clinical care and achieve broad population health goals
- **Using** outcomes-based payments to enable transformation
- **Engaging** individuals in their care and improving consumer satisfaction

By aligning our public and private resources and levers, we intend to drive our markets in a direction that reinforces coherence and coordination. Doing so will require buy-in from, support for and engagement with advocates, insurers, providers, purchasers, academia, funders, policymakers and—most importantly—patients. Transforming the health care system is dependent on the combined efforts of all elements of the existing system—payment, delivery, health information technology, workforce, public health, policy and patients.

The integration of primary care and behavioral health is the cornerstone of our vision. We strongly believe that coordinated, accountable systems of care begin with primary care and work outward from there. It is imperative that we implement models of care that incorporate behavioral health into the organization and delivery of primary care. This will enable us to address mental health and substance use conditions, as well as co-occurring behavioral health issues along with chronic medical conditions in appropriate and patient-centered care settings. Accordingly, we have developed a model for integrating primary care and behavioral health, and sustaining it through outcomes-based payments. This model is based on a bold and important goal:

**By 2019, 80 percent of Coloradans will have access to coordinated systems of care that provide integrated behavioral health care in primary care settings.**

Our focus on integrating behavioral health into primary care is just the starting point to achieve the ultimate vision of our State Health Innovation Plan through the creation of comprehensive, person-centered, coordinated systems of care that include physical and behavioral health, public health, oral health and long-term services and supports. Using the foundation of integrated primary and behavioral health, we will build upon that to create coordinated systems of care supported by value-based, outcomes-based payment arrangements that reflect the total cost of care across the patient care spectrum. Through this transformation, we can improve the experience of care for our citizens, improve the health of our population and bend the cost curve: a Triple Aim win.

Outline of the Innovation Plan; Highlights of Findings and Recommendations

*Chapter 1: Background*

In order to create the context for our vision and approach, this Innovation Plan begins with a "Background" section that examines the broad factors shaping Colorado's health care landscape:

- Demographic profile and geography.
- Population health issues and considerations.
- Description of Colorado's highly competitive commercial health insurance market.
- Coverage and cost trends for both commercial and government-sponsored insurance

*Chapter 2: Delivery and Payment Redesign*

With this context informing our approach, we then lay out our overall vision for transforming the delivery and payment of health care. We start by examining the current "as is" state of health care delivery and payment in Colorado, highlights of which include:

- Numerous opportunities and innovations that provide a strong foundation to launch our transformation efforts.
- A provider community that is just beginning the transformation of clinical and administrative systems to enable participation in payment models that require them to manage their patient panel's to outcomes targets within annual budgets.

- Fragmented care as illustrated by the relative absence of large, coordinated systems of care and continued prevalence of small provider practices, and siloed administration of physical and behavioral health benefits in both commercial insurance and Medicaid.
- Fragmented care also exists in behavioral health, as substance use and mental health are paid for and treated separately.

Based on the needs and opportunities identified in the first part of the chapter, we then identify targets for transforming the current state into our preferred, "to be" vision of health system transformation:

- Improve health care quality:
  - Improve performance on indicators of chronic disease and behavioral health over the next five years.
  - By 2019, 80 percent of Coloradans will have access to integrated behavioral health in primary care settings.
  - By 2024, Coloradans will have access to coordinated systems of care that integrate physical and behavioral health, public health, oral health and long-term services and supports.
- Transform payment:
  - By 2019, a majority of primary care expenditures in Colorado will be made through prospective, outcomes-based payment models.
  - By 2024, a majority of all health care expenditures in Colorado will be made through prospective, outcomes-based payment models.
- Reduce statewide health care spending trend:
  - Reduce and maintain the average annual growth rate of health care spending from 8.6 percent annually to the rate of overall inflation or below over the next five years.

Our strategies for reaching these targets and achieving our vision include:

- Implement a defined, evidence-based, agreed-upon model of integrated care in primary care practices statewide to connect all Coloradans with a primary care home that provides integrated care. Adapt this model to allow the bi-directional integration of primary care into

behavioral health settings consistent with the Medicaid Health Homes approach for Coloradans with severe mental health needs.

- Establish criteria to assess practices' readiness to implement the systems necessary to integrate care and manage risk.

- Leverage common measures in primary care such as those agreed upon for CPC, to drive alignment on measures for the integrated care model.

- For public programs, align rules and policies among primary care and behavioral health programs to support integration.

- Provide technical assistance and support to primary care practices to enable their transition to integrated care models, success with non-FFS payments and partnerships in coordinated systems of care.

- Work with Medicaid and commercial insurers to accelerate transition to outcomes-based, value-oriented payment models.

The chapter closes by identifying some outstanding questions whose answers will help us implement these strategies; ongoing engagement with stakeholders will be critical for answering those questions.

*Chapter 3: The Colorado Framework – Integrating Behavioral Health and Primary Care*

Because we plan to begin moving toward the broad vision of coordinated care outlined in Chapter 2 by first integrating primary care and behavioral health, Chapter 3 explains our rationale and plan for doing so: "The Colorado Framework." The Colorado Framework defines integrated behavioral health care as:

> The care that results from a practice team of primary care and behavioral health clinicians, working together with patients and families, using a systematic and cost-effective approach to provide patient-centered care for a defined population. This care may address mental health, substance abuse conditions, health behaviors (including their contribution to chronic medical illnesses), life stressors and crises, stress-related physical symptoms, ineffective patterns of health care utilization.

We are focusing our efforts on this model for three reasons:

- Robust evidence that integrating behavioral health service delivery into the primary care setting can improve care and control costs, especially for patients with co-occurring chronic

(e.g., diabetes, heart disease, asthma, etc.) and behavioral (e.g., mental and substance use) conditions.

- Strong base of integrated care initiatives in both safety net and commercial health care delivery settings on to build.
- Strong base of patient-centered medical home models in Medicaid and the commercial sector on which to build

Practices working within our framework for integration will implement tailored models that work for their specific communities and populations and meets patients where they are. These models fall along a continuum from coordination to co-location to fully integrated care with an embedded behavioral health provider on the primary care team. The Framework focuses on a primary care-based approach to integrated care because that is the way most Coloradans will experience it. However, we also recognize the importance of "bidirectional" approaches that bring primary care into a behavioral health setting. This model of integrated care is critically important for Coloradans with severe and persistent mental illness whose health home is a community mental health center, not a primary care practice.

Key elements of our model include:

- Team-based care
- Shared patients and outcomes
- Systems to support integration

Certain core competencies are necessary to achieve these elements: leadership and practice engagement, quality improvement processes, data capacity, population management, patient-centeredness and care coordination.

Achieving these competencies requires a coherent shared vision and model for transformation, resources to support the transformation, the coordination of the providers, and the provision of support services within a statewide infrastructure. Sustaining this new model of care requires a simultaneous movement away from FFS to outcomes-based payment models that reward the transformation. Accordingly, this chapter outlines a payment reform trajectory that supports integration, and builds on current approaches and can align both public and private insurers.

*Chapter 4: Workforce*

This chapter examines how to build a health care workforce with the capacity, training, efficiency and effectiveness to support the Colorado Framework integrated care model—and to ensure we can meet the goal of giving 80 percent of Coloradans access to this model by 2019.

We face challenges in transforming our health care workforce. Rural and frontier regions face ongoing shortages of both primary care and behavioral health providers. In addition, Colorado has a documented deficit of providers in specific behavioral health specialty areas.

Our workforce strategy is to develop a statewide roadmap that recognizes the wide range of issues, including training, licensure, scope of practice, recruitment, and retention. The roadmap will recognize the need for local decision-making and innovation combined with statewide support, financial sustainability, a shared vision and an ongoing culture of collaboration. It is framed around five critical areas:

- Building on Colorado's base of information and data to aid decision-making.
- Creating a statewide systems-level plan of workforce training.
- Strengthening our workforce pipeline.
- Addressing policy barriers related to workforce innovation.
- Leveraging local technology, innovation and leadership.

*Chapter 5: Health Information Technology and Health Information Exchange*

Colorado has a strong base of health information technology (HIT) and health information exchange (HIE), but much work remains to be done to create a statewide system to support our integrated care model, specifically, as well as our broader vision of creating coordinated systems of care. Key HIT challenges include differing and sometimes incomplete electronic health record (EHR) systems among hospital systems and practices, and between different state agencies; different EHRs, consent requirements and data capture ability for physical and behavioral health care settings; and misperceptions about the limits on information-sharing posed by current state and federal privacy laws. These fundamental issues make effective information exchange problematic.

In order to facilitate integrated care, as well as the creation of more coordinated systems of care, this chapter outlines a combined HIT/HIE strategy that includes:

- Promoting the adoption of advanced EHRs that can capture both physical and behavioral health information, as well as other tools that support integrated care.
- Expanding telehealth infrastructure for rural populations.
- Overcoming barriers to information sharing between physical and behavioral health providers by developing a common consent model for behavioral health information exchange regardless of care setting.
- Educating both providers and patients about what state and federal privacy laws do and do not allow in terms of information-sharing.
- Developing capabilities for alerts and notifications for ER visits or hospital admissions.
- Expanding analytics capabilities for providers, using aggregated clinical and administrative data.
- Enabling patient access to their own clinical records through the HIE.
- Incorporating public health databases such as vaccine registries, birth and death records and others into the HIE infrastructure, in order to give providers a more complete picture of their patients' health care use patterns and needs.

Expanding HIE statewide is essential to achieving our vision, but requires significant investment. The state is pursuing federal funds to broaden connectivity and interoperability among its programs and agencies. In tandem with Colorado's State Health Innovation Plan (SHIP), we are in the process of developing a multi-agency health information technology partnership that will help us to better serve our shared populations.

*Chapter 6: Public Health*

This chapter shifts from our integrated care model to the broader vision of creating coordinated systems of care beyond primary care and behavioral health integration.

In order to bring public health in line with the rest of the care delivery system and the payment models that support it, Colorado must make some significant changes how public health is delivered. Key components that will facilitate the integration of public health with the larger delivery system include:

- Building connections between public health and direct care including resource sharing, goal-setting and community collaboration using a Health Extension System. Population health goals can only be met with input from the population. Public health has clear connections through recent community health assessment and planning and their population focus; clinical care providers have direct access to influencing health at the individual level. Clinical care providers and public health must collaborate to impact population health
- Connecting public health to the statewide Health Information Exchange. Determining public health priorities requires data about the overall health and health care provision of the population. Currently the public health system controls the population-based data and direct care controls the heath care provision data. By connecting with the state HIE, public health can use these multiple levels of data to create a more comprehensive picture of health across communities to aid in more robust health priority setting.
- Incorporating mechanisms for reimbursement of services provided through the public health system into new payment models. Public health is reliant on government funding and grants to support ongoing work. With additional sustainable sources of funding, our public health agencies will be able to invest in more long-term prevention initiatives to improve population health.

## *Chapter 7: Patient Experience*

The patient experience of health care services in Colorado varies based on one's health insurance coverage, ability to pay for needed care, age, race, ethnicity, health care needs and location. Accessing coordinated health care can be challenging for Coloradans with chronic and co-occurring health conditions. The lack of care coordination system-wide can result in delayed diagnosis and incomplete or duplicative care. The costs and complications of uncoordinated care keep many from seeking the help they need. Coloradans want more respectful interactions with the health care system, better information sharing and coordination of care, and transparency about costs and billing.

## *Chapter 8: Legal Barriers to Integrated Care*

Colorado's legal and regulatory landscape doesn't consistently support the creation of a health care system dedicated to the triple aim of improving population health, improving the patient

experience, and reducing costs. As Colorado moves forward with its commitment to integrate care, it will undoubtedly have both short and long-term impacts on Colorado's legal and regulatory landscape.

Short-term

- Clarify privacy and confidentiality rules under HIPAA and Colorado law
- Seek federal approval for Medicaid to move away from fee for service while maximizing hospital provider fees
- Ensure state agencies have the ability to appropriately and securely access and utilize existing state data sources to help facilitate patient-centered, integrated care

Long-term

- Assess fragmented regulatory oversight of mental health, behavioral health, and substance use disorder providers
- Analyze continued use of differing payment for behavioral and physical health services
- Ensure consistency and lack of conflict among regulations that apply to health facilities
- Identify areas of professional and facility licensing that impede integrated care at the clinical, operational, or financial levels
- Identify areas of anti-trust law that impede integrated care at the clinical, operational, or financial levels.

# INTRODUCTION

**Making the Case for Colorado**

Colorado aims to become the healthiest state in the nation by:

- **Creating** coordinated, accountable systems of care that give Coloradans access to integrated primary and behavioral health services regardless of their insurance payer or status
- **Ensuring that** each Coloradan has access to a trusted home for care that meets them where they are
- **Integrating** physical and behavioral health
- **Leveraging** the power of our public health system to support the delivery of clinical care and achieve broad population health goals
- **Using** outcomes-based payments to enable transformation
- **Engaging** individuals in their care and improving consumer satisfaction

The integration of primary care and behavioral health is the cornerstone of our vision. We strongly believe that coordinated, accountable systems of care begin with primary care and expand from there. More mental health and substance use conditions are seen in primary care than in any other healthcare setting and patients in primary care frequently exhibit behavioral health issues along with chronic medical conditions, making it logical and imperative that we incorporate behavioral health into the organization and delivery of primary care.

Accordingly, we have developed a model for integrating primary care and behavioral health, and sustaining it through outcomes-based payments. This model embodies a bold and important goal:

**By 2019, 80 percent of Coloradans will have access to integrated behavioral health care in primary care settings.**

Integrating of behavioral health into the primary care setting will serve as an entry point to broader integration and will give us a strong foundation to achieve the ultimate vision of our State Health Innovation Plan through the creation of comprehensive, person-centered, coordinated systems of care that include physical and behavioral health, public health, oral health

and long-term services and supports. We acknowledge the challenges we face, most notably a fragmented delivery system enabled by a predominantly fee-for-service payment system. The resulting duplicative work and misaligned treatment plans result in poor care and poor health for the patient.

Yet we are confident in our ability to fulfill our vision and achieve our goal. The detailed State Health Innovation Plan (SHIP) that follows illustrates our strategies for overcoming these and other challenges. Our strategies are supported by a strong history of leadership from our elected officials, public-private collaboration and innovation. Colorado's insurers, providers, purchasers, patients, advocates, academia, and policymakers work together closely, aided by strong support from the state's philanthropic community, to develop innovations to support health care transformation. Some highlights of this spirit in action:

- In 2006 Colorado's General Assembly passed SB 06-208 establishing a bipartisan, multi-stakeholder Blue Ribbon Commission for Health Care Reform. The Commission worked for 11 months to develop 32 recommendations for increasing health care coverage and access, controlling costs and improving quality. Many of the Commission's recommendations have been implemented, including Medicaid and Child Health Plan Plus coverage expansions and the creation of a statewide health insurance exchange.
- In 2008, the State in partnership with Colorado's hospitals established a hospital provider fee that was matched by federal dollars to fund the expansion of Medicaid and Child Health Plan Plus and increased reimbursement rates.
- In 2009, four commercial health plans and Medicaid participated in a joint PCMH pilot. This laid the groundwork for Colorado's successful application for the Comprehensive Primary Care Initiative in 2012. Eight commercial health plans, one self-insured payer, Colorado Medicaid and Medicare have embraced this approach to primary care transformation.
- Colorado's General Assembly was the first in the nation to pass bipartisan legislation creating a State health insurance exchange in 2011 with support from insurers, business, advocates and providers.
- In 2011, Colorado Medicaid launched the Accountable Care Collaborative with seven Regional Care Collaborative Organizations (RCCOs) to coordinate care statewide. RCCOs

are managed by community-based organizations that build on unique local strengths to address local needs.

- Colorado's primary care and behavioral health providers are national leaders in partnering to provide integrated physical and behavioral health. More than 100 federally qualified health centers and community health centers around the state provide whole-person care to their safety net clients and at least 10 grant-funded initiatives (including four funded by the Center for Medicare and Medicaid Innovation) are testing different models for integrating care.

- In April 2013, Governor John Hickenlooper released his "State of Health" agenda, outlining a vision for building a comprehensive, person-centered statewide system that delivers the best care at the best value to help Coloradans achieve the best health. The plan reflects research conducted by the Colorado Health Institute, Colorado Coalition for the Medically Underserved and other nonprofit organizations as well as state agencies, and calls upon public and private organizations, as well as Colorado citizens, to work together to achieve specific targets in four focus areas:
  - o Promoting prevention and wellness
  - o Expanding coverage, access and capacity
  - o Improving health system integration & quality
  - o Enhancing value and strengthening sustainability

These initiatives, plus many more around the state, demonstrate Colorado's collaborative approach to addressing our population's health care needs. They give us confidence in our ability to align our public and private resources and levers; engage insurers, providers, purchasers, policymakers, advocates, academia, funders and patients; and drive our markets in a direction that reinforces collaboration and coordination. By creating a strong foundation of integrated primary and behavioral health, and building on that to achieve the vision outlined above, we can improve the experience of care for our citizens, improve the health of our population and bend the cost curve: a Triple Aim win.

# CHAPTER 1: BACKGROUND

## Demographics and Geography

Colorado is a large, primarily rural state with pockets of dense urban development in one corridor running along the Rocky Mountains. While the population in Colorado remains one of the healthiest in the nation, it is much less healthy than it was just a few years ago. We have a very competitive health insurance market that hasn't reduced the upward pressure on health insurance premiums and makes multi-payer alignment incredibly challenging. Statewide, median income tends to be somewhat higher than the national average, however the distribution of that wealth is unbalanced and the discrepancy between low- and high- income Coloradans is increasing. Rising health insurance premiums combined with stagnant or decreasing incomes have placed a significant burden on Colorado's lower and middle class residents.

**Figure 1: Single and Family Health Insurance Premiums vs Average Household Income**
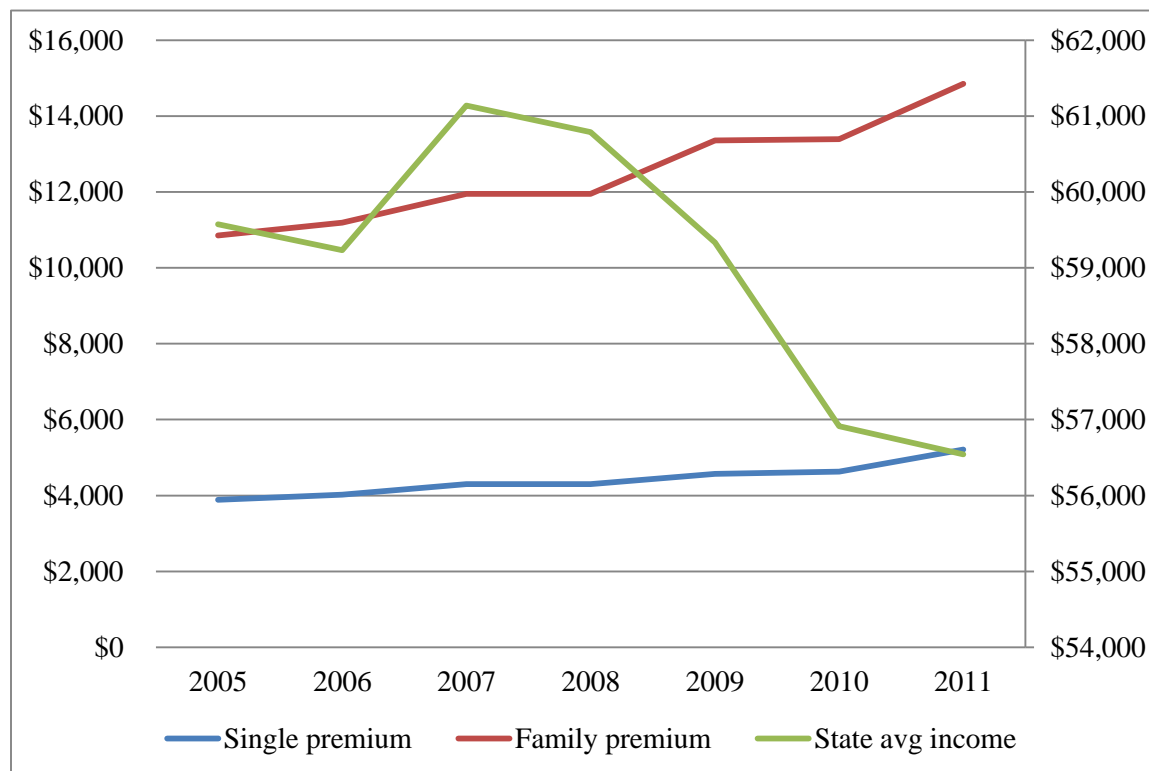
**Figure 2: CO and US per Capita Income vs CO per Capita Health Expenditures**
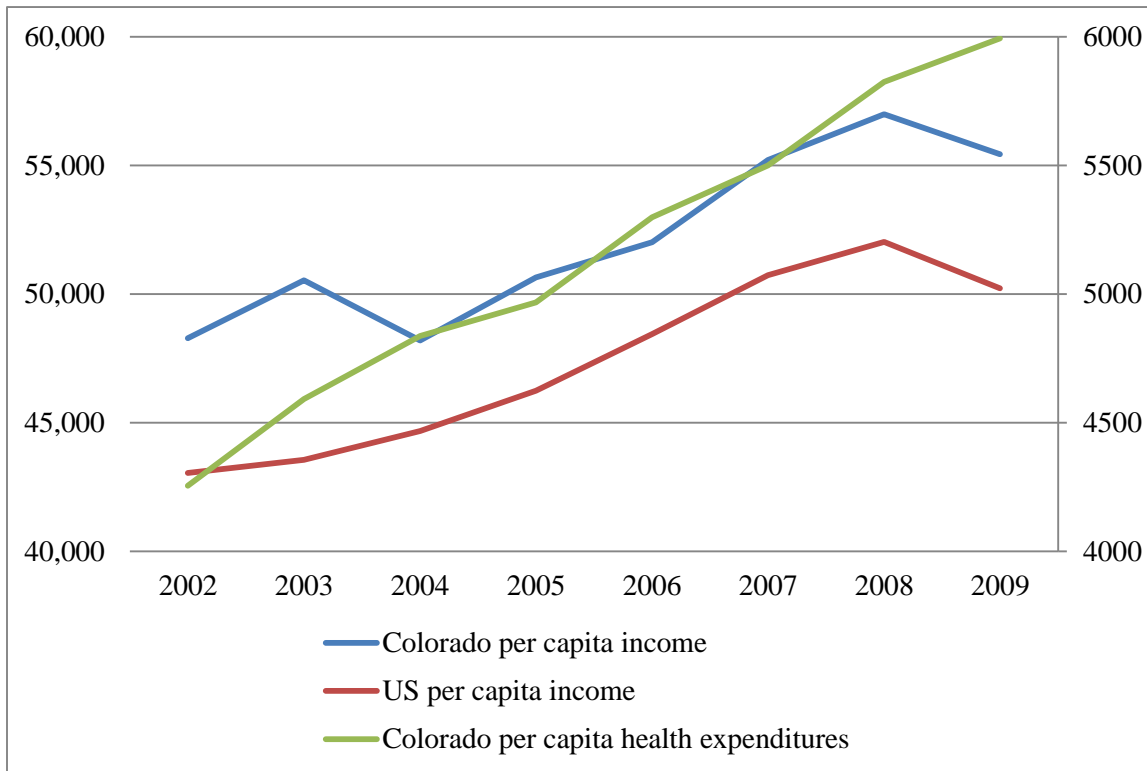


Colorado was recently identified as one of the fastest growing states with a population increase of over 3 percent from 2010 to 2012, largely due to in-migration.[1] While the bulk of the incoming residents are young, Colorado's population is aging. Between 2000 and 2010, Colorado's population aged 55 – 64 increased by an annual average of 6.1 percent from 338,000 to 619,000 compared to the total population growth of 1.7 percent.[2,3] By 2030, Colorado's population 65+ will be 150 percent larger than it was in 2010 growing from 540,000 to 1,350,000 from aging alone.[4]

The racial mix in Colorado in 2012 was primarily White (84 percent), and the percentage of Black (4 percent), American Indian or Alaska Native (1 percent), Asian (3 percent), multiracial (3 percent) and Native Hawaiian or other Pacific Islander (1 percent) populations was low compared to other states. It is important to note that much of the population classified as White may also identify as Hispanic. In 2012, the Hispanic population in Colorado represented over 21 percent of the state's population, a 42 percent increase from 2000.[2]

**Figure 3: Population Growth by Age by Decade[5]**
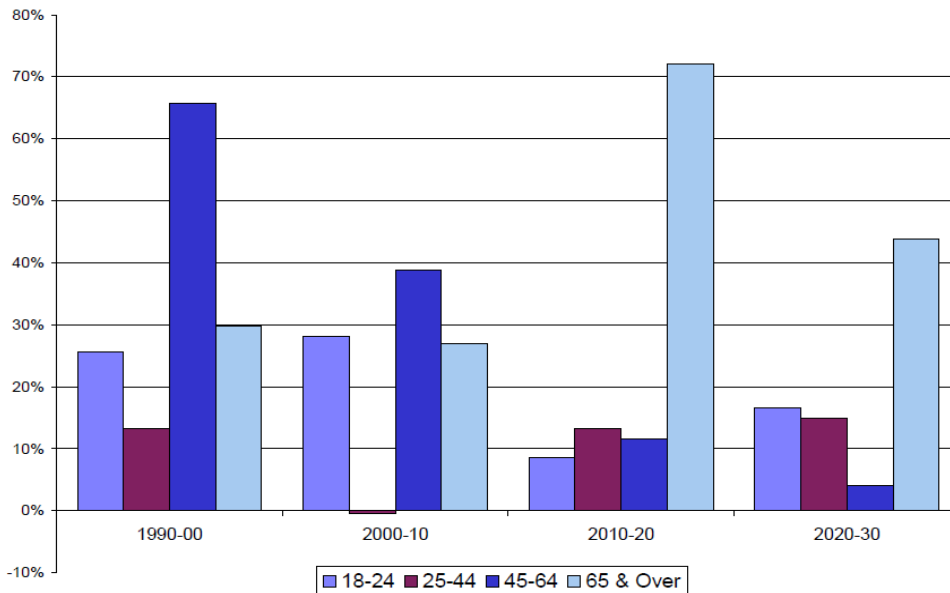


The population distribution and geography in Colorado present some unique obstacles to health care access and provision. Colorado is the eight largest state in the nation in terms of land mass, but with a population of just over 5 million, is only the 22nd most populous.[1] Approximately 86 percent of the population is concentrated on 20 percent of the state's land, primarily along the I-25 corridor stretching from north to south across the state, while the remaining 13 percent of the state's population is spread across 80 percent of the state.[6] The non-urban populations are split between rural and frontier communities of <6 people per square mile. Twenty-three of Colorado's 64 counties are frontier and an additional 24 counties are rural. In fact, only 21 of Colorado's 64 counties have populations greater than 25,000.[6] Colorado's numerous mountain passes and the low population density in areas of the state can make access to health care services extremely challenging.

**Figure 4: Colorado: County Designations, 2013** [7]
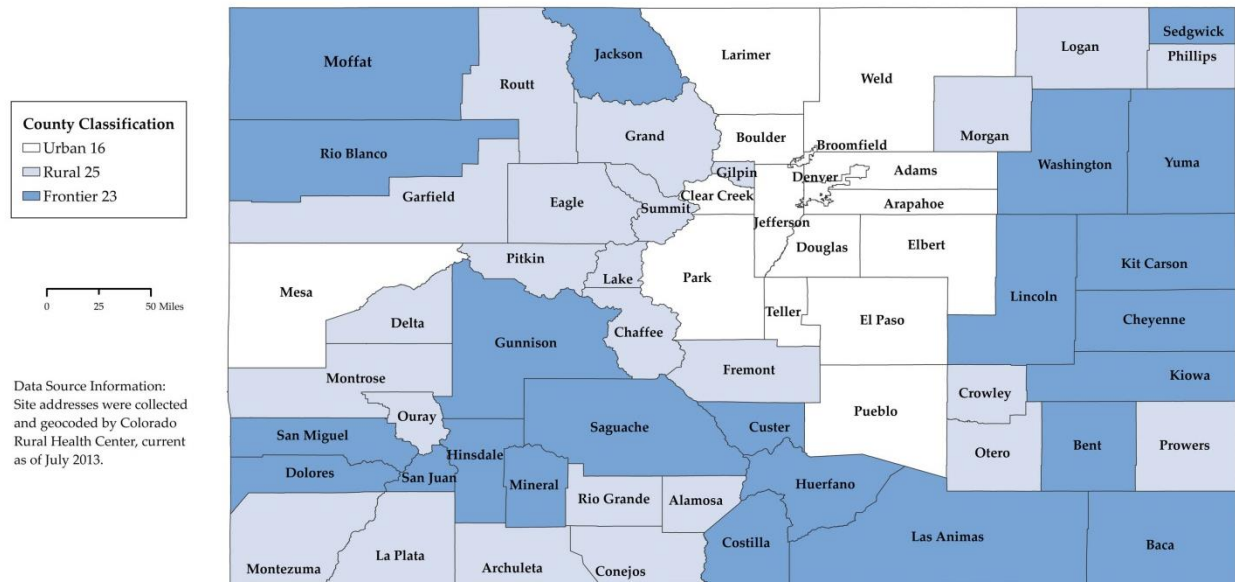


**Public Health Issues and Considerations**

From the outside, and on the surface, Colorado can seem like a very healthy state. Indeed, more than 27 percent of Coloradans regularly meet the federal physical health guidelines--more than any other state in the nation and Colorado ranks tenth among states in healthy living.[8,9] Colorado continues to lag behind on several critical measures of health care provision, ranking 28th in prevention and 40th in health care access.[9] Other challenges include:

- The state's rising obesity rate. While Colorado continues to have the lowest rate of obesity in the nation, that rate has been steadily rising and recently exceeded 20 percent, a number that would have made us the fattest state in the nation just 15 years ago.[10] Altogether, more than 60 percent of the state is either overweight or obese, including almost one in three children. However, there is some indication that efforts to address obesity may be having a positive effect. In 2007, 14.2 percent of Colorado's children between 10 and 17 were obese; that rate fell to 10.9 percent in 2011.[11] Colorado also has one of the lowest rates of diagnosed diabetes in the country, with 4.8 percent of working-age adults diagnosed with the disease, almost half of the national average.12 The prevalence of diagnosed diabetes among adults in Colorado has risen slightly since 2004, but is rising faster among poor and Hispanic populations.

- Tobacco use. Colorado has a lower rate of smoking than the rest of the country. Only 18.3 percent of our population smokes, compared to 21.2 percent for the U.S.[13] Unfortunately, that rate is still rather high and has been increasing over the past years and is up from our all-time low of 17 percent in 2010.[12] On the positive side, Colorado also has a large number of residents trying to quit smoking. Overall, 66 percent of Coloradans made at least one attempt to quit smoking last year, and more than three-quarters of Hispanic smokers made at least one attempt to quit smoking last year.[13] The levels of quit attempts may indicate that Colorado is ready to embrace efforts to reduce smoking across the state.

- Access to mental health and substance use treatment. Three in ten Coloradans need treatment for mental health or substance use disorders each year, yet less than half of them are able to access care.[14] Colorado also lags in mental health spending, currently ranking 32nd out of the 50 states and spending less than one-third the national average to treat substance abuse disorders.[14] Mental health concerns are especially pronounced in the Colorado adolescent population where the suicide rate is the eighth highest in the nation.[15] Colorado ranks 2nd in the nation for alcohol use in the last month and 5th for both dependence on or abuse of illicit drugs and alcohol dependence, yet less than half of those with substance use disorders are getting treatment.[16] We also know that racial minorities and the poor have a more difficult time accessing available mental health and substance abuse services, but the information we have is incomplete and almost certainly understates the need among those populations.[14]

- Racial and ethnic disparities. Minority populations in Colorado are growing and are disproportionately affected by poor health and poverty.[17,18] Colorado's overall poverty rates topped 13.5 percent in 2011, but 27.3 percent of the African-American community lived below the federal poverty line.[2] The Latino population had the next highest rate at 24.3 percent. Meanwhile, white, non-Hispanics had a much lower poverty rate with only 9.4 percent of the population living in poverty.[2]

  Minority populations also have a more difficult time receiving needed care than white Coloradans. Black and Hispanic Coloradans experience worse overall health, higher rates of obesity and inactivity as well as lower scores on key public health indicators such as infant mortality, low birth weight, diabetes and high blood pressure.[10,19,20] Colorado Medicaid doesn't break down behavioral health service provision by racial/ethnic categories so we

have no clear picture of the level of mental health access available to non-white populations. We know that youth and adults of color are disproportionately likely to receive their mental health care in a correctional facility.[14] Colorado's two tribal communities share in this disparity, experiencing increased rates of mental health problems and diabetes as well as decreased access to care and specialists.

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**Children and Youth in Colorado**

Colorado's children are among those most in need across the state. According to the 2013 Kids Count report, Colorado ranks in the bottom ten states in the nation for children's health. In 2011, there were 1.2 million children under the age of 18 living in Colorado. More than 23 percent of the state's children 12 years and younger lived at or below the federal poverty level during 2011 The percentage of children living in poverty increased from 14 percent in 2000 to 18 percent in 2013, representing an additional 77,000 children living in poverty. Approximately 9 percent of children had no form of insurance during 2011, though some of these children will receive coverage through the new Medicaid expansion. Children without insurance are more likely to lack a medical home and thus are less likely to receive coordinated medical, mental and dental care.

Many children have difficulties in the social and emotional realm that interfere with the child's optimal development, ultimately affecting their ability to be ready for school and life. The 2011 Colorado Child Health Survey indicates that 16 percent of Colorado's parents report concerns about their children's emotions, concentration, behavior, or getting along with others. Of these, 64 percent identify these difficulties as moderate or severe, yet only 25 percent of these parents reported seeking counseling or treatment. Approximately 346,000 children under the age of six years live in Colorado. According to the Division of Behavioral Health, approximately 3,640 children under the age of six years, or 1 percent, receive services through Colorado's public mental health system. Based on the 2011 Healthy Kids Colorado Survey, over one-fifth (22 percent) of Colorado high school students reported that they felt sad or hopeless every day for at least two weeks within the past 12 months. Overall, 15 percent of students reported that they had considered attempting suicide in the past 12 months, and overall, 17 percent of middle school students reported having ever seriously thought about killing themselves. A total of 6 percent of Colorado students reported attempting suicide in the past 12 months.

**Commercial and Public Health Coverage and Cost Trends**

<u>Coverage</u>

The majority of Colorado's insured population is covered by commercial health plans. In 2011, the most recent year available, 68.9 percent of Coloradans were covered by commercial insurance (57.4 percent through employer-sponsored group health coverage and 11.5 percent in the individual market). Nearly 30 (29.7) percent of Coloradans were covered by public, government-based health plans including Medicaid, Medicare, Tri-Care, the Federal Employees Health Benefit plan and the Veterans Administration. Colorado currently has over 744,000 residents enrolled in Medicaid, representing 14 percent of the population.[21] Another 13 percent or 653,000 Coloradans are enrolled in Medicare.[22] Four percent of the population is enrolled in other government-based health care, including 69,087 children and pregnant women in the state's CHP+ program.

Among those covered by group health insurance, 61.3 percent are in employer self-insured plans. The market share of this segment has decreased steadily since 2008 when approximately 70 percent of those covered by group health insurance were enrolled in self-insured plans. Interestingly, employer self-insurance has been on the rise throughout the rest of the country during this time.[22] There are, however, some initial indications that more employers are now moving to self-insured status as a response to reforms in the Affordable Care Act; this may mean that the self-insured trend in Colorado will reverse in the coming years.

**Figure 5: Health coverage by type, 2011[22]**
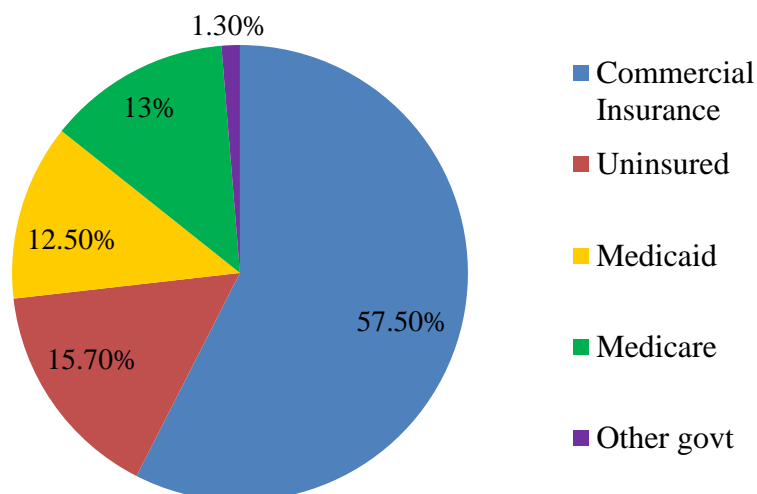
Commercial insurance premium trends and driving factors

Colorado's private insurance market is one of the most competitive in the country. While more than 450 health plans write coverage in the state, 10 insurers account for 69 percent of the market.

**Figure 6: Top Health Insurers in Colorado and Their Market Share [22]**
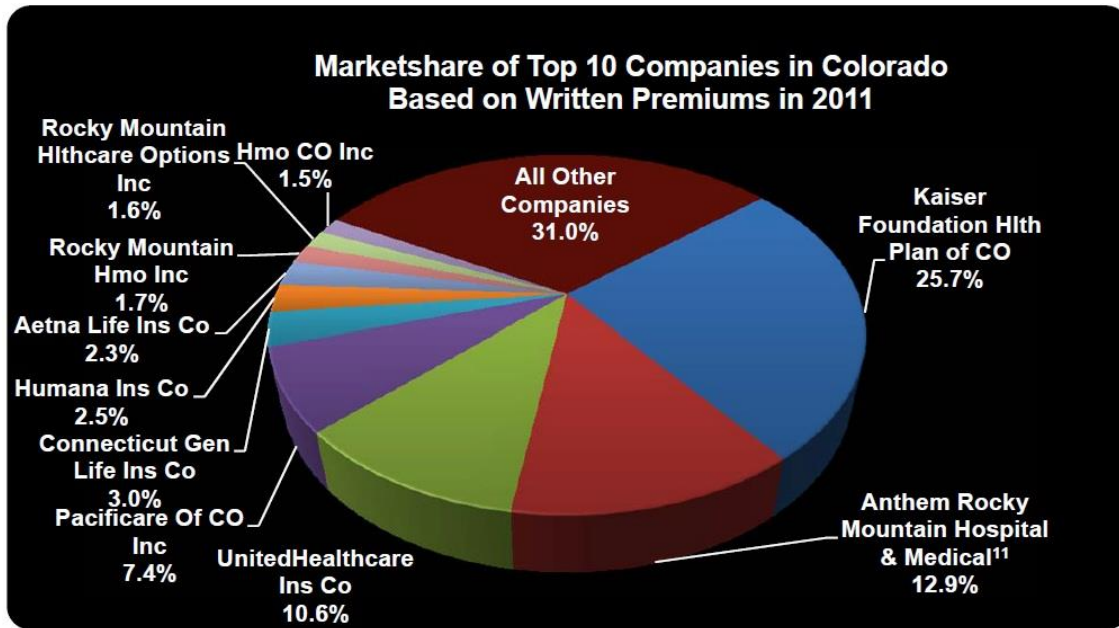


Premiums in Colorado have followed the national trend, increasing faster than inflation for decades. From 2010 to 2011, premiums for private payer insurance in Colorado jumped substantially, with average individual premiums increasing by 12.5 percent to $5212 and average family premiums increasing by almost 11 percent to $14,850.[22] Figure 7 shows the sharply increasing premium rates in comparison to the slow growth in the state GSP.

**Figure 7: Single and Family Premiums vs Gross State Product (Millions) 2002-2011**
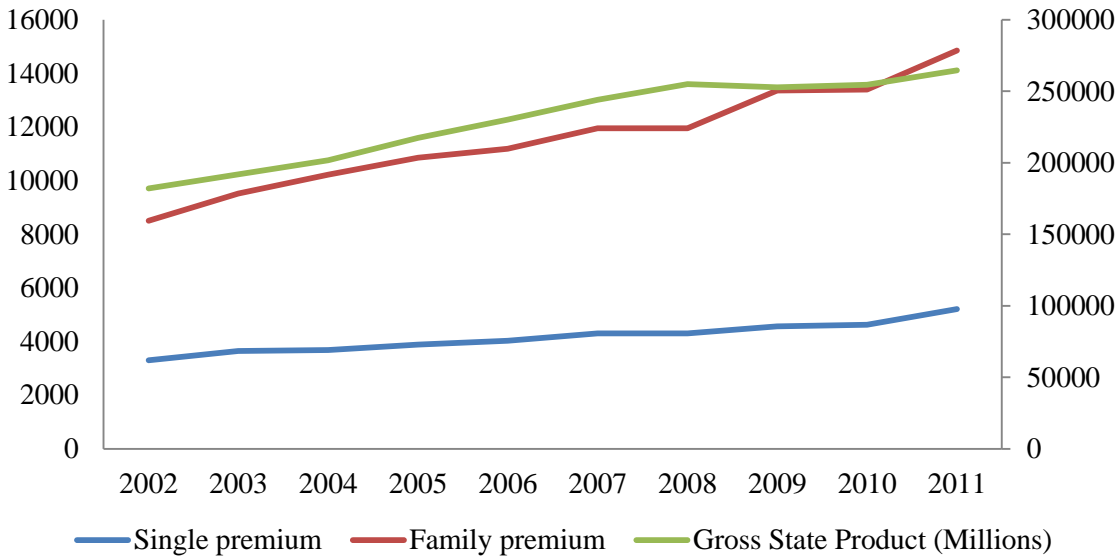


In response to these increasing premiums, Colorado employers are increasingly shifting premium and out-of-pocket costs on to their employees through plan design changes, premium share increases and high deductibles. In its annual survey of Colorado employers in 2012, Lockton Companies, a large international insurance brokerage, found that more than one-half (53 percent) of respondents said their 2013 plan would include a deductible of $1,000 or more, up from 46 percent the year before.  This is significantly higher than the national average of 34 percent reported by the Kaiser Family Foundation. Forty percent of Lockton respondents in Colorado offered a health savings account (HSA)-eligible high deductible health plan (HDHP) in 2012, which is substantially higher than the 19 percent reported nationally by the Kaiser Family Foundation. Additionally, nearly one-quarter (23 percent) of employers said they would consider adding a HSA-eligible HDHP in 2013 if one were not currently offered.[23]

Medicaid/Child Health Plan Plus: enrollment and cost trends

As of September 2013, Medicaid covers approximately 744,000 Coloradans, 14 percent of the population; HCPF estimates that approximately 160,000 will enroll for Medicaid as a result of the Affordable Care Act expansion.[21] Due to the recession, Colorado's Medicaid enrollment has been increasing as the newly unemployed find themselves eligible for the program. Colorado also expanded Medicaid eligibility in 2010, adding children up to 250 percent FPL and both

parents and adults without dependent children with incomes up to 100 percent FPL (adult enrollment was capped at 10,000). These expansions were enabled by levying a fee on the state's hospitals.

Enrollment in Colorado's State Children's Health Insurance Plan, Child Health Plan *Plus* (CHP+), increased in FY 2011-12 from 69,008 to 76,330, a 10.61 percent growth. Caseload growth slowed in FY 2012-13 to 4.08 percent, primarily due to a shift in enrollment from CHP+ to Medicaid and decreased spending for CHP+ as a result of the Deficit Reduction Act.[24]

CHP+ also saw an increase in per capita costs for children between FY 2011-12 and FY 2012-13 of 2.86%, compared to the decrease seen between FY 2010-11 and FY 2011-12.[24] Per capita spending in Medicaid has been decreasing in Colorado for the last four years, with an average rate of -6.86 percent.[24]  Record caseload growth has continued to drive total costs upward. From FY 2009-10 through FY 2012-13 overall Medicaid spending experienced an average growth rate of 9.2 percent. Spending on key services has also been steadily increasing. For example, inpatient hospital expenditures increased by an average of 3.64 percent over the last four years; spending on durable medical equipment has increased at an average rate of 7.72 percent and prescription drug spending has increased at a rate of 9.84 percent.[24]

Other government programs

Other government health care programs in the state include the Indian Health Service, the primary source of care for the state's residents living on the Ute Mountain Ute Indian reservation and for tribal members living off reservation across the state. The Southern Ute Reservation recently applied for and received a P.L. 93-638 contract through the Indian Self-Determination Act to uncouple from the IHS and place their health system under Tribal control.

Colorado's high-risk insurance pool, CoverColorado, will sunset in March of 2014. CoverColorado is a nonprofit, state subsidized high-risk health plan that covers those who cannot qualify for individual insurance because of pre-existing conditions. At the end of 2011, 13,841 people were enrolled in CoverColorado. The need for CoverColorado goes away as people cannot be denied coverage for health insurance starting January 1, 2014.

## CHAPTER 2: DELIVERY SYSTEM DESIGN AND PAYMENT METHODS

**Executive Summary**

Through the Colorado State Health Innovation Plan (SHIP), we envision a future in which care for most Coloradans will be provided through coordinated systems of care that integrate physical and behavioral health, and connect public health agencies, clinical care delivery systems and community organizations to achieve population health goals. We aim to facilitate this coordination by accelerating the movement toward outcomes-based payment in both Medicaid and the commercial market. We will begin the transformation by strengthening primary care and integrating it with behavioral health to provide "whole person" care so that, by 2019, 80 percent of Coloradans will have access to integrated behavioral health care in primary care settings. This integration model will teach us how to effectively integrate systems so we can expand and create coordinated systems of care that include clinical care, behavioral health care, public health, oral health, and long term services and supports.

Our approach is designed to achieve the Triple Aim: improve the health of our population and the individual experience of care, while reducing the per capita cost of health.

This seamless, integrated vision is very different from the current structure and practice of Colorado's health care delivery system, which is largely siloed and fragmented. Most care is reimbursed through fee-for-service (FFS) payment and outcomes are evaluated through a multitude of similar-but-not-identical measures by the many insurers in our state.

The current lack of coordination in Colorado weakens the delivery system be reinforcing separate compartments of care and inhibiting overall system redesign. By asking overburdened providers to focus on many priorities including quality, financing, administration, patient engagement, and culture, among others, we force them to pay attention to none.

Despite these challenges, we have a strong foundation on which to build our vision of coordinated care, including initiatives for patient-centered medical homes, pilots that integrate primary and behavioral health, and participation in non-fee-for-service payment models. By

aligning our public and private resources and levers, we hope to drive our markets in towards coherence and coordination.

It is essential that stakeholders from across the spectrum—patients, advocates, purchasers, providers, insurers, academia, funders, policymakers —understand, support and commit to the vision of this SHIP. Ongoing outreach and engagement with key stakeholders is critical to successfully refining and implementing our vision. Accordingly, our plan includes:

- Robust recommendations for supporting practice transformation
- Identification of data resources that practices can use to manage budgets, monitor performance and chart improvements across all their payers
- A detailed glide path to help practices and payers transition to new payment models;
- A proposed Health Extension System (HES) to support practice transformation and foster linkages between providers, public health agencies and community health improvement initiatives while allowing services to be tailored to the local community
- Support for patient, family and care-giver engagement and understanding of the needs of some targeted populations in Colorado and
- A call for expanded health information exchange to support greater coordination

There are some questions that remain to be answered in order to flesh out our strategy that are identified at the end of this chapter. Our engagement with stakeholders includes processes for addressing those outstanding issues.

**Current Status of Care Delivery and Payment in Colorado**

In contrast to some other states, Colorado has few large, multi-specialty physician groups and has many physicians in small, one to three member practices. Some physicians join independent practice associations or align with management service organizations that contract with health plans, to maintain autonomy for their individual practice. At the same time, many Colorado physicians are selling their practices to hospitals or entering into direct employment contracts. Estimates of the number of hospital employed physicians vary from approximately 30 percent according to the Colorado Medical Society to more than one-half according to the Colorado Hospital Association. Despite the differing estimates, it appears the trend towards increasing

hospital-employed physicians is not slowing down. Indeed, certain specialties (e.g., cardiology) have virtually no independent practitioners remaining in Colorado. This trend may encourage more coordinated systems of care by facilitating the creation of more accountable care organizations (ACOs).

**The Vision of Health for Tribes in Colorado**

Tribal sovereignty is an important part of addressing American Indian behavioral health, and overall well-being. Culturally competent service delivery depends on clarity about the objectives and expectations across American Indian health policies. The vision is to improve behavioral health and well-being through integration by bringing forward community-defined solutions and recommendations from across Colorado's diverse tribal populations.

Many tribe members have moved off of the southern reservations into Colorado's urban centers. This movement has created unique identity and acculturation experiences, including increases in intertribal and interracial marriages, a new generation of children born and raised in an urban environment, and isolation from tribal-specific practices and social supports.

Health care is administered differently between the two Ute Tribes. The Ute Mountain Ute Tribe's health services are primary administered by IHS at the Ute Mountain Ute Health Center (UMUHC).  The Ute Mountain Ute Tribe also has some health services it manages under a 638 contract such as EMS/Ambulance services, Public Health Nursing, Community Health Representatives, and Mental Health Technician services. In FY 2013, the UMUHC had 13,507 living patients registered at the facility, over 28,000 patient visits, and issued 40,594 prescriptions. Southern Ute Indian Tribe has a 638 contract for overall health care, which transfers the responsibility of health care from the Federal government to the Tribe. According to the Southern Ute Tribal Health Department's annual report for fiscal year 2012, in 2011, the Health Center served 9,269 living patients, had 23,335 ambulatory care visits, and 33,648 prescriptions.

Because of the geographic consolidation of services, tribal members may have to travel many miles to get access to care if they have left the reservation or need specialty care not readily available on site. Additionally, severe stigma surrounding mental and behavioral health are prevents many residents from receiving the care they need.

Lack of access to services based upon tribal enrollment status continues to be an ongoing issue in Colorado. Many Indian Health Service clinics will provide services, but require proof of tribal enrollment in a federally recognized tribe to access services. As a result, many Tribal members are not getting the care they need that could be eliminated through streamlined processes for Medicaid and other support programs.

The degree of coordination afforded by these hospital-physician networks varies. Some networks have succeeded in getting all their providers on one, well-integrated electronic health record, improving communication among facilities and providers and creating at least "de facto" ACOs, while others struggle to meld systems and cultures. This problem is exacerbated by the fact that most of Colorado's hospital systems have been expanding at a rapid pace in recent years by merging with or setting up joint operating agreements with previously independent facilities. In Colorado there are five hospital systems, four non-profit and one for-profit, that include the majority of the community hospitals in metropolitan areas. This kind of rapid consolidation creates challenges for the participants.

At this point in time there is no systematic coordination between our clinical and public health delivery systems, and between clinical and social services providers. In general, few health care providers are aware of the services local public health and social services agencies provide. Coordination between these agencies and health care providers is further stymied by the fact that public health and social service agencies generally lack electronic health records, much less a means to transmit data securely. As a result, care coordination becomes more challenging and fragmented.

Physical and behavioral health care delivery in Colorado is largely supported by fee-for-service (FFS) based payments. A 2012 survey administered by the Center for Improving Value in Health Care (CIVHC) found that, for other insurers, more than 90 percent of their expenditures are for traditional, non-outcome-based payments (FFS, DRGs, etc.).[25] Care coordination payments to primary care practices are common and opportunities for shared savings exist sporadically across the state. Payers are starting to work with providers to develop accountable care products and one payer, Rocky Mountain Health Plans, is beginning to experiment with global budgets for portions of its population. Colorado is only beginning its journey away from encounter-based payment in the commercial insurance sector.

Both Medicaid and commercial health plans administer and pay for behavioral health benefits separately from physical health benefits, creating siloed delivery and payment systems. Medicaid reimburses behavioral health services through a fully capitated behavioral health carve out through the Colorado Community Mental Health Services Program. The program is managed by

the Department of Health Care Policy and Financing (HCPF) and is financed through a 1915(b) Managed Care waiver. Behavioral Health Organizations (BHO) are assigned a geographic region and are responsible for arranging or providing for medically necessary mental health services to members in their region. The BHOs are paid a per-member-per-month (PMPM) rate to cover the full range of behavioral health services for their population. The program has been successful at reducing the cost curve for behavioral health and has saved the state more than 105 million dollars since 1996, compared to projected spending under a non-capitated model.[26] Despite the success, the carve out is difficult to integrate into FFS or non-capitated systems and will be challenging to address or modify as we advance the SHIP vision.

Many substance abuse services are not included in the capitated payment and receive the bulk of their funding through the SAMHSA block grant, distributed through the Office of Behavioral Health. Substance abuse is one of the essential benefits required under the ACA and has now been built into Colorado's Medicaid benefit package, effective January 2014. Previously, the Mental Health Parity and Addiction Equity Act of 2008 required parity between physical and mental health services, so if mental health services were offered, they had to be in line with any physical health coverage. The change in the law will mean that behavioral health coverage, including substance abuse services, will increase dramatically and it is likely that demand will proportionately increase. With the inclusion of substance abuse services in the new post-ACA health plans, it is unclear what will happen with the SAMHSA grants and whether substance abuse services will be folded into the existing capitation payment.

Colorado's Medicaid program is leading the movement away from FFS and towards outcome-based payment. Its Accountable Care Collaborative (ACC) launched as a pilot serving a subset of Medicaid enrollees in 2011. The ACC divides the state into seven Regional Care Collaborative Organizations (RCCOs) and each ACC enrollee is connected with a primary care medical provider (PCMP) within the RCCO. Both the RCCO and the PCMP receive per-member, per-month payments, designed to help both the RCCOs and PCMPs implement the infrastructure that will help coordinate care within and among practices. RCCOs are held accountable and paid to improve health outcomes, lower costs, and support PCMPs to provide a medical home level of care for all clients. Colorado's strong safety net of federally qualified

health centers (FQHCs), rural health centers (RHCs) and community mental health centers (CMHCs) features numerous collaborative relationships among providers.

Over the last 3 years, the Accountable Care Collaborative (ACC) has transformed Colorado Medicaid. In the ACC, Medicaid members receive coordinated care from a patient-centered medical home and Primary Care Medical Providers have support in providing high quality efficient care. With over 350,000 clients and more than 2,300 rendering primary care physicians participating, the ACC has garnered the attention of various aspects of the health care system in Colorado and has built a strong foundation for continuous change.

The Regional Care Collaborative Organizations (RCCOs) have built a formal network of contracted Primary Care Medical Providers (PCMPs) and an informal (non-contracted) network of specialists. The Department plans to continue to gain efficiencies and improvements in the health care system by formalizing, expanding and enhancing the program's specialty care component.

The Department will enhance specialty care services within the construct of the Medical Neighborhood model. In a Medical Neighborhood, PCMPs collaborate closely with specialists to use limited specialist resources in the most efficient and effective ways possible. The Department will ensure improved access and appropriate utilization of specialty care by:

- Increasing the number of specialists participating in the ACC Program;
- Establishing a framework for PCMP/specialty care collaboration in the ACC; and
- Leveraging telehealth technologies to enhance collaboration and more effectively use the specialty care network.

**Challenges**

Several factors create challenges to fostering new coordinated models of health care delivery and non-FFS payment in Colorado. Colorado's SHIP is designed to address the many of these challenges:

- Providers, particularly in rural areas, struggle to get the resources necessary to transform into integrated primary care practices (e.g., through enhanced use of HIT, enhanced staffing to

provide team-based care, etc.) in a FFS-based payment system. At this time, small practices also lack the patient volume and financial "critical mass" necessary to manage care and costs with risk-based payment.

- Colorado's competitive insurance landscape has led to a plethora of performance measures. In 2012, the Colorado Medical Society identified 699 individual performance measures across six private insurers plus Medicare, and found that only 38 of those measures were common to four or more insurers.[27] The lack of alignment among measure sets creates a significant expense and reporting burden for providers, limits the reliability of the data, increases costs and makes it almost impossible for providers to focus their improvement efforts to truly benefit population health.

**Opportunities and Innovation**

Colorado has an impressive number of payment and delivery initiatives underway around the state, a summary of which can be found in Figure 8 at the end of this chapter with full details available in the appendix as the Inventory of Non-FFS Payment and Delivery Innovations. The following highlights key developments that provide the foundation on which we are building the Colorado SHIP.

Colorado's robust PCMH foundation:

- *PCMH certification*: In 2011, 567 of the 3,000-3,500 primary care physicians in Colorado (16-19 percent) had achieved PCMH recognition from NCQA. Assuming four physicians per practice and 2,000 patients per physician that equates to roughly 141 practices and 1,134,000 Coloradans with a PCMH.[28]
- *Meaningful Use:* The Colorado Regional Health Information Organization (CORHIO) reports that 1,298 primary care practices had achieved Stage 1 Meaningful Use by August 2013 and 2,295 were using their electronic health records for e-prescribing and reporting. All of Colorado's FQHCs have achieved Stage 1 Meaningful Use.
- *Comprehensive Primary Care (CPC) Initiative:* Eight commercial health plans, Medicare and Colorado Medicaid are participating in this CMMI-led PCMH initiative. The 74

participating primary care practices are concentrated in the metropolitan areas along the I-25 corridor though some are located on the Western Slope.

- *FQHC Advanced Clinical Transformation project:* The Colorado Community Health Network is providing grant-funded technical assistance to 18 of 19 community health centers to facilitate their continued transformation to PCMHs.
- *Medicaid ACC*: The Medicaid ACC is based upon a PCMH approach to primary care, with both RCCOs and primary care medical providers receiving per-member-per-month payments. Originally launched with just 60,000 enrollees, the ACC has grown in just two years to cover 352,000 Medicaid recipients—almost half of the current 744,000 Medicaid enrollees. By 2016, an estimated 555,000 Coloradans, 58 percent of Medicaid enrollees, will be part of the ACC.[21,29]

Initiatives to integrate primary care and behavioral health:

- *Pilots for integrated care:* Numerous pilots are underway around the state testing different approaches for integrating physical and behavioral health and/or incorporating behavioral health services into community health improvement initiatives. The list includes five initiatives funded through the CMMI Innovation Challenge, two SAMHSA/HRSA-funded initiatives, and numerous grant-funded projects (see Appendix for a list of efforts underway in Colorado).
- *Community collaboration:* Community mental health centers and physical health providers are collaborating at more than 120 sites statewide.[30]
- *Medicaid Integration:* Medicaid is integrating primary care and behavioral health within the RCCO Region 1 global payment pilot. The program is also exploring ways to better integrate the RCCOs and BHOs as those contracts are re-bid.
- *Screening, Brief Intervention and Referral to Treatment (SBIRT):* SBIRT focuses on substance use as a healthcare issue and provides tools, counseling and coaching to healthcare providers for effective substance use screening. SBIRT guidance has been distributed to more than 4,000 healthcare providers statewide as part of integrated primary care. The program has been associated with significant decreases in substance use in most populations.

Current market movement toward value-based payment models:

- *Care coordination payments and shared savings:* Many Colorado health plans offer per-member-per-month care coordination payments to primary care and some pediatric practices, usually in combination with a shared savings opportunity if practices meet budget and quality targets. Medicaid, in conjunction with stakeholders, has also developed a shared savings model for RCCOs and PCMPs to incentivize improved performance within the ACC (contingent upon approval from CMS). One Colorado provider group is participating in the Medicare Shared Savings Program ACO demonstration.

- *Bundled payments*: Three Colorado hospitals are participating in the CMMI Bundled Payments for Care Improvement Initiative and one in the Medicare Acute Care Episode (ACE) bundling demonstration. Colorado's employer purchasing coalition, the Colorado Business Group on Health, is sponsoring PROMETHEUS bundled payment pilots for chronic conditions with self-insured employers in Alamosa, Colorado Springs and Boulder. As Colorado's Regional Health Improvement Collaborative, CIVHC is developing bundled payments for acute care episodes with physician groups and hospitals in metro Denver. And, one of the state's major commercial insurers is also working with hospitals to develop bundled payments for certain acute episodes.

- *Global payment approaches:* Medicare Advantage plans in the state are paying full capitation, including both up- and down-side risk, to a small number of independent provider associations in metro Denver. Colorado Medicaid, in partnership with Rocky Mountain Health Plans (RCCO Region 1) is piloting global payment within the ACC in 2014-15 (see call out box).

Access to claims and clinical data, and telehealth connectivity:

**Global Payment in Colorado Medicaid**

Under House Bill 1281, Rocky Mountain Health Plans (RCCO Region 1) will be piloting full risk, global payment within the ACC starting in 2014. The pilot program includes behavioral health integration, global payments, and risk and gain-sharing arrangements which will allow payments to providers for value at the point of care. These payments are designed to ensure:

1. Reimbursement to give providers the time and capacity needed to perform the activities required for whole person care;
2. Accountability for the total cost of care; and
3. Bonus opportunities for quality improvement.

This pilot will support integrated primary care and behavioral health for the entire population below 250 percent FPL, without regard to coverage type in Mesa, Montrose, Delta, Gunnison, Pitkin, Garfield, and Rio Blanco counties (~11,000 beneficiaries).

The pilot is expected to show a net savings for the state by the end of the first year of implementation.

- *All Payer Claims Database (APCD):* Created by statute in 2010, the APCD combines closed health insurance claims from Medicaid, Medicare and commercial health plans in a comprehensive, secure data warehouse. Public, high-level reports illuminate spending and utilization differences across regions, insurers and providers, pointing the way toward opportunities for transformation. Detailed custom reports allow providers to get aggregated data from all insurers (rather than discrete reports in differing formats from each payer)—a critical tool for analyzing total cost of care, setting budgets and identifying opportunities to better manage costs without compromising quality. Efforts are underway to combine APCD claims data with clinical data, creating a powerful new engine for population health management by providing a better picture of patient management over time.

- *Colorado's health information exchanges:* Colorado Regional Health Information Organization (CORHIO) and Quality Health Network (QHN) connect nearly 1,500 primary care and specialty practices, hospitals, long-term care facilities, home health agencies and other providers. (See Health Information Technology chapter)

- *Telehealth*: The Colorado Telehealth Network has used grants from the Federal Communications Commission to provide telehealth connectivity to more than 200 hospitals, clinics and community mental health centers statewide, with a goal of 400 by 2015.

Community-based coordination efforts:

- *Healthy Transitions Colorado (HTC):* HTC is a statewide collaborative, coordinating dozens of care transitions initiatives to achieve a common goal: eliminate 8,700 hospital readmissions, help patients avoid an extra 34,000 days in the hospital, and save $80 million by July 2015.
- *Health alliances:* Local health alliances in 19 communities around the state combine clinical care, public health and community supports (see Public Health chapter). Some of these groups have pioneered health information exchange in their regions and all have seen improvements in access and outcomes.
- *Regional Care Coordination Organizations (RCCOs):* The RCCOs within the Accountable Care Collaborative serve as community-based accountable care organizations. This structure lets providers and insurers partner within a payment system that aligns incentives to promote better care and lower costs.

**Quality Performance by Key Indicators (for each payer type)**

As noted earlier, Colorado insurers—government programs as well as commercial health plans—employ a wide variety of performance measures to gauge outcomes. The following is a snapshot of primary care measures currently in use by Medicaid and commercial insurers in Colorado.

Medicaid

Since its inception in 2011, the ACC has assessed PCMPs on three key performance indicators (KPIs). RCCOs and PCMPs both have the opportunity earn incentive payments based on their performance on these KPIs:

### Transforming Long Term Services and Supports Organization and Delivery

Work is now underway to transform Long Term Services and Supports (LTSS) delivery in Colorado. When elderly and disabled individuals have more choice in their service design, services can be better aligned with needs and individuals will be more engaged in their care.

In 2012, Governor Hickenlooper created the Office of Community Living to redesign all aspects of the LTSS delivery system and the Community Living Advisory Group (CLAG) to provide leadership and a forum to develop these activities and create efficient, whole person, community-based care. HCPF continues to identify program initiatives and has developed work groups to focus on key topics and timelines. There are four LTSS projects that highlight the movement to person-centered, integrated care:

- Community First Choice: The Community First Choice (CFC) in the ACA allows states to provide person-centered, home and community based attendant services and supports through Medicaid to those who need institutional level care. In mid-2012, HCPF created the CFC Council to explore the feasibility of CFC in Colorado. HCPF is preparing a feasibility analysis report and anticipates a public report on CFC planning in fall 2013.

- Waiver Redesign and Simplification: The abundance of LTSS waivers in Colorado places a heavy burden on staff, consumers and families. The a of program descriptions, service packages, procedures and manuals is confusing and hard to update and increasing federal paperwork requirements require more staff time to complete. Colorado is working to simplify its 12 waivers, with simpler programs, fewer forms and requirements, and a flexible benefit set based on individualized assessment of needs and preferences for more cost effective administration and a better care experience. With input from the CLAG, HCPF hopes to submit a consolidation plan to CMS by the end of 2015.

- Colorado's Olmstead Plan: Colorado's Strategic Olmstead Plan will identify specific actions that the state will take to ensure that individuals who are at-risk of institutionalization or wish to transition from institutional care are informed and have access to the housing and supports they need to live the community. The plan will emphasize person-centered approaches to support individuals to transition and incorporate lessons learned from Colorado Choice Transitions.

- Colorado Choice Transitions: CCT provides supports and services to individuals who wish to transition from nursing homes and other long-term care facilities and live in the community. The program launched April 2013 and has the goal of transitioning 500 people to community living. In support of the Olmstead Plan, our experiences with CCT will help us design and sustain the best practices for supporting people who choose to return to the community from a nursing facility or some other long-term care facility.

- 30-day all-cause readmissions
- Emergency room visits
- High-cost imaging
- Well-child visits (added July, 2013)

In November 2013, Colorado Medicaid announced the following results for the first three KPIs and the program as a whole:

- Inpatient hospital readmissions: In FY 2012-13, improvement on this KPI continued as readmissions declined to15-20% below the expected benchmark.
- Emergency room utilization: In FY12-13, ER utilization by ACC enrollees increased 0.9 percentage points less than utilization by those not enrolled in the ACC program, or an increase of 1.9 percent for ACC enrollees compared to an increase of 2.8 percent for those not enrolled.
- High cost imaging: Utilization rates of high cost imaging services for ACC enrollees has continued to decline, with utilization now approximately 25% below the expected benchmark.
- Chronic disease management: Management of chronic health conditions has improved for ACC members, as evidenced by:
  - Lower rates of exacerbated chronic health conditions such as hypertension (5%) and diabetes (9%) relative to clients not enrolled in the ACC Program.
  - 22% reduction in hospital admissions for ACC members with COPD who have been enrolled in the program six months or more, compared to those not enrolled.
- Total cost of care: In its previous report, the Department calculated a range of estimated gross program savings between $9 million and $30 million for FY 2011-12. The program continues to demonstrate success in cost containment and actual savings. In FY 2012-13, the ACC program analysis indicates $44 million in gross savings or cost avoidance.

Commercial insurers

Health plans in Colorado each use distinct, though similar, outcomes measures. The CPC Initiative provides a vehicle for some common measurement across private and public insurers.

Participating insurers must evaluate their CPC practices on specific measures in the following domains, as identified by CMMI:

- Patient/caregiver experience
- Care coordination (risk-standardized, all condition readmissions; readmissions related to heart and lung disease)
- Preventive health (screening for fall risk; flu immunizations; tobacco use assessment and cessation counseling; screening for depression and colorectal cancer; mammography)
- At-risk populations (controlling diabetes, high blood pressure, heart disease and heart failure)

**Goals for Payment and Delivery System Transformation**

We will begin this transformation by integrating behavioral health into primary care settings and moving to outcome-based payment for primary care for 80 percent of Coloradans over the next five years. This model will teach us the best approaches for integration in the state and lay the foundation for further payment and delivery system transformation (see the Colorado Framework chapter).

**Strategies for Health for Tribes in Colorado**

Integrated behavioral health and primary care in the Tribal health systems would streamline care, decrease costs and help to eliminate the stigma that is keeping many residents from seeking the care they need. Successful implementation requires partnering with various systems and sectors. Elements of such partnership include:

- An increased focus on preventative care, early intervention and an increased awareness of mental health and chronic disease connection.
- An increased focus on the health and well-being of the elderly, including the development of nursing homes and programs that help connect the elderly with youth so that wisdom and culture can be shared. Person centered care and respect for role of family
- Better integration of traditional healing and spiritual practices.
- Increasing use of technologies to better serve remote populations.
- Improved food distribution to increase access to healthy foods.
- Coordinated physical and behavioral healthcare, such that an interdisciplinary team of people are working together for the patient.
- Enhanced behavioral health services at all levels, including emergency and short and long term care.
- Consistent funding to support longer clinic hours and improve access to care year round.

These coordinated systems of care will eventually extend beyond the walls of the clinical care delivery system to include public health, long-term care, social services and other community providers, creating comprehensive networks to improve population health. The collaborative networks of care will support chronic disease management, both physical and behavioral, and will help address population health goals such as reducing obesity and tobacco use. These new systems of care will be supported by prospective, outcomes-based payment arrangements that

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**The Vision for Children and Youth**

Most children with mental health issues are more likely to be seen in a primary care setting than in the mental health system, and children with chronic medical conditions are two times more likely to have mental health difficulties than those children without such medical conditions. Because of these kinds of issues, it is critical for early identification of mental health difficulties to be integrated into the primary health care system.

A system of care coordination is imperative in order to best serve the medical and mental health needs of children and their families.  There needs to be a mechanism to ensure that comprehensive, flexible and individualized care coordination can occur. In early care and education settings in Colorado, 11 percent of care providers report that children under the age of six years in their care demonstrate ongoing and interfering behaviors such as hurting themselves or others, showing disrespect or defiance, or being irritable, mad, frustrated, or withdrawn. Ten out of every 1,000 children or 1 percent are being removed from their early care and education setting due to challenging behaviors, with family child care homes dismissing children from their care at a rate six times higher than that in child care centers.

Desired outcomes for integration for children and youth include:

- Fewer behavior problems and expulsions,
- Children are emotionally and socially ready to learn, increasing their likelihood to be successful in school,
- Increased social/emotional wellbeing for children,
- Greater family and child resiliency,
- Environments that supports positive social-emotional development,
- Workforce that can support the needs of young children,
- Follow-up/referral from screenings,
- Increased access to treatment/intervention,
- Increased number of environments providing early identification and mental health consultation,
- Systems change that results in cross systems collaboration between early learning and early childhood mental health and K-12 education.

reward providers for keeping patients healthy and improving the quality of care. Payment and delivery approaches will be aligned between Medicaid and Colorado's commercial health plans.

<u>Specific targets</u>

- Improve patient outcomes:
    - Improve performance on indicators of chronic disease and behavioral health over the next five years (see the Winnable Battles discussion in the Public Health chapter).
    - By 2019, 80 percent of Coloradans will have access to integrated behavioral health in primary care settings.
    - By 2024, Coloradans will have access to coordinated systems of care that integrate physical and behavioral health, public health, oral health and long-term services and supports.
- Transform payment:
    - By 2019, a majority of primary care expenditures in Colorado will be made through prospective, outcomes-based payment models.
    - By 2024, a majority of all health care expenditures in Colorado will be made through prospective, outcomes-based payment models.
- Reduce statewide health care spending trend:
    - Personal health care expenditures in Colorado have been rising by an average annual growth rate of 8.6 percent over the last three decades.[31] We aim to reduce that trend to match the rate of overall inflation over the next five years.

**Strategies for Achieving Our Goals**

Our strategy builds upon the opportunities and innovations outlined earlier in this chapter—most importantly, our strong foundation of primary care. Our approach is predicated on a belief that effective systems of care have a primary care home at their center. For some Coloradans, this primary care home may actually be at a mental health center, which is why we are exploring the Medicaid Health Homes state plan amendment (SPA) to provide the best possible care for these individuals. We are also exploring options do develop bidirectional integration to allow individuals to receive primary care in a behavioral health setting once we have successfully

**Strategies for Colorado's Children and Youth**

Colorado's early childhood and K-12 mental health system of care follows the public health model of promotion, prevention, and intervention. Successful implementation requires partnering with other child-serving systems and sectors in a comprehensive and coordinated child and youth mental health system. Elements of such partnership include:

- Collect and integrate information among the various professionals and settings (e.g., mental health, primary care, psychiatry, child welfare, child care, schools) providing services to children and families, using a medical home approach for coordination of services.
- Coordinate and align early childhood and K-12 services systems to create a continuum of coordinated services designed to address the needs of infants, toddlers, young children, youth and their families  (e.g., being seen by an integrated mental health clinician during a routine well-child check as a covered benefit that does not require a mental health diagnosis).
- Provide universal early screening for social and emotional difficulties along with developmental screening; include evaluation of family and psychosocial risk factors to identify and address problems early.
- Integrate mental health services into primary care, early care and education settings, home visitation, and WIC.
- Support social-emotional development in K-12 populations with "best practice" programs for early childhood/youth mental health.
- Enhance screening and referral for parental depression, stress, and other mental health issues.
- Expand availability of parenting education through early care and education, schools, community organizations and pediatric primary care settings.
- Increase access to early childhood and youth mental health resources and services through primary care, outpatient, in-home, consultation and family centered programs, particularly for children who have entered the child welfare system, their parents and caregivers.

In building this integrated system, we must:

- Assess policy, system and program readiness to address early childhood and youth mental health issues statewide.

- Assess the ability to integrate early childhood and youth mental health into existing health care coverage and networks, creating a sustainable and enduring system of care including primary and preventive mental health services.

- Integrate the perspectives of parents, caregivers, state agencies, and health care professionals.

integrated behavioral health into primary care. Our plan focuses first on enhancing primary care

and does not explicitly address the role of specialty or hospital-based care because systems based on primary care are best positioned to improve overall health and control costs. Specialty care, including care for those with severe mental illness (SMI) and significant substance abuse issues will continue to be referred to specialists outside primary care. Primary care can address small problems before they turn into big problems, and potentially prevent those problems from occurring. By expanding primary care to include behavioral health services, we expand its impact and increase its ability to improve care for individuals, advance the health of our population and control system costs. Once we have successfully integrated behavioral health into a primary care setting and have moved to value-based payment for primary care, we will have the basic infrastructure to begin creating larger coordinated systems of care. These systems of

## Strategy for the Homeless in Colorado
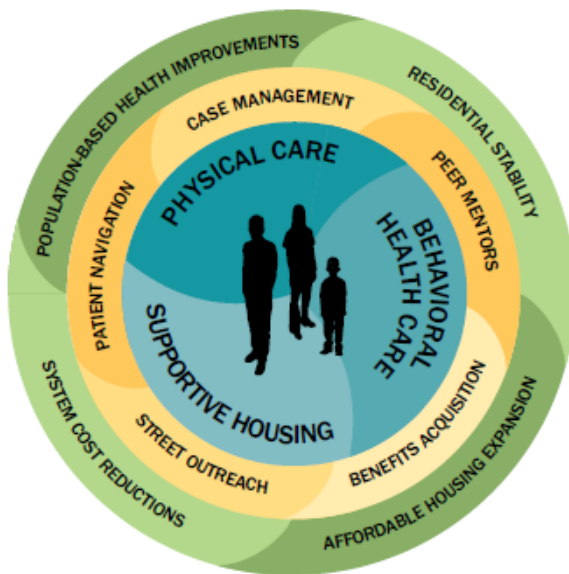


An integrated delivery model responds to the specialized needs of homeless adults and children, blending the delivery of patient-centered physical care (medical, dental, vision, pharmacy, and chronic disease self-management) with behavioral health care (mental health care and substance treatment services) and supportive housing. Street outreach personnel and patient navigators ensure that clients are able to access the care they need and can effectively navigate the systems in which it is provided.

 Case managers and benefits specialists provide the social supports and assist clients in securing the public benefits to which they may be entitled (Medicaid, SSI/SSDI, TANF, AND, etc.). Peer mentors build relationships with individuals to foster a sense of hope and trust by sharing lessons learned from their own recovery from homelessness. Each of these plays a vital role in addressing the social isolation and alienation that often leads to relapses and further aggravation of mental and physical conditions. Combined, all personnel contribute to the goal of furthering positive health status and housing stability for the people served. As a result, individuals and families begin to thrive and enjoy an improved quality of life. In addition, positive social impacts in the community include population-based health improvements and residential stability; increased affordable housing supply; and, system cost reductions (i.e., emergency services, hospital stays, incarceration).

care will include the full spectrum of care including bidirectional physical and behavioral health integration, public health, oral health and long term services and supports. As we move towards this ambitious vision, we will be working with both public and private insurers to move towards an outcome-based payment structure for care that supports value and quality care. As this system develops, the patient experience will also improve. Anyone who experiences care in the state will benefit from the advances we propose, regardless of payer or coverage status. Improving the patient experience is critical for achieving our larger State Healthcare Innovation Plan vision and the Triple Aim.

Key elements of our strategy include the following:

- Build on existing PCMH foundation in Medicaid and the private sector to connect all Coloradans with a primary care home.
  - o Expand the Accountable Care Collaborative to cover all Medicaid recipients.
  - o Pursue Section 2703 Medicaid Health Homes funding so community mental health centers can qualify as medical homes for Medicaid enrollees with severe and persistent mental illness.
- Implement an evidence-based definition of integrated care in primary care practices statewide. Adapt this model to enable bi-directional integration of primary care into behavioral health settings consistent with the Medicaid Health Homes approach.
- Establish criteria to assess practices' readiness to implement the systems necessary to integrate care and manage risk. Identify a neutral party, not associated with insurers or providers, to evaluate practices and connect them with insurers on completion of the criteria.
  - o Many of the 74 practices currently participating in the CPC Initiative practices are already integrating behavioral health and all are considered high-performing primary care practices. These early adopters can facilitate the transition to integrated care.
- Use common outcomes measures in primary care to drive alignment on measures for the integrated care model.
- Align rules and policies among primary care and behavioral health programs to enable integration.
- Support primary care practice transformation so practices can implement this integrated care model, participate in coordinated systems of care and succeed with non-FFS payments.

- Connect practices with resources, experts and successful peers to learn how to provide integrated care and become part of coordinated systems of care. The Health Extension System (HES) being developed by the University of Colorado Department of Family Medicine, CIVHC, HealthTeamWorks and others can be an important resource in this process. One of the functions of the HES will be to assess primary care practices' readiness for primary care and behavioral health integration and link the practices with appropriate consulting services and other resources needed to transform their care delivery systems, including training in integrated care models. (See Colorado Framework chapters for details).
- Provide coaching and support to primary care providers to move along the glide path to accepting new payment model). This will be a vital part of the practice transformation assistance for practices, staged according to practice readiness and stage of transformation.
- Create infrastructures that enable small practices to share administrative and analytic capabilities. Many small practices will not be part of hospital-based delivery systems. For these practices, management services organizations (MSOs) and independent practice associations (IPAs) may provide the critical mass necessary to coordinate care and manage population health and costs.
- Provide timely, aggregated claims data across all payers from the APCD to practices to enable them to track and manage costs and budgets for their patient populations and monitor progress on claims-based outcomes measures. Good access to data is critical for transforming delivery and payment.

- Work with Medicaid and commercial insurers to accelerate the transition to outcomes-based, value-oriented payment models that will support the transformation to integrated care in the practice setting. These models will support the creation of broader coordinated systems over the next five years and beyond.
  - Use the CPC Initiative payment mechanism (FFS plus care coordination payments) to support the initial transition to integrated behavioral health and primary care.
  - The glide path to new payments (see the Colorado Framework chapter) also serves as a path for insurers to go beyond FFS and care coordination payments. Because most Colorado insurers rely on FFS claims processing platforms that pay providers based

on retrospective billing, it is important that we create a path that guides their transition to prospective, outcomes-based payments.

- Using the glide path approach, insurers can work with practices on budget setting. Practices can still bill FFS against those budgets, with a retrospective reconciliation on a regular basis. This type of approach creates a transition period for insurers and practices to rework their billing and payment systems.
- This approach will allow health plans, hospitals and specialty physicians to continue developing bundled payments for acute care episodes. Bundled payments can be seen as an interim prospective payment strategy on the path toward global payments.

- Over time, facilitate the creation of community-based systems of care/accountable care organizations that bring together primary and specialty care, hospitals, local public health agencies and community support agencies. This could entail building upon the Medicaid RCCOs and existing community health alliances (see Public Health chapter for a description of these alliances). Key components to this facilitation would include expanded health information exchange and technical assistance on issues such as developing collaborative care agreements or formal contracts among participants.

- Coordinate clinical care with the public health delivery system and community agencies.
  - The HES can connect primary care practices with community health improvement efforts as part of practice transformation support and advancing a shared vision of population health. It can also train primary care practices to use community health workers to collaborate effectively with community service providers, local public health agencies and other organizations. (see Public Health chapter)
  - Use local public health agencies' and hospitals' community health improvement plans to leverage both clinical and community resources.
  - Use evidence-based approaches to address population level health issues more effectively using the strength of integrated public health and clinical care. Large scale issues like obesity, diabetes and tobacco use can be more easily addressed when the goals of clinical and public health are aligned. The data and infrastructure support from the combined systems will be critical for success.

**Transitioning to Prospective, Accountable Payment Models**

Moving from FFS to prospective payments that focus on quality of care requires time and investment from both providers and payers. Practices must implement the systems and develop the expertise to track and manage outcomes and costs and need funding to put those systems in place and pay for needed coaching on analytic and financial skill building. Payers need time to adapt systems from retrospective claims processing platforms to prospective payment models. Accordingly, we developed a transition "glide path": to phase in new payment approaches as practices develop the capacity to analyze data and manage budgets.

As illustrated below, this path starts with FFS + care coordination payments. As practices gain experience managing care and costs, they will add on shared savings opportunities. Finally, after practices have demonstrated success in a shared savings model, the path adds downside risk. Similar to Medicare's Shared Savings Program and Pioneer ACO, practices will have a period of years to progress along the glide path. Practices will begin this journey at different points along the path, and the elements in each phase may vary depending upon a practice's sophistication. For example, some practices are participating in shared savings arrangements but may not yet have the internal systems in place to track costs.

Our vision will create true global budgets covering primary, specialty and some tertiary care, as well as the public health delivery system. As our model starts with integrated primary and behavioral care, we will start by moving toward an annual payment for primary care services.

**Observation Phase**
- Identify current spending and future benchmarks for spending
- Understand needs to transform practice, delivery, and payment
- Identify outcome and quality baselines

**Care Coordination and Shared Savings**
- Increased coordination through additional payments
- Support in practice transformation
- Performance, quality and cost measurement

**Shared Savings and Risk**
- Increased provider responsibility – expectations and accountability
- Additional payment built into total cost of care
- Support in practice transformation
- Performance, quality and cost measurement

**Annual payments and budgeting for comprehensive primary care**
- Payment based on total cost of care and coordination payment
- Learning collaborative
- Performance, quality and cost measurement

- Expand HIE connectivity to cover all clinical care and public health sites statewide, enabling real-time exchange of clinical data to foster better coordination of care.

  - Link the APCD with clinical registries and other data sources including public health databases such as immunization registries, birth and death records to enable population-based assessment of outcomes and costs.

- Create additional academic collaborations and programs that support the education of primary care and behavioral health care providers in preparation to work and thrive in an integrated environment. (see Workforce chapter)

**Outstanding Questions**

In order to achieve its vision, Colorado needs to focus on a number of issues and questions that are not addressed in the strategies outlined above, including:

- Coordinated systems of care can control costs by minimizing duplication of services and enhancing care management among teams, but they can also increase costs by concentrating market power. We must acknowledge that tension and explore the market and regulatory levers available to mitigate the potential consequences of our goal.
- The delivery strategies and payment transformation outlined here are focused on primary care, though the goal is to create comprehensive delivery systems supported by outcome-based payment that can support specialty care, hospitals and community organizations. We must devote more time to outlining the path necessary to fulfill that larger vision, including the intermediate step of creating better access to specialty care.
- Any payment and delivery system reform needs to recognize that certain populations, such as the homeless, tribal communities and school-based health care systems, may not lend themselves to the same incentive and performance-based payment structure. We also recognize that there will still be gaps and populations that do not benefit from the new system as greatly as others. We must develop alternative value-based payment strategies for populations with unique challenges.
- What are the policy pros and cons of the trend toward more provider employment? Do we want to explicitly endorse that, or ensure that options remain for clinicians who want to

remain in independent practice? If so, what policies would the state need to adopt to support independent practices?

- While PCMHs are at the core of our transformation vision, how do we effectively reach beyond primary care to engage specialty care in order to ensure sustainable, robust medical neighborhoods? How do we leverage ACC model of Neighborhoods?

- How do we best align benefit designs with this new payment and delivery approach?

- Efforts to align commercial insurance and Medicaid have focused on fully-insured plans, but self-insured employers represent a significant percentage of Colorado's commercial insurance market. How can we foster better alignment between self-insured and fully-insured payers?

- How do we facilitate measure alignment among insurers?

- How do we best support health care provided in rural Colorado? Can we combine funding streams from Medicare, Medicaid and commercial insurers to provide the financial stability that will support rural providers?

**Policy and Regulatory Changes Needed to Carry Out These Strategies**

As we seek to move Colorado's market to outcome-based payment approaches, we must recognize that prudent fiscal management requires that the ultimate potential risk is held at an organizational level where long term sustainability and consumer protection can be assured. Colorado has an extensive system of oversight to ensure insurance company solvency. Risk-sharing payment arrangements between insurers and providers must be subject to solvency oversight, guarantee fund protection, and risk scalability in order to protect providers and their patients from fiscal failure. Global payments for individual providers should be done only within a system in which ultimate risk remains at a very high level—not the individual practice level, since individuals practices will likely not have the resources necessary to qualify as risk-bearing entities under Colorado law. At the same time, we want to explore opportunities to create new accountable care arrangements and "virtual" ACOs in which networks of providers join together to coordinate care. Policymakers and regulators will need to examine how best to create coordinated systems of care that can comply with essential consumer protections and ensure the financial stability of the model.

**Federal Waiver or State Plan Amendments Needed for Key Transformation Strategies**

The larger Colorado SHIP, including the integration of primary care and behavioral health as well as public health, long term services and supports, oral health and HIT, will need to be carefully examined to determine what federal waivers or state plan amendments would be required for success. We do not anticipate that the Colorado Framework, our model that begins the integration process with primary care and behavioral health, will require any additional federal waivers or state plan amendments.

**Figure 8: Delivery and Payment Innovations in Colorado**



**New Payment Models**

**Payment and Delivery Innovations in Colorado**

**Delivery Redesign**

**Integrated Phys./Behavioral Health**

**Bundled Payments**
- CMS Acute Care Episode Demonstration - Exempla St. Joseph
- CMS Bundled Payments for Care Improvement - Exempla Lutheran, Penrose St. Francis, University Hospital
- PROMETHEUS Payment for Chronic Conditions - C. Springs/Alamosa

**Global Payments**
- Medicaid ACC/RCCO Region I Global Payment Demo
- Rocky Mtn Health Plan SHAPE Demo
- Denver Health MedicaidChoice
- Humana (Medicare Only)
- United Healthcare (Medicare Only)

**Shared Savings**
- Medicare Shared Savings Program - Physician Health Partners
- CMS Acute Care Episode Demonstration
- CMS Bundled Payments for Care Improvement
- Medicaid Accountable Care Collaborative Shared Savings
- Comprehensive Primary Care Initiative
- CO Choice Health Plans/San Luis Valley HMO
- Aetna PCMH
- Anthem Patient Centered Primary Care Program
- Centura Colorado Accountable Care
- Cigna Collaborative Accountable Care
- Colorado Access
- United Healthcare
- Humana (Medicare only)
- Health Incentives Payment Pilot/PROMETHEUS

**Databases and Health Information Exchange**
- Colorado All Payer Claims Database
- Medicaid Statewide Data Aggregator (ACC SDAC)
- Colorado Beacon Consortium
- Colorado Regional Health Information Exchange
- Quality Health Network
- Colorado Telehealth Network

**Care Coordination Payments**
- Medicaid Accountable Care Collaborative
- Medicaid Person Centered Payments in LTC
- Medicaid Colorado Children's Healthcare Access Program
- Comprehensive Primary Care Initiative
- Colorado Access
- CO Choice Health Plans/San Luis Valley HMO
- Aetna PCMH
- Anthem Patient Centered Primary Care Program
- Cigna Collaborative Accountable Care
- Rocky Mtn Health Plan Comprehensive Care Payment Demo
- United Healthcare
- Denver Health MedicaidChoice

More than 120 co-located practices
Advancing Care Together - CU, 11 sites
Project Bloom
Rocky Mtn Health Plan SHAPE Demo
COMPASS - Kaiser Permanente
Integrating Primary Care and Wellness
Consultation Liaison in Mental & Behavior Care of Mental, Phys. & Subst. Use Syndromes
Promoting Resources for Integrated Care & Recovery - Mental Health Center Denver/ Denver Health

TIPPING Point - SE Mental Health Services
21st Century Care - Denver Health
AspenPointe Integrated Care Program
Aurora Compreh. Comm. Mental Health Ctr.
CO Psychiatric Access & Consultation for Kids - Colorado Behavioral Healthcare Council
Mcaid ACC/RCCO Reg. I Global Payment Demo
Jefferson Center for Mental Health Union Square Health Home
CO Comm. Treatment Centers/Feinstein Institute
Sustainable High Utilization Team Model - Metro Community Provider Nework/partners

**Long-Term Care**

HCPF Dual Eligibles Pilot*
  *waiver request pending

South Denver Care Continuum - Christian Living Communities

**Public Health**

Winnable Battles - CDPHE

CO Prevention Alliance

**Care Transitions/Readmissions**

Healthy Transitions Colorado
Accountable Care Collaborative/RCCOs
Sustainable High Utilization Team Model - Metro Community Provider Network
Collaborative Accountable Care
TIPPING Point - SE Mental Health Services
Eagle County Community Paramedic
21st Century Care - Denver Health
Home Healthcare Collaborative - CO Center for Nursing Excellence
South Denver Care Continuum - Christian Living Communities
Long Term Care Quality Initiative - CO Health Care Association
Reducing Hospitalization/ED Visits - CO Health Care Association
Improving Communication & Readmission - CO Rural Health Center
Family Caregiver Protocols - UC Denver
FQHC Advanced Primary Care Practice Demo - CO Community Health Network

Care Transitions Intervention - UC Denver School of Medicine
Transitions of Care Program - Systems of Care Initiative
Integrating Care Populations & Communities - CFMC
ReConnect Leadership Project - Centura St. Anthony
Centura Health at Home
Colorado Beacon Consortium
Long Term/Post-Acute Care Care Transitions through HIE - CORHIO
Senior Reach - JCMH
Telehealth in the Home - CO Foundation for Home Care
Patient Centered Medical Community - Boulder Valley Care Network
NW Denver "Connected for Health"
Assisting Older Adults with Transitions of Care - UC Denver & Health Sciences Center
Adult Resources for Care and Help - Mesa County Area Agency on Aging
Upper Arkansas Area Council of Governments

**Patient Centered Medical Home**

Medicaid Accountable Care Collaborative/RCCOs
Comprehensive Primary Care Initiative
TIPPING Point - SE Mental Health Services
Safety Net Medical Home Initiative

21st Century Care - Denver Health
FQHC Advanced Primary Care Practice Demo - CO Community Health Network
Centura Colorado Accountable Care

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Last updated October 2013. Access the complete CO Payment Reform and Delivery System Innovation inventory at www.civhc.org.

# CHAPTER 3: THE COLORADO FRAMEWORK: INTEGRATING BEHAVIORAL HEALTH AND PRIMARY CARE

## Executive Summary

The goal of Colorado's Framework model is to connect 80 percent of Coloradans with coordinated systems of care that give them access to integrated behavioral health care in primary care settings. In order to achieve this goal, we intend to implement a statewide framework for integrated care that will be supported and sustained by new payment models. The Colorado Framework will transform the way care is delivered, broaden the capacity of primary care delivery and make the provision of behavioral health and primary care services more seamless. Our approach is grounded in a robust literature base and will lead to comprehensive health system transformation by enhancing the patient experience, improving population health, and increasing cost-effective care in the primary care setting.

Practices working within the Colorado Framework for integration will receive coaching and transformation support to create tailored models that work for their communities and populations. These practices will develop the capacity to provide comprehensive integrated primary and behavioral health care with a goal of positively affecting the following domains:

- Timely access to behavioral health care
- Screening, identification and effective treatment for behavioral health problems
- Identification and treatment of co-morbid behavioral and medical disorders
- Provider and practice capacity to provide more comprehensive whole-person care
- Patient satisfaction
- Provider and staff satisfaction
- Quality of care
- Cost effective care

One of the most significant barriers to implementing and sustaining integrated care is the way these services are currently reimbursed. The Colorado approach will provide a payment reform trajectory that better supports integrated models, builds off ongoing efforts in the state, and can align both public and private insurers in order to stimulate broad-based provider participation.

Our focus on primary care behavioral health integration is just a starting point for a more comprehensively integrated health system that also includes physical and behavioral health, public health, oral health and long-term services and supports. The Colorado Framework model will ensure the preponderance of primary care will be delivered under an integrated, multi-payer model for the majority of the state's population in five years and set us up to achieve our greater vision of comprehensive and coordinated systems of care.

**What is "Integrated Care"?**

The Colorado Framework defines integrated behavioral health care (mental health, health behaviors, and substance use treatment will be jointly referred to as behavioral health throughout the rest of this chapter) as:

> The care that results from a practice team of primary care and behavioral health clinicians, working together with patients and families, using a systematic and cost-effective approach to provide patient-centered care for a defined population. This care may address mental health, substance abuse conditions, health behaviors (including their contribution to chronic medical illnesses), life stressors and crises, stress-related physical symptoms, ineffective patterns of health care utilization.[32]

Integrated care models occur along a continuum from coordination to co-location to integrated care, the end goal.[33] As practices move along the continuum of integration the goal is to embed a behavioral health provider (BHP) along with supporting services and systems into primary care to better address the patients' needs efficiently and effectively. When patients with behavioral health problems are cared for in primary care they can often have their needs addressed before the problems become more severe or chronic. These behavioral health services should not focus solely on emotional health but also the health behaviors of the patient and the impact of psychosocial factors on patient management of chronic conditions. Behavioral health interventions in primary care are often brief and targeted with a focus on improving the patient's functioning.[34,35] The Colorado Framework focuses on a primary care based integration because that is where most Coloradans will receive care. However, we also want to recognize the need for "bidirectional" approaches that bring primary care into a behavioral health setting. This model of integrated care will be critically important for Coloradans with severe and persistent mental illness whose health home is a community mental health center rather than a primary care

practice. While many behavioral health conditions can be effectively treated in primary care, others such as severe mental illnesses (SMI) or significant substance use disorders may be best treated and managed outside of a primary care setting. Those individuals would continue to be seen by specialty clinics and mental health centers; the Colorado Framework will not attempt to move these kinds of specialized treatments into a primary care setting. Bidirectional integration will be a critical part of the health care system, but will not be the initial focus of integration and, as such, is beyond the scope of this specific model.

**Opportunities and Innovations: Integrating Behavioral Health and Primary Care**

<u>Serving a need</u>

Integrated behavioral health and primary care is a critical step in defragmenting healthcare creating a more effective and efficient way of providing comprehensive care for the whole person. Consider the following. the majority of health care services are delivered in the primary care setting,[36] and patients with mental health and substance use conditions often first present and are solely seen in primary care.[37]  In fact, up to 70 percent of primary care visits could benefit from a behavioral health intervention.[38] Often these comorbid behavioral health problems and the associated psychosocial issues go unidentified and untreated. Depression and anxiety disorders are the most common mental health conditions identified by primary care providers, often complicating other medical conditions and significantly increasing the cost of care.[39,40] Unfortunately, mental health services have been identified as the most difficult subspecialty for primary care physicians to access.[41] Attempts to refer externally to the specialty behavioral health system have generally led to low rates of patient response, resulting in low treatment initiation and completion rates, and limited communication and care coordination.[42,43] As a result, an estimated 50-90 percent of mental health care is delivered within primary care where providers have limited training and resources to provide such care.[44,45,46,47] Increased integration will allow patients to seamlessly access appropriate mental health care in a setting they're already visiting.

Furthermore, the most challenging and expensive patients to treat frequently present in primary care with co-occurring behavioral health and chronic medical conditions.[40,48-55]  These patients

report significantly more impaired functioning and worse health status, as well as higher levels of distress as the number of medical comorbidities increases.[56-58,59] Heart disease, diabetes, chronic lung disease, dialysis, cancer, chronic pain, sleep disorders, stroke and arthritis are the most frequently cited disorders associated with co-occurring psychological issues.[58,60-63] Finding ways to best care for the patients routinely seen in primary care remains one of the biggest challenges and promising opportunities we have in Colorado. Providing comprehensive care that addresses patients' physical and behavioral health needs will allow primary care to better achieve the triple aim goals.

The evidence base for integration

Multiple systematic reviews have demonstrated the effectiveness of integrating behavioral health service delivery into the primary care setting.[7,18,19] In 2008, the Agency for Healthcare Research and Quality (AHRQ) released a systematic review examining models of integrated care in the United States.[64] Butler et al. included 33 randomized controlled trials and high quality quasi-experimental design studies (26 on depression care, four examining anxiety disorders, one somatization disorder, one attention deficit and hyperactivity disorder, and one depression and alcohol disorder).[64] Thirteen case reviews were also included in order to help the reader make the connection between the research and practice of integrated care. All reviews of the evidence support the value of integrating mental health into primary care, especially when patients receive appropriate evidence-based treatment. When the core elements of the PCMH (e.g. patient-centered care, coordinated care, systematic screening and diagnosis) are included as part of the integrated model, we can achieve better mental health outcomes.[65] Integration can help address some of the most important problems in healthcare, such as poor outcomes and high costs associated with patients who have a behavioral health condition or a chronic medical condition with behavioral health contributing factors.[66,67]

Building on Colorado's existing base of integrated care initiatives

Currently there are numerous efforts underway in Colorado to integrate behavioral health and primary care, including a number of grant-funded pilot projects testing various approaches to integrating care. In addition, many safety net providers are partnering with each other and with

private providers to provide integrated care in their clinics. Two pilot programs in western Colorado, one specific to Medicaid and one covering Medicaid and commercial members—both directed by Rocky Mountain Health Plans—are using global payments to support integrated care. Figure 9 below illustrates both the number and distribution of efforts around Colorado to integrate care (Please see the Delivery System and Payment Design Chapter and the Inventory of Payment and Delivery Innovations in the Appendix for more information).

**Figure 9: Integrated Care Efforts in Colorado as of October 2013**
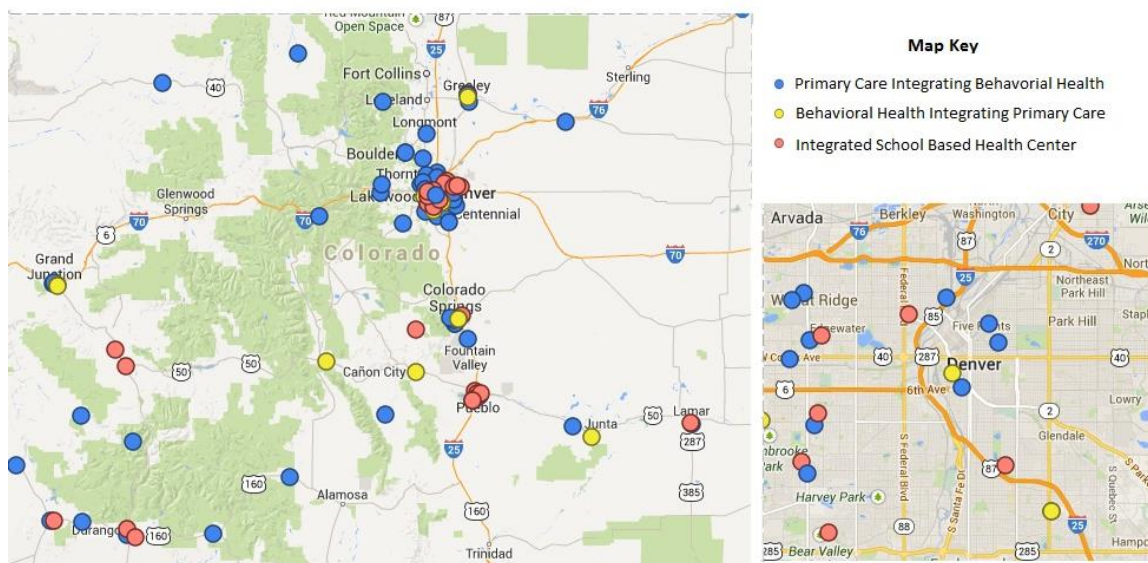


Many Colorado stakeholders have been actively engaged in determining how to spread integrated care in the state. In 2011, the Colorado Health Foundation and the Collaborative Family Healthcare Association partnered to launch the Promoting Integrated Care Sustainability (PICS) project.[68] An advisory board comprised of primary care and behavioral health care providers, health plans, state agencies, elected officials and policy experts convened to identify and analyze financial barriers to delivering integrated care services in Colorado. A number of recommendations emerged from this effort, most of them short-term fixes focused on changes to Medicaid. The PICS recommendation that is arguably most important, and most challenging to implement, calls for evaluating the viability of global funding strategies to sustain integration.

Building on Colorado's efforts to enhance primary care

Behavioral health integration is a complementary addition to ongoing efforts in Colorado to enhance primary care. Our approach builds upon the Patient-Centered Medical Home (PCMH) model of primary care, which emphasizes the need for primary care to be coordinated, team-based, and connected to other health care providers and systems of care. Behavioral health integration is a key aspect of the PCMH goal of achieving "whole person care," in addition to the coordination of care, reducing the experience of fragmentation, and controlling costs.[69] Many primary care practices in Colorado have begun the transformative work of becoming a PCMH. In 2011, 567 primary care physicians or 16-19 percent of the 3,000-3,500 in Colorado had achieved PCMH recognition from the National Committee for Quality Assurance (NCQA). Assuming four physicians per practice and 2,000 patients per physician are roughly 141 practices and 1,134,000 Coloradans in PCMHs.[28]  In addition, 74 practices around the state are participating in the Comprehensive Primary Care (CPC) Initiative through the Center for Medicare and Medicaid Innovation. Eight commercial insurers and one self-insured as well as Colorado Medicaid and Medicare are providing per-member-per-month payments to practices on top of fee-for-service (FFS) to support the initiative.

**Challenges**

- Reimbursement: While Colorado has made substantial efforts to integrate behavioral health into primary care, there are still significant barriers to progress. The most significant barrier for taking models of integration to scale in Colorado has been financial. Many Colorado innovators have been forced to abandon full scale integration efforts once grant funding runs outs. The traditional FFS reimbursement in primary care is insufficient to support payment for integrated behavioral health services, forcing integration pilots to rely on grants and other unsustainable sources for funding.

- Siloed delivery of physical and behavioral health: Most insurers in Colorado administer and pay for behavioral health care benefits separately from physical health care. Medicaid "carves out" payments for mental health/substance use services and pays behavioral health organizations (BHOs) on a capitated basis, perpetuating multi-level fragmentation in Colorado's healthcare system. The BHOs have different geographic coverage and administration from the Regional Care Coordination Organizations (RCCOs) that coordinate physical health benefits for many Medicaid recipients.

- Differing billing requirements: Behavioral health providers attempting to work in primary care settings within the Medicaid program are forced to operate by rules and regulations unique to a "carved-out" mental health system that often make it difficult for the BHP to be reimbursed for services.
- Integrated vs. traditional behavioral health care: Integrated behavioral health care interventions are different from traditional behavioral health services in many ways. Genuine integrated behavioral health care is often delivered through a brief interaction and in higher volumes, with emphasis on a team-based approach to care delivery. This is very different from the traditional behavioral health approach that focuses on an individual provider providing care in an extended appointment of an hour or so. This type of service delivery requires a cultural shift for primary care and BHPs who are used to working individually.

**The Colorado Framework for Integrating Primary Care and Behavioral Health**

The specific model of behavioral health integration that Colorado is proposing is adapted from the recently published *Lexicon for Behavioral Health and Primary Care Integration* by CJ Peek and the National Integration Academy Council for the Agency for Healthcare Research and Quality's Academy for Integrating Behavioral Health in Primary Care (AHRQ) (see Appendix).[32] The Colorado Framework outlines three key elements of integration identified in the Lexicon as well as three stages of integration. This Framework allows communities and practices to adapt integrated models to meet the needs of the families and community being served by presenting scopes of integration that practices may focus on, rather than a one-size-fits-all approach. The process towards integrated care will be different for each practice depending on its implementation of foundational practice transformation elements, electronic health record capacity, community resources, the needs of the patient population, and the clinic's ability to integrate behavioral health services into the practice. Practices working within the Colorado Framework will create tailored models that work for their population.

The AHRQ Lexicon that was used to develop the Colorado Framework is a set of concepts and definitions, developed through expert consensus, to describe what behavioral health and primary care integration means. The goal of the Lexicon was to present a functional definition to describe what an integrated practice would look like.[32] The Lexicon allows for effective communication

and concerted action among clinicians, care systems, health plans, researchers, policymakers, business modelers, and patients – all working towards effective, widespread implementation on a meaningful scale.

For years, there have been attempts to classify and organize integrated practices in a way that can be easily understood and measured. Most often, these attempts have come down to using levels as a way to classify practices by "how integrated" they actually are. For example, the Standard Framework developed by the Substance Abuse and Mental Health Services Administration under the Health and Resources Services Administration (SAMHSA-HRSA) Center for Integrated Health Solutions describes three overarching categories of care (i.e. coordinated, co-located, integrated) and a continuum of integration with six different levels.[70] The Standard Framework aggregates many aspects of integration (e.g. type of collaboration between providers, level of shared workflows, type of spatial arrangement, protocols for follow-up) and places these in categories along the continuum.

These measures of integration are an initial attempt to evaluate where a practice stands on a continuum of integration and to inform the direction of a practice through the integration process. These measures work well when used for their intended purpose of promoting higher levels of integration and collaboration. The AHRQ Lexicon was developed to break down integration in more detail allowing for a greater sense of detail for practices.

The Lexicon separates out the components proposed in the Standard Framework into three defining elements and the corresponding parameters of integration. This separation allows for more complete definitions and flexibility for practices working towards integration. There are many similarities between these two efforts so those Colorado practices that have been using the Standard Framework in their integration efforts will be well poised to participate in the Colorado Framework.

The stages of integration

The Colorado Framework outlines three basic stages along the path to full integration between behavioral health and primary care. Recognizing that achieving integration may take time, require the building of relationships, and modification of administrative and operational

functions, these three basic categories are all steps that organizations and practices can take towards achieving integrated care. The three categories--coordinated, co-located, and integrated-- represent the physical location as well as level of collaboration between the behavioral health provider and the primary care team. These categories provide a pathway that can help practices assess their current capacity and develop goals for movement along the continuum of integration. Table 1 below explains the continuum of these categories.

The ultimate goal for a practice is to achieve fully integrated care by having a behavioral health provider (BHP) on site and working as a member of the practice team. This is critical because it allows both the primary care providers and the patients to access the BHP when the services are most needed and in the site that is most commonly accessed by patients. Having a BHP on site allows for more regular communication and close collaboration between providers to facilitate complete whole-person care. With a fully integrated practice, BHPs are integrated into the practice workflow and provide care in the primary care setting; however, even within the domain of full integration, practices have the flexibility to choose whether they will hire a BHP themselves or contract with a local behavioral health agency.

**Table 1: Continuum of Integrated Care**

| Coordinated | Co-located | Integrated |
|---|---|---|
| • Behavioral health (BH) and medical clinicians spend little time with each other and have different office systems.<br>• Usually a referral-based system. Patient has to negotiate separate practices.<br>• May only communicate sporadically. Some protocols and shared workflows may be in place for referral and exchange of information; care may become better coordinated as they move to more systematically coordinated relationship. | • BH and medical clinicians in same building; may spend some but not all of their time in the same space.<br>• Patient usually has to move from primary care to behavioral health space.<br>• Regular communication and coordination, usually via separate systems and workflows but with care plans coordinated to a significant extent. | • BH and medical clinicians share the same room, spending all or most of their time seeing patients in shared space, often the same exam room with warm hand-offs.<br>• Shared care plans, clinical documentation, billing procedures.<br>• Clinical workflow, role clarity, and regular communication to ensure effective communication and coordination |

The Colorado Framework takes into account that not every practice will immediately have the capacity for an onsite BHP and the fully integrated model may never be practicable for some small and rural primary care practices. Therefore, practices may initially have a coordinated or a co-located relationship with a BHP while working towards more robust integration. These will generally be considered transition steps, as the limitations within coordinated and co-located relationships may not allow practices to fully maximize the patient experience, population health or cost-effective care. The model was designed with the understanding that the fully-realized integrated care model is not feasible for all providers and practice settings.

The behavioral health care provided by an integrated practice with a BHP generally includes: 1) brief, action-oriented interventions with "warm handoffs" of patients from the primary care providers during the course of a single visit; 2) team-based follow-up and care management if needed; 3) an occasional time-limited course of more traditional counseling; and 4) consultation or referral with close coordination of care for more serious cases or those that don't respond to primary care behavioral treatment.

Scopes of integration

Practices will be at different stages of readiness to integrate behavioral health and may have varying levels of capacity. They will also have very different behavioral health needs in their patient population and may need to focus on developing the capacity to care for certain types of BH presentations in order to provide the best care to their patient panel. Therefore, Colorado has identified two scopes (see Figure 10 below) based on patient behavioral health needs to help practices decide what role functions, protocols and work plans they should develop. Identifying the needs of the patient population served is crucial to determining the best scope of integration for a practice.

The scopes described below are cumulative, meaning Scope Two builds on Scope One so that practices have the capacity to meet at least the basic mental health and substance use needs of the patient population. Practices that want to address the patient presentations outlined in Scope Two must first demonstrate that they are providing the services necessary to achieve Scope One. This decision was made based on input from stakeholders and experts on integrated care. We will

continue to engage practices and other stakeholders as we refine the model, to ensure that the cumulative approach makes the most sense for practices.

**Figure 10: Scopes of Integration**

| **Scope One** | **Scope Two** |
|---|---|
| **Mental health and substance use conditions commonly presenting in primary care**<br>e.g. anxiety, depression, post-traumatic stress disorder (PTSD), attention-deficit/hyperactivity disorder (ADHD), tobacco dependence, risky drinking or drug use. | **Scope One + BH contributors to common medical conditions and mental health/substance use conditions intertwined with chronic illness**<br>e.g. depression in an adult with poorly regulated diabetes, asthma, stress-linked physical symptoms or symptoms that have no medical explanation (e.g., headaches, stomach aches, pain, or fatigue) |

- Scope One: Practices starting with Scope One will provide comprehensive primary care that includes the capacity to identify and treat patients with mental health and substance abuse conditions commonly encountered in primary care that can be understood and treated more or less independently of other health conditions. This scope does not include providing behavioral health care for patients with SMI or specialty mental health service needs such as intensive outpatient treatment or other specialized services.

- Scope Two: Practices in Scope Two will provide the comprehensive primary care outlined in Scope One and also have the capacity to identify and treat behavioral health contributors to chronic medical conditions and mental health/substance abuse (MH/SA) conditions that are deeply intertwined with medical conditions. Scope Two practices will also provide support to patients who need to make health behavior changes to manage chronic illnesses or prevent medical conditions. Scope Two practices will encourage health-promoting or prevention behaviors such as realistic goal-setting, stress management, exercise, good nutrition, and appropriate preventive services (e.g., breast cancer screening, immunizations, etc.). While the

definition of Scope Two identifies functions and capacities that are markers of full integration, not all practices or organizations may be able to or need to get to full integration in order to meet the needs of their population.

It will be difficult to reach our payment reform and cost-savings objectives if large numbers of practices elect to remain in Scope 1. The opportunity for savings is maximized in Scope 2 with the integration of the behavioral aspects of chronic conditions. The combination of the integrated approach with payment models that utilize shared savings and risk will be critical to motivate practices to move beyond Scope 1 into the more fully integrated Scope 2.

The key elements of integration

Three essential elements of integration are required to carry out the functions described in the scopes above. These elements—Teams, Shared Patients & Outcomes, and Systems to Support Integration—may look different depending on the practice's level of collaboration and physical location of the BHP.[32] Fully integrated practices will have successfully implemented the three essential elements, while practices still working with coordinated or co-located systems may not be able to fully implement all aspects of the elements. The elements are illustrated in Figure 11 below.

**Figure 11: Key Elements of Integrated Practice**
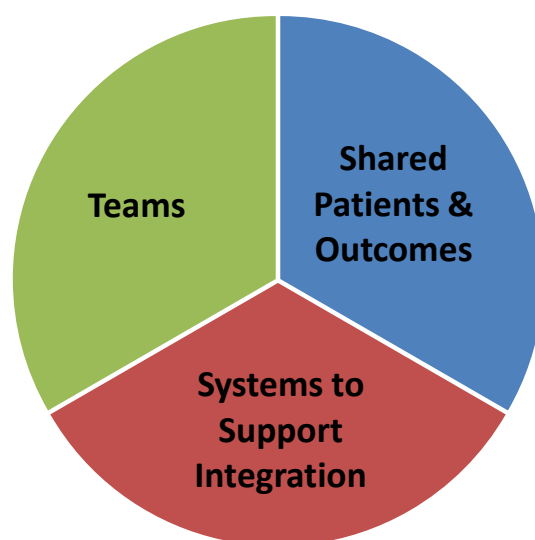
- *Teams -- Multidisciplinary team tailored to the needs of each patient and situation, with shared operations, workflow and culture and each team member trained to participate in the integrated model.*

Practice teams must work together to provide whole-person, patient-centered care to the patient population to improve physical and behavioral outcomes. By employing a team-based approach, practices will likely achieve outcomes that would be difficult to achieve by single providers (e.g. improved patient health, and patient experience). The team should include an appropriate number of staff who possess the necessary behavioral health and primary care expertise, skills, and training to carry out the required functions to address the needs of their particular population. Ideally, a qualified BHP should be integrated into the practice team to provide direct patient care, supervise BH services provided by other team members, and fulfill necessary BH functions. Practices should also have the staff available to fulfill case management functions (e.g. monitoring patient outcomes, connect patients to community resources, care coordination) so the BHP is available to provide evidence-based interventions or supervise those providing this care. Practices will use the scopes of integration to determine the necessary team functions. The patient and the family should be engaged as a crucial component of the team with shared decision-making support and self-management resources. The required roles/functions of the team are detailed in Table 2 below by scope of integration.

These roles can be fulfilled by various team members as long as the individuals have the appropriate training and expertise. Please see Workforce chapter for additional information.

**Table 2: How Teams Operate within the Two Scopes of Integrated Care**

| Roles/Functions Required by the Integrated Practice Team | |
|---|---|
| **Scope One: Foundational** | **Scope Two: Expanded** |
| Identification. screening, assessment, and intervention for common MH/SA conditions (e.g. ADHD, depression, PTSD or anxiety in an otherwise healthy adolescent or adult) | Identification, screening, assessment, and intervention for behavioral health factors in common chronic illnesses (e.g. depression and/or disease-related distress in cardiovascular disease or diabetes) |

| | |
|---|---|
| Evidence-based MH/SA treatments | Capacity to team with chronic illness care coordinators, PCPs and utilize information tools such as registries |
| Behavioral activation/self-management interventions | Advanced BH and self-management support interventions |
| Health behavior change interventions to manage or prevent MH/SA conditions and alter unhealthy lifestyles | Patient education / coaching in managing BH factors in chronic care |
| Improved access to psychopharmacology assessments / treatment either onsite or offsite with close collaboration between providers | Health behavior change interventions to alter unhealthy lifestyles and manage chronic illnesses, or prevent other medical conditions |
| Follow-up care for identified MH/SA needs, monitoring of outcomes and care processes | Follow-up care for identified BH needs, monitoring of outcomes and care processes for chronic care |
| Timely adjustment of care and coordination | Timely adjustment of care and coordination |
| Social support and family interventions for MH/SA conditions, including connections to community resources. | Social / family support to include BH factors in chronic care or consultation with other staff |
| Crisis intervention and effective connection to offsite MH/SA specialists | Ability to address patterns of ineffective healthcare utilization such as overuse, misuse, underuse, or ineffective use |
| Identify complex or high risk/high cost patients with MH/SA conditions and refer to specialty care when necessary | Identify complex or high risk/high cost patients with BH conditions or contributing factors to chronic illnesses needing care management or specialty care, with referral when necessary |

Practices that have not formed functional multidiciplinary care teams are generally not ready for integrated behavioral health and will need to do foundational work in this area while developing a relationship with a BHP. Practices that are moving along the continuum of integration, but still within the realm of coordinated or co-located care will need to determine what role functions they can mobilize for their population. These plans may develop a plan for moving forward on the continuum and developing the capacity to provide for all of the foundational functions outlined in scope one.

- *Shared patients and outcomes:  Common patient panel for medical and behavioral health providers; entire team is responsible for total (behavioral and physical) health outcomes.*

Team members must take shared responsibility for the care of their patients, have the same shared outcomes and be accountable for those outcomes including both behavioral and physical. Taking shared responsibility for patients will require that the team coordinate all care including screening, assessment, treatment and follow-up/monitoring treatment response and adjusting treatment as needed. Having shared responsibility for total health outcomes should encourage each team member to actively collaborate throughout the care process to ensure high quality care for the patient.

- *Systems to support integration: Patient identification/attribution, patient engagement, shared care plans and medical records, systematic follow-up and adjustment of treatment approaches as necessary.*

  Comprehensive, population-based care cannot be achieved without systems in place to ensure the following:

  o Systematic identification of patients with BH needs who could benefit from integrated treatment
  o Patient and family engagement in their care and treatment decisions
  o Care plans that include all aspects of the patient's health (e.g. biological, behavioral, social, and cultural), are shared between the patient, family, BHP and PCP
  o Shared health record that includes the medical and BH record with regular ongoing communication among team members
  o Appropriate treatment/follow-up and adjustment of care to ensure patient progress toward treatment goals.

  Several experts have highlighted that the last component, follow-up and adjustment of care, is the most crucial and the one most often not carried out. The practice transformation plan described later in this chapter explains the process to help practices develop these systematic clinical approaches necessary for success. Practices will also need to develop competencies that enable the successful adaptation of these key elements of integration.

> **Integrated Behavioral Health for Pediatric Populations**
>
> The Colorado Framework can be applied to practices with any patient population, including pediatric practices. While some components of the model will vary for pediatric practices, the key elements (teams, shared patients/mission, and systems to support integration) remain the same. Practices serving children will need to consider the different behavioral health needs of children of all ages and their families and develop the appropriate team functions and systems to meet those needs. The evaluation plan will also consider appropriate measures for these populations and examine other sources of data beyond clinical outcomes, such as school function or social adaption. Some measures that are currently being considered include measures of ADHD asthma and missed days of school

<u>Competencies supporting the key elements of integration</u>

Colorado's Framework for integration builds upon other initiatives in the state, such as PCMH, that aim to create truly comprehensive primary care. Many of Colorado's primary care practices have had some exposure to the core PCMH principles and have already begun work to develop some of the foundational competencies of comprehensive primary care. While it is not necessary for a practice to achieve formal PCMH recognition in order to implement the key elements of integration, many of the core principles of a PCMH are helpful for integration.  In order to successfully implement the Colorado Framework and provide comprehensive care, practices will need to develop the competencies described in Table 3.

**Table 3: Competencies to Support Integration**

| COMPETENCY | ACTION STEPS |
|---|---|
| **Leadership and Practice Engagement** | • The concepts of comprehensive primary care and behavioral health are understood and actively supported by practice leaders. <br> • Practice leaders support innovation, are willing to take risks and have occasional failures in order to improve. <br> • A culture of shared leadership has been created, with everyone sharing responsibility for improvement in the practice. <br> • The practice has a shared vision for practice transformation that everyone understands and support. <br> • Opportunities are provided for all staff members to be involved in practice change and improvement processes. |

| | |
|---|---|
| **Quality Improvement Process** | • There is a QI team that meets regularly.<br>• The QI team uses QI tools effectively – process mapping, PDSA.<br>• The QI team has a sustainable, reflective QI process that deals effectively with challenges and conflict.<br>• Quality measures and other data are used as a central area of focus for the practice's improvement activities. |
| **Data Capacity** | • The practice has an ongoing, reliable system for empanelment and panel management within our data systems and practice processes.<br>• Clean and accurate quality measurement data are available for targeted conditions.<br>• Workflows for maintaining accurate registry data have been reliably implemented. |
| **Population Management** | • Registry data identify specific populations of patients.<br>• The practice has a patient recall system designed and implemented to bring in patients for needed care.<br>• The practice uses a standardized method or algorithm for identifying its high risk patients.<br>• The practice provides care management services for patients identified as being high risk or needing additional assistance, community resources, and/or contact between visits. |
| **Patient Centeredness** | • A system has been implemented for identifying and monitoring patient needs for support in health behavior change and managing their chronic conditions.<br>• A system has been implemented for assisting patients with developing goals and action plans for health behavior change and chronic disease management.<br>• Personalized care plans are developed collaboratively with patients and families.<br>• Care plans and action plans are regularly reviewed to monitor patient progress in accomplishing their goals and adjusted when appropriate.<br>• Patients and families are provided resources to help them engage in the management of their health between office visits.<br>• Patients can reliably access their personal clinician or a care team member within defined and acceptable time periods. |
| **Team-based Care** | • Care teams have been designated and hold regular team meetings (can be everyone in very small practices). |

| | |
|---|---|
| | • Team members have defined roles that make optimal use of their training and skill sets.<br>• Protocols and standing orders have been implemented to better distribute workload throughout the team.<br>• The practice team has received training in integrated care and continuing education about integration and evidence-based practice is routinely provided.<br>• Team huddles are used to discuss patient load for the day and to plan for patient visits. |
| **Coordination of Care** | • Local referral sources and community resources are identified and share with patients.<br>• A structured system in place for assuring appropriate follow-up and care planning for patients undergoing transitions of care.<br>• When referrals are made to specialists or community resources, key information is communicated ahead of the visit and appropriate follow-up is achieved. |
| **Behavioral Health Integration** | • Practice has a shared vision for behavioral health integration that everyone understands.<br>• A system has been implemented to screen for patient behavioral health issues including substance use and mental health (e.g. SBIRT).<br>• A BHP has been fully integrated into patient care in our practice.<br>• Protocols and work flows have been implemented for warm-handoffs and standardized follow up with our BHP.<br>• Patient medical records are accessible to both behavioral and physical health providers.<br>• Personalized patient care plans are shared between behavioral health and primary care clinicians. |

**How We Will Achieve this Goal: Practice Transformation Plans**

The Colorado Framework can only be successful with extensive transformation on the part of the practices. Accordingly, Colorado will provide practice transformation support and coaching to help practices develop the necessary competencies (listed above) to successfully implement the elements of integration and give them access to needed resources and support. Our comprehensive plan includes practice facilitation, data and IT support and resources, and learning collaboratives.

Supporting practice transformation: The Colorado Health Extension System

Health Extension Systems are critical to integration efforts. This is described at length in the public health chapter. Below are key components of practice transformation support that could be provided through Health Extension Systems. The extension agents will provide technical assistance to help practices in the implementation of practice transformation including behavioral integration. This assistance will be facilitated by connections to the central hub of services and by ongoing relationships with primary care practices, behavioral health systems and providers, community agencies, and public health officers.  Extension agents and the extension services will focus on helping practices develop the competencies listed above as well as the key elements of integration to achieve improvement on the SHIP quality metrics.

**Figure 12: Key Elements of a Health Extension System[71]**



Key practice transformation support that could be provided through the Health Extension System includes:

- Practice education, through on-site coaching, learning collaboratives, online modules, etc.
- Leadership development, including consultation with clinician and management leaders, perhaps with participation from community leaders.
- Links to practice facilitation. Practices that already have a relationship with a practice facilitator or coach will be able to maintain that, while the Extension System will connect

practices without such a relationship with the appropriate resources. The Extension System will provide training and resources to facilitators, share best practices, and evaluate their performance.

- Engagement with the BH community to help practices understand the resources available in their community and determine the integration strategy that works best for them (e.g., hiring a BHP as an employee, or contracting with a community mental health center or private behavioral health group). Similarly, the Extension System will serve as a bridge between community and private BHPs and primary care practices. In addition, the Extension System can connect BHPs with training resources to understand the very different clinical model of BH provision in a primary care setting.

- Practice preparation for new business and payment models, including contracting with BH groups (as appropriate) and developing the information, financial and governance systems necessary to manage care and costs within prospective, outcomes-based payment systems.

- Learning communities, including regular regional learning collaboratives, webinars and conference calls, and cross-practice consultations and/or visits.

- Data extraction and management – technical support in extracting and analyzing registry and EHR data.

- Patient engagement, including assistance in establishing patient advisory groups.

- Linkage to community health workers, a critical part of supporting patients outside the practice walls.

- Community engagement, including connections to community and public health agencies for patient self-management support and convening stakeholders to support greater coordination among primary care practices, BH providers, other health care providers, local public health officers, community agencies, and others to improve community health.

**Figure 13: Colorado Framework Practice Transformation and Support Timeline**



| 2014/15 | 2015/16 | 2016/17 | 2017/18 | GOAL |

**Project Readiness**
- Finalize planning for practice facilitation, set up Health Extension Service
- Hire, train practice facilitators, Extension Agents
- Conduct practice readiness assessments
- Develop data management resources, including reporting process for facilitators

**Project Launch**
- Launch Health Extension Service
- Develop IT support infrastructure & resources
- Practice engagement
- Continue practice readiness assessments
- Begin practice facilitation for moderate and high-readiness practices
- Conduct Regional Learning Sessions

**Ongoing Implementation**
- Continue practice engagement
- Continue practice readiness assessments
- Provide practice facilitation for all practices
- Conduct Regional Learning Sessions

**80% of Coloradans have access to integrated care in primary care settings**

Practice transformation process

This section outlines the process of working with practices to accomplish the necessary transformation as illustrated in Figure 14. A more detailed description of the process may be found in the Practice Transformation report in the Appendix.

*Practice Readiness Assessment*

1. Step one: Assess practice readiness (demographics, EHR/data reporting status, PCMH implementation, quality improvement experience). This assessment will be used to help stage practices according to their projected initial readiness to implement BH integration. Practices that appear to be highly ready for BH integration will be prioritized to receive the second stage of the assessment.

2. <u>Step two</u>: Interview by the local extension agent and completion of the Comprehensive Primary Care Practice Monitor (see Appendix). The Monitor assesses key elements of practice transformation (above) for both comprehensive primary care and BH integration.

    a. Based on the information gathered from the two-stage assessment, practices will then be categorized as:

        i. High readiness for BH integration

        ii. Low to moderate readiness

        iii. Very low readiness or not willing to proceed at this time.

3. <u>Step three</u>: Practice transformation assistance will proceed according to these categories.

**Table 4: Categorization for Practice Transformation Support**

| **High readiness for Behavioral Health Integration** | • High level of basic PCMH/comprehensive primary care competency<br>• Vision is aligned with the CO framework for BH integration and may have taken some steps toward its implementation.<br>• May need combination of: a) further practice education regarding BH integration, b) assistance with identifying BH partners, c) assistance with the business aspects of implementing BH and/or moving toward advanced payment models, d) practice facilitation aimed at implementing BH integration, and e) HIT assistance regarding new areas of data extraction for QI and or population management, implementation of a personalized care plan within their record systems, and/or dealing with barriers to sharing medical records across behavioral and primary care clinicians.<br>• Able to implement BH integration and move toward advanced payment models relatively quickly |
|---|---|
| **Low to moderate readiness** | • Implemented some basic comprehensive primary care competencies<br>• Has an initial vision and readiness to move toward BH integration.<br>• In need of HIT assistance, and practice facilitation.<br>• Practice facilitation will focus on the comprehensive primary care competencies, with some ongoing focus on behavioral integration.<br>• Introduce other resources and activities listed for the high readiness practices as practice approaches readiness for BH integration<br>• Practice may choose to include a BHP on the team to accelerate their inclusion on the team and involvement in these earlier practice transformation activities.<br>• Length of time to progress to the stage of true BH integration will vary depending on initial state of readiness and may range from six |

| | |
|---|---|
| | months to two years. |
| **Very low readiness/not willing** | • Has done little or nothing to implement PCMH/comprehensive primary care and has limited data capacity.<br>• May be resistant to making these changes and will require focused education and leadership development to move toward a practice vision of comprehensive primary care and BH integration.<br>• Will need an ongoing relationship with a change agent (the extension agent in this case) to help change resistant clinicians and practices.<br>• Practices that become willing but lack basic data capacity will be provided with HIT assistance.<br>• All practices will be invited to local collaborative learning sessions, which may help with education and leadership alignment.<br>• When willing to move forward and have a basic level of data capacity, they will advance to the "low to moderate readiness" category as above and receive practice facilitation. |

**Payment Models to Support and Sustain Comprehensive Primary Care with Integrated Behavioral Health**

One of the most substantial barriers to effective integration is the FFS payment model that predominates in Colorado. The health care system responds to financial incentives and in order to make lasting changes to our delivery models we must simultaneously change the way we pay for health care services—shifting from paying for volume to paying for value.

That shift cannot occur overnight. It is important for insurers and providers to move deliberately and collaboratively toward the payment systems that will support truly coordinated or integrated care. In Colorado both commercial insurers and Medicaid have already begun this progression, for example, the Comprehensive Primary Care Initiative, Medicaid Accountable Care Collaborative and proprietary models for commercial insurers are already implementing care coordination payments and creating opportunities for shared savings. These approaches incorporate a component of FFS while beginning to lay the groundwork for prospective, outcomes-based payments.

The State Innovation Model provides Colorado an opportunity to further develop sustainable payment models that can support integrated primary care. This section identifies our payment model trajectory to transform how we pay for care. Whether a small single physician practice or

## Figure 14: Practice Transformation Support

**Practice Assessment**
1. Online practice information form
2. Prioritize practices for more in-depth assessment
3. Interview and complete Practice Monitor

↓

**High Readiness to Implement BHI**

→

**Preparation**
- Shared vision for BHI
- Necessary data for BHI
- Connection with possible BHI partners

→

**Implementation**
- Focused BHI practice facilitation
- Community engagement activities

**Moderate to Low Readiness**

→

- Data assistance
- Practice facilitation
- Ongoing monitoring of progress
- Incentives to participate and implement model

**Very Low Readiness and/or Unwilling**

→

- Ongoing relationship: re-assess and involve when willing
- Medical home & BHI education
- Data assistance

an integrated care delivery system, several foundational components can help move providers and insurers toward quality care delivery paid for with value-based payment models. Our proposed transition path to new payment models reflects and builds upon current movement in both Medicaid and commercial insurance.

<u>Trajectory for payment reform</u>

The graphic below depicts steps along Colorado's payment reform continuum and provides an outline for transitioning to accountable care within the overall Colorado SHIP and Model Design. This path reflects movement already underway in the Colorado market: for example, the CPC Initiative, Medicaid ACC and some commercial insurers are already implementing care coordination payments and creating opportunities for shared savings.[72]

**Figure 15: Payment Model Trajectory**



**Observation Phase**
- Identify current spending and future benchmarks for spending
- Understand needs to transform practice, delivery, and payment
- Identify outcome and quality baselines

**Care Coordination and Shared Savings**
- Increased coordination through additional payments
- Support in practice transformation
- Performance, quality and cost measurement

**Shared Savings and Risk**
- Increased provider responsibility – expectations and accountability
- Additional payment built into total cost of care
- Support in practice transformation
- Performance, quality and cost measurement

**Annual payments and budgeting for comprehensive primary care**
- Payment based on total cost of care and coordination payment
- Learning collaborative
- Performance, quality and cost measurement

We recognize that not all providers are at the same level of readiness and we cannot "flip a switch" and shift to prospective, value-based payments immediately. However, unless the fundamental payment structure is changed, the way care is delivered cannot change in a

sustainable manner. For this reason, the goal of the SHIP and the Colorado Framework is to move as many providers and insurers along the continuum towards prospective risk-adjusted monthly/annual budgets as can handle the responsibility and shared risk.

This trajectory reflects the realization that provider entities will need support in order to move along the payment continuum without jeopardizing patients' access to care or providers' solvency. They must have both sufficient time and technical assistance to put in place the administrative and clinical systems and assemble the financial reserves that are necessary to successfully accept risk. Most critically, before provider entities are allowed to accept downside risk, they must gain "training wheels" experience in managing to budgets.

The following sections break down the phases of this glide path to new payments to provide more detail and context on how they might look in practice. After the initial observation phase— in which practices learn to manage to budget and develop the capacity to utilize data for quality and cost measurement—practices are ready to move toward new payment models. This payment glide path begins with shared savings, moves to limited risk corridors, and from there advances to prospective PMPM payments for comprehensive primary care. Much like the Medicare Shared Savings and Pioneer ACO programs, Colorado envisions a multi-year (e.g., three-year) timeframe for movement along the payment model trajectory once practices have completed the observation phase.[72]

Stakeholder input will be necessary to determine the specific timeframe for each phase along the continuum and the potential requirements to advance to the next stage.

*Phase 1: Observation Phase – FFS + Care Coordination Payments while providers transform their practices and learn how to track total cost of care budgets*

Our trajectory begins with an observation phase, at which time the behavioral health provider is connected to the team, the needed practice transformation supports are initiated, the practice and payer groups establish actual versus projected costs, and identify performance and quality measures that will be tied to the shared savings. This observation phase also provides an opportunity for providers and insurers to build lasting relationships based on data sharing and communication.

- This phase will include a care coordination payment. This payment, in addition to practices' standard FFS reimbursements, will pay for the infrastructure needed to support care coordination — costs that are not reimbursable under the FFS model.

- This payment does not cover the cost of the behavioral health services, practices will continue to use referrals and existing collaborations with the BHOs which will be paid for through FFS and the existing carve out for Medicaid behavioral health services. Colorado will support compliance with the new parity regulations and the ACA. This support will be critical for practices just starting to develop the capacity for change and will ensure that all practices will be able to support the needs of patients.

- Practices will establish a primary care team with a behavioral health provider and initiate the appropriate practice transformation supports. This will include practice facilitation and access to practice transformation support services.

- Practices will build data analytic capacity to ensure they have the capacity to understand and utilize quality improvement and cost data.

- Practices and insurers will come to agreement on risk adjustment and total cost of care methodology and will determine the mechanism for behavioral health service reimbursement.

- Evaluation of actual versus projected costs will occur at the end of the observation phase, followed by agreement on the shared savings arrangement for the next phase.

Aligning incentives so that providers are willing to participate but do not get stuck in the observation phase is essential. There are administrative complexities that need to be laid out between practices and insurers to allow movement and avoid unnecessary work that does not support triple aim outcomes (opening codes, spending a lot of time on FFS reimbursement, etc.).

It is essential that payer and provider entities work together closely enough during the observation period to develop trust that goes beyond the legal contract between them. If at the end of the observation period there is no significant gain in trust among the participants, the small likelihood of progression to increased risk arrangements, and no timeline will ensure success without this relationship.

*Phase 2: Shared Savings*

Once a practice is undergoing the transformation to provide integrated behavioral health and is learning to provide care within a budget by tracking actual costs to budgeted costs, it is positioned to move along the payment continuum to a shared savings model.[73]

- Practices receive a percentage of net savings resulting from their efforts to reduce health spending on total cost of care for a defined population.
- Predetermined quality measures will need to be met prior to participating in any shared savings.
- The care coordination payment continues to play an important role in supporting practices during their transformation. This payment helps practices develop workflows that are not based on patient encounters and allows a practice to evaluate how best to provide quality-driven patient-centered care.  Whether payments increase, decrease, or remain unchanged year to year depends on the proximal capital needs and the ongoing operational demands.
- Shared savings arrangements do not place providers at risk but place an emphasis on quality improvement and cost reduction.
- While shared savings are an important step for many providers and insurers, it is important to continue to move along the continuum. These shared savings arrangements are almost always based in a FFS structure. This phase of the continuum should be thought of as a means to an end, and not an end in itself.

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**Shared Savings Methodology includes the following components:**

- A total cost of care benchmark with risk adjustment for the patient population
- Provider payment incentives to improve care quality and lower total cost of care
- A performance period that tests the change
- An evaluation to determine program cost savings during the performance period compared to the benchmark cost of care and to identify improvements in care quality
- Shared savings policies including savings thresholds, minimum savings rates and population identification as well as methodologies for determining and distributing shared savings
- Determination of any potential excluded costs, for example, an out of area emergency

</div>

*Phase 3:  Shared Savings and Risk/Limited Risk Corridors*

Only after a practice has demonstrated success in tracking and managing to budgets in order to qualify for "upside" risk (i.e., shared savings opportunities), can it be expected to move to a model with the potential for "downside" risk (i.e., shared losses). Many factors influence a practice's capacity to do take on risk, including size, sophistication and ability to withstand a withhold to create a risk pool. Most importantly, practices must be able to understand the expected cost of care for their population and be able to predict whether they can provide that care within the pre-determined budget. The practices or organizations at this level of sophistication will need to perform their own actuarial analyses to determine their financial risk-bearing capacity before entering into any risk-bearing relationships; the Health Extension System can connect them to resources to assist with this critical work. Practices engaged in risk-sharing arrangements will need to understand the cost of care outside the walls of primary care and understand how the care they deliver can help offset the cost of this care.

A "risk corridor" arrangement establishes parameters for when insurers and providers share gains and losses, and the relative proportion each bears.  For such contracts to be successful, quality and cost performance benchmarks must reflect the relative health status of the practice's patients and historical cost trends. It is also critical to distinguish between clinical risk and insurance risk. Effective risk-sharing payment strategies hold the provider accountable for the services provided to patients. This is clinical risk. The payer, meanwhile, is responsible for the risk associated with things over which the provider has no control, such as the health status of the patients who come to them. This is insurance risk.

- Risk corridors must identify the potential for shared savings and risk based on actual versus projected total cost of care. Practices need to understand what the expected cost of care is for the population and be able to predict whether they can provide that care within the pre-determined budget.
- The care coordination payment continues to play an important role in supporting practices during their transformation. Within the limited risk corridor phase, the care coordination is built into the budget.

*Phase 4:  Prospective PMPM Payment for Comprehensive Primary Care with Integrated Behavioral Health with Shared Savings/Risk*

Fully integrated primary care practices with the capacity to provide care based on scopes one and two of the Colorado Framework may be ready and willing to accept a monthly prospective payment for the total care of their patient population within the primary care setting. This transformative payment model allows providers greater flexibility to deliver the best combination of services to their patients and incorporated greater accountability for quality and value-based care

Unlike capitation contracts in the 1990s, this payment is tied to quality measures and incorporates the care coordination payment into the budget determination. Risk adjustment of the patient population will allow for a more accurate prediction of the total cost of care for the population.

Evaluating the total cost of care for a population to determine the basis for a comprehensive primary care annual payment is incredibly complex. Practices and insurers need to evaluate and agree upon the tool utilized for risk adjustment and come to a clear understanding of the services that will and will not be included in the annual payment, including any lab work, specialty care, hospital care, etc.

In this framework, we are not holding providers accountable for costs incurred outside the walls of the primary care practice. As Colorado's health care delivery system moves toward more coordinated systems of care and ACOs, it will become more feasible to transition providers into outcome-based payment arrangements that reflect the total cost of care across the patient care spectrum. That is a goal for Colorado's overall State Health Innovation Plan. The Colorado Framework Model is focused on getting integrated primary care practices to the point of accepting prospective payments that are tied to care provided within their own practice.

- The payment is adjusted based on the health (e.g. co-morbidities and severity of illness) of a patient. Annual budgets are design to cover the overall cost of care provided to a patient within the practice setting regardless of the number of services that are provided.
- The care coordination payment is included in the budget as part of the prospective payment.
- As with the risk-sharing arrangement, the practice or organization must to be able to accept a withhold and support risk corridors.

- To ensure quality, safety, efficiency, and patient-centered care, a proportion of the comprehensive payment will be performance/outcomes-based and paid dependent upon achieving specified outcomes.
- The quality incentive payment will depend on consensus goals and the use of validated process and outcome measures agreed upon by insurers and the providers.
- In order to mitigate potential risk on the part of the provider organization, practices must set up stop loss agreements with insurers to ensure that costs for "outlier" patients (i.e., a patient whose care needs and costs are unexpectedly high as a result of unforeseen factors) are covered.

**Key Components Necessary for Payment Transformation**

Building on the initiatives highlighted in the delivery and payment overview chapter and the work that has already been done are essential pieces of the foundation that will assist practices and insurers move along the payment trajectory. The following components are key domains for continued discussion around payment reform:

- Shared quality measures
  Reducing the reporting burden for providers by streamlining the "universe" of required measures that need to be reported is essential for broad stakeholder buy-in. We propose to start with a common set of required measures which insurers can then add onto from an agreed-upon set of measures that are tied to shared savings or other incentive payments, such as the measures in meaningful use within the state and the universal measures used for CPC.

  Over time, we will migrate to outcome measures rather than just process measures. This must parallel the movement along the payment continuum and the assumption of financial responsibility. As practice's financial responsibilities increasingly rely on outcomes, the measures used must evolve to support the transformation.

  Determining both benchmarks and targets for each measure will require input and consensus from providers and insurers, supported by input from the state's HIEs, data analysts and patient advocates. The goal is to identify core measures of integration, patient satisfaction

and experience of care, and quality improvement. The Evaluation portion of this chapter identifies the specific measures under consideration.

- Risk adjustment

  Risk adjustment is the process of adjusting payments to minimize the provider's exposure to insurance risk. Patients who are more expensive to insure, such as the elderly or those with chronic medical conditions, are considered higher risk than others without such conditions. Adjusting for risk means that providers with sicker patients receive larger budgets to manage care. Appropriate risk adjustment is critical to ensure that providers have adequate resources to care for high-risk patients, and that patients get the care they need.
  With the great variation in the populations served by primary care practices, risk adjustment is necessary for a fair and equitable payment system. Insurers currently use their own, often proprietary methods for risk adjusting populations. Aligning risk adjustment methodologies across insurers is essential to success.

- Data analytics to support quality and cost measurement, including total cost of care evaluation

  A key component of the SIM practice transformation support focuses on the data capacity needs of practices and insurers as they move along the payment continuum. The data necessary for this work is often difficult for practices to access and use, so the practice transformation support services will assist practices with data extraction and analysis. Developing capacity to gather and utilize data for quality and reporting purposes will be crucial to successful implementation of the clinical model as well as movement along the payment continuum. Timely data is essential for monitoring patient panel indicators over time and tracking the cost of care provided to those patients against budgets. Without adequate data access and analysis, providers cannot be held accountable for hitting quality or cost targets.

  During the observation period, practices will be given support to develop this capacity as well as an opportunity to submit baseline data for analysis, as explained in the Practice Transformation section earlier in this chapter and in the Practice Transformation appendix.

Some practices, mostly larger ones, will prefer to do this analysis themselves, but the vast majority will likely rely on prepared reporting packages from some central analytic unit, such as Colorado's APCD.

In addition to risk adjustment of the patient panel, evaluation of total cost of care is also essential to success in outcomes-based payment models. Providers must have regular access to their own claims data and actuarial/technical support to help them analyze the total cost of care for their patients. These data reports must be aggregated across all insurers, rather than simply provided as discrete reports from individual insurers, in order to give providers a complete picture of their patient panels. This approach also reduces the number of errors in the reports due to small sample sizes, which historically are frustrating for providers, because of their sometimes conflicting conclusions. The APCD is already developing aggregated claims reports for providers to support process improvement and transition to new payments; it will be an essential tool for the success of the SHIP and Model Design.

- Health information technology/data exchange

Electronic health records (EHRs) and data registries are essential to creating high-performing primary care practices. The "early adopter" practices for Colorado's Integrated Care model are likely to be those (such as practices participating in the Comprehensive Primary Care Initiative) that have already achieved at least Stage 1 Meaningful Use designation of their use of EHRs and ability to transfer some records. For our integrated care model to be successful—let alone develop the coordinated systems of care envisioned in our larger SHIP—we must accelerate the movement of all providers along the Meaningful Use continuum and expand connectivity and interoperability using our state's HIEs (See the HIT/HIE chapter for more detail).

One of the larger challenges facing an integrated physical and behavioral care system is the interoperability of records in the EHR. The large number of consent requirements, the variation between consent requirements for behavioral health and physical health, and frequently misunderstood HIPAA protections has created an environment where BH records may be kept in a completely separate and incompatible EHR, if at all. A successful integrated

system must be able to have unobstructed communication from provider to provider. CORHIO and QHN are working on the development of universal consent forms and systems that will be able to handle the confidentiality requirements of both BH and physical health records.

- Allowing flexibility

    While we want to move all insurers toward outcomes-based payments, we need to acknowledge the constraints of multi-state insurers that may not be able to shift to outcomes-based payments as quickly as single-state, Colorado-based insurers. We can, however, identify key areas for alignment. For example, providers may be willing to accept being paid in slightly different ways as long as they are being measured using the same benchmarks and targets.

**Evaluation Plan**

The goal of the Colorado Framework is to connect 80% of the people of Colorado to coordinated systems of primary care that give them access to behavioral health care. The evaluation will assess the practices that have achieved integration. The precise definition of an integrated practice has not been finalized, but will be aligned with the Framework and reflect the priorities we have outlined above.

To organize our evaluation, we will apply the Reach Effectiveness Adoption Implementation Maintenance (RE-AIM) framework, a model for the planning, implementation, evaluation, and reporting of translational research as practice developed by Virginia Tech ([http://www.re-aim.org/index.html](http://www.re-aim.org/index.html)). This will help us identify the elements of implementation that are important to the generalizability and sustainability of our model and allow practices to achieve the expected outcomes.

The implementation of the Colorado Framework will highlight associations between components of the Framework and important Triple Aim outcomes of health care. In order to maximize the useable data and information from this effort, we will measure characteristics of participating

practices and organizations, which aspects of integration are used and how reliably, and a broad, balanced set of quality, care, and financial outcomes.

We also need to be mindful of the burden that measure collection and reporting requirements add to primary care practices. We will address the important aspects of evaluation primarily through measures already being collected by these organizations to minimize the reporting burden.[74] There will be few additional requests for data and only as necessary for critical evaluations. Our intent is to make the data from such requests useful both to those who will be collecting the data as well as those who are evaluating the program implementation.

Measuring BH integration

The primary outcome to be measured through the implementation of the Colorado Framework is the percent of primary care practices that are integrated. To report on this outcome, we will develop a definition of integration based on the key elements outlined by the Lexicon and the Colorado Framework. Additional stakeholder feedback will be necessary to determine the best measure of integration and all other measurement criteria. We will evaluate the degree that practices have integrated BHPs and BH services into their practice to determine where they fall on the continuum of integration (i.e. coordinated, co-located, and fully integrated). This measure will be used to group practices and compare practice-level outcomes.

 These options have been considered as potential ways to measure integration:

- Does the practice have an established relationship with a BHP and if so, what type of relationship? (e.g. does the practice refer patients to an offsite BHP (coordinated), is BHP in the same building as the medical clinic but in a separate space (co-located), or the BHP and medical staff share the same space and work as a team (full integration)).
- A certain amount of BHP time per full time primary care provider within the practice.
- A combination of an onsite behavioral health provider with other elements such as shared care plan, shared record, shared population.
- Measure functional elements related to communication and coordination of care such as shared EHR data or meaningful use. (e.g. Do the practice and the BHP have compatible EHR systems? Are the practice and the BHP at the same level of MU?)

Evaluation of the Colorado Framework model

The Colorado Framework model offers the opportunity to learn a great deal about the implementation of behavioral health integration and its impact on health care value. Practices in Colorado will differ in the components of integration they are able to implement and where they are along the continuum of integration. Because of this variation, we will be looking at practice implementation to answer two important questions:

1. What components of integration have been implemented, and with what degree of adherence to or adaptation of the model?
2. How has integration impacted important clinical, financial and experience of care outcomes for targeted populations?

Because this is an evaluation of a real life implementation process in primary care practices, it will be important to consider the characteristics of practices as we evaluate the success of implementation and its impact. We will be watching to see what approaches and programs work and don't work in various settings and practices.

Differences in the components and pace of integration implementation in different practices make it important to continually measure key processes and outcomes, and to use statistical methods to identify significant trends over time. Simple before and after measures or measures that compare across sites have limited ability to capture the complexity of implementation. Currently, there are a limited number of instruments available to measure the degree of integration at the practice level. Therefore, we will measure outcomes and the elements of integration by choosing one or more common conditions or populations in each of the two scopes of integrated care and measure the extent of integrated care delivery to these populations.

Qualitative evaluation methods such as focus groups, progress notes from practice transformation facilitators, and key informant interviews will provide added richness to the quantitative evaluation. This approach mixed methods will also help to better understand observed differences in program adoption, implementation and maintenance.

We will also evaluate the impact of integration on Triple Aim outcomes. Clinical outcome and process measures will be chosen based on the target populations for integrated care and will align with measures being collected for other purposes. Sustaining healthcare across integrated primary care efforts (SHAPE) is a global payment model for primary care and behavioral health integration, based in Grand Junction. The clinical measures being used in the SHAPE project (described in table 5 below) will be the first set of measures we will consider using to assess the impact of BH integration on health outcomes. Measures of patient function will also be included to evaluate the impact of integrated care. The outcome measures chosen will include age appropriate measures for pediatric populations as well as adults. We will make special efforts to align the selected measures with existing measure sets including: Meaningful Use measures, CPC, ACC, Medicaid core measures and the PCMH pilot. As we mentioned earlier in the chapter, we are well aware of the burden that measurement and measure reporting places on primary care physicians. Because of that burden we will make every effort to establish an evaluation plan that works within the existing measure sets and requires little if any extra effort from the providers. We will evaluate health outcomes at multiple levels including the following:

- Individual patient clinical improvements due to integrated behavioral health care (may include self-care)
- Individual functional improvements due to integrated behavioral health care
- Aggregate clinical outcomes for the panel of patients who receive integrated behavioral health care
- Aggregate population health (for populations defined by the practice)

**Table 5: Measures and Methodologies for Evaluation**

| Measure | Methodology |
|---|---|
| Diabetes:<br>Low Density Lipoprotein (LDL) Management and Control<br>NQF #0064 | • Percentage of patients 18-75 with diabetes whose most recent LDL-C level during the measurement year is < 100 mg/dL |
| Hypertension:<br>Controlling high blood pressure | • Percentage of patients 18-75 years of age who had a diagnosis of hypertension and whose blood pressure was adequately controlled (<140/90mm/Hg) during the measurement |

| NQF #0018 | year |
|---|---|
| Major Depressive Disorder:<br>PHQ-9 or equivalent measure to show change | • Percentage of patients aged 12 and older screened for clinical depression on the date of the encounter using an age appropriate standardized depression screening tool AND, if positive, a follow-up plan is documented on the date of the positive<br>• Of the patients with depression, percentage of patients 18-75 with an improved PHQ-9 score |
| Obesity(BMI>=30):<br>Adult BMI Assessment<br><br><br><br>NQF #0421 | • Percentage of patients aged 18 and older with a calculated BMI in the past six months or during the current reporting period documented in the medical record<br>• AND if the most recent BMI is outside of normal parameters, a follow-up plan is documented within the past six months or during the current reporting period |
| Comprehensive diabetes care:<br>HbA1c poorly controlled (>9.0%)<br><br>NQF #0059 | • Percentage of patients 18-75 years of age with diabetes whose most recent HbA1c level during the measurement year is >9.0%<br>• Percentage of diabetics that had a change in A1c |
| General anxiety disorder:<br>GAD-7 or equivalent measure to show change<br><br>SHAPE Minimal Data Set | • Percentage of patients 18-75 screened annually for general anxiety disorder using the GAD-7 or equivalent<br>• AND of those patients w GAD, percentage of patients with an improved GAD-7 score |
| Substance abuse disorder:<br>AUDIT or equivalent measure to show change<br><br><br>SHAPE Minimal Data Set | • Percentage of patients 18-75 screened annually for substance abuse using the AUDIT or equivalent<br>• Of the patients with a substance abuse disorder, percentage of patients with improved AUDIT scores. |
| Tobacco Use Assessment and Cessation Intervention<br><br>NQF #0028 | • Percentage of patients 18-75 who were asked about tobacco use<br>• Percentage of patients who answered "yes" and received cessation intervention |

Furthermore, we will examine financial outcomes related to the Colorado Framework and the associated payment reform. The evaluation will examine the cost of implementing the model, the total cost of care for the population and potential cost savings for integrated practices and the state. While costs will likely rise at the onset of the new model, we anticipate that the cost savings from integration will save the Colorado health care system significant money over time (See the Chapter 9 for the actuarial analysis of the Colorado Framework). The evaluation plan will also include quality of care measures that will assess patient experience of care and provider satisfaction measures. The measures outlined below follow the most recent guidance of the full and complete use of the RE-AIM model. This list of measures is not fixed or exhaustive but rather an example of what the evaluation plan measure set might look like.

1. Measures at the patient level (denominator for all measures would be members of target population)
    a. Reach
        i. Percent and characteristics (or representativeness) of patients who are offered integrated services
        ii. Percent and characteristics (or representativeness) of patients who actually receive integrated services
        iii. Percent and characteristics (or representativeness) of patients with a shared care plan that includes physical and behavioral aspects of care
        iv. Percent and characteristics (or representativeness) of patients with evidence of communication between physical and behavioral health clinicians
        v. Percent and characteristics (or representativeness) of patients who receive specified services that might include screening, treatment initiation, periodic follow up and treatment adjustment as needed.
    b. Effectiveness
        i. Percent and characteristics (or representativeness) of patients who achieve both BH and medical clinical targets
        ii. Percent and characteristics (or representativeness) of patients who report high level of satisfaction with integrated services

      iii.  Percent and characteristics (or representativeness) of patients who report improved functional status and/or quality of life

      iv.  Percent and characteristics (or representativeness) of patients who have decrease or no increase in overall health care costs over time in integrated practices

2. Measures at the practice level

   a.  Adoption

      i.  Percent and characteristics (or representativeness) of practices that have onsite behavioral health clinician, type of clinician, FTE/FTE of primary care provider or /1000 patients

      ii.  Percent and characteristics (or representativeness) of providers that use integrated services ('use' has to be defined)

   b.  Implementation

      i.  Percent of patients who receive intended services

      ii.  Description of modifications made to model during implementation

      iii.  Cost of implementation (broadly captured – time, money, other resources)

   c.  Maintenance

      i.  Percent of patients who maintain clinical improvement over time or who achieve or avoid a longer term outcome

      ii.  Percent of practices that continue to have integrated services over time

      iii.  Satisfaction of participating providers

      iv.  Description of modifications to made to model to address sustainability

      v.  Description of business model for sustainability

**Table 6: Measures Matrix – RE-AIM and CO Framework**

| COMPONENT | Reach | Effectiveness | Adoption | Implementation | Maintenance |
|---|---|---|---|---|---|
| Integrated clinician | X | X | X | X | X |
| Shared panel | | | X | X | X |
| Shared record | X | | X | X | X |
| Shared workflows | X | X | X | X | X |
| Patient ID | X | | X | X | X |

| | | | | | |
|---|---|---|---|---|---|
| Patient engagement | X | X | X | X | X |
| Follow up | X | X | X | X | X |
| Clinical Outcomes | | X | | | X |
| Satisfaction Outcomes | | X | | | X |
| Financial Outcomes | | X | | | X |

**Outstanding Questions**

- Mental health care and substance abuse disorder treatment are not fully integrated in the state. There are regulatory and privacy issues that will have to be addressed and resolved in order to truly integrate behavioral, mental and substance abuse services into a single delivery point.

- There is significant stigma associated with mental health conditions and substance abuse disorders. Substance abuse also has criminal justice complications. We will need to have a clear approach to addressing and overcoming this stigma for primary care integration to be successful.

# CHAPTER 4: COLORADO'S HEALTH CARE WORKFORCE: BUILDING THE CAPACITY TO SUPPORT OUR GOALS

## Executive Summary

Colorado must build a health care workforce with the capacity, training, efficiency and effectiveness to support the Colorado Framework goal to provide 80 percent of Coloradans with access to comprehensive primary care that integrates behavioral health by 2019.

Our strategy to develop the workforce reach this goal is to create a statewide roadmap that recognizes the wide range of issues, including training, licensure, scope of practice, recruitment and retention. The roadmap will recognize the need for local decision-making and innovation combined with statewide support, financial sustainability, a shared vision and an ongoing culture of collaboration to execute the Colorado Model for integrated primary care and behavioral health.

The strategic workforce roadmap is framed around five critical areas:

- Building on Colorado's base of information and data to aid decision-making.
- Creating a statewide systems-level plan of workforce training.
- Strengthening Colorado's health care workforce pipeline.
- Addressing policy barriers related to workforce innovation and workplace satisfaction.
- Leveraging local technology, innovation and leadership.

Colorado faces challenges in transforming its health care workforce. While the overall size of the workforce is appropriate by many measures, rural and frontier regions face ongoing shortages of both primary care and behavioral health providers. In addition, Colorado has a deficit of providers in specific behavioral health specialty areas.

Opportunities abound, however, to make a successful transformation. Colorado has a strong and committed academic system, a culture of collaboration on innovative health care solutions and a provider and workforce community ready and willing to do the hard work. All of the pieces are in place to create the health care workforce of the future in Colorado.

**Current Status of Colorado's Health Care Workforce**

Coloradans receive health care via 100 hospitals and nursing facilities, from more than 11,000 physicians, through 54 rural health clinics, 43 community-funded safety net clinics, and 17 federally-qualified health centers.

<u>Primary care</u>

Assessing the status of Colorado's primary care capacity reveals a mixed set of trends. Based on several statewide statistics, Colorado's primary care workforce could be considered appropriate for our population and at least on par, if not more robust, than the nation as a whole. However, the macro view masks significant variations across the state. Many rural, frontier and underserved urban regions in Colorado experience entrenched provider shortages. Further, the ability to readily access needed health care varies by region as well as by insurance type.

Although Colorado has 3,400 primary care physicians practicing in Colorado, these doctors are concentrated in urban areas along the front range of the Rocky Mountains.  Additionally, roughly 3,200 nurse practitioners and 1,000 physician assistants work in primary care settings.  Colorado had 229 active physicians for each 100,000 residents in 2010, slightly above the national rate of 220 physicians per 100,000 people.[75] With 92.3 active primary care physicians per 100,000 people, Colorado's rate was again slightly higher than the national rate of 90.5 per 100,000.[76] In fact, Colorado saw a small net increase in the numbers of practicing primary care physicians between 2007 and 2011.

In addition, by a number of measures, Coloradans have good access to health care. More than four of five Colorado residents (81.2 percent) have a personal doctor or health care provider, nearly 10 percentage points higher than the national rate of 71.7 percent.[75] And 85.3 percent of Coloradans say they can get medical care when needed - again, higher than the national rate.[77]

Finally, Colorado has a robust safety net serving our vulnerable populations (see Figure 15). Nine federally-qualified health center (FQHC) clinic sites are available for each 100,000 residents with incomes at or below 200 percent of the federal poverty level (FPL).[75] This is better than the national rate of six clinics for each 100,000 low-income people. Colorado FQHCs serve

more than one of four residents (25.7 percent) in this income bracket compared to about one of six (15.5 percent) nationally.

**Figure 16: Safety Net Clinics, August 2012**

Safety Net Clinics, Colorado, August 2012

- Community health center
- Community mental health center
- Community-based low-income dental clinic
- Community-funded safety net clinic
- Rural health clinic
- Family practice residency program
- Hospital emergency department
- School-based health center
- Local public health department/ public nursing service

Data source information
Safety net provider site addresses were collected and geocoded by the Colorado Health Institute, current as of August 17, 2012.

Due to clinic overlap, locations of points were spatially adjusted.

colorado health
INSTITUTE
Informing Policy. Advancing Health.

Map created August 17, 2012

These positive indicators mask some worrisome trends. The percentage of physicians delivering primary care declined to 28.7 percent in 2011 from 30.6 percent in 2007. And more than a third (35 percent) of Colorado's rural physicians are 55 or older, with plans to retire in the coming decade.[78] Additionally, over 35 percent of Colorado nurse practitioners are over 55, and Colorado has well-documented shortages of many types of nurses.[79]  Perhaps most concerning is our lack of advanced training nurse faculty able to train the next generation of Colorado nurses.  While these statewide trends mirror developments around the country, we must consider their implications for our primary care-based model of care.

There are regional workforce variations across Colorado that significantly impact care. Population-to-provider ratios range from 9,119 residents for each primary care provider in a county near Denver to just 556 residents per primary care physician in a rural county in western Colorado.[80] Regional variations are even more evident when comparing the population-to-full time equivalent (FTE) primary care provider ratio among the state's 21 Health Statistics Regions (see Figure 16) A lower ratio (fewer people per full-time primary care provider) suggests greater availability of primary care, while a higher ratio (more people per full-time primary care provider) suggests a more limited care capacity. Regions shown on the map with the highest ratios - and thus the least primary care capacity – should be a particular focus in workforce development efforts.

**Figure 17: Ratio of Primary Care Physician Full Time Equivalents (FTE) to Population by Colorado Health Statistics Region, 2013**
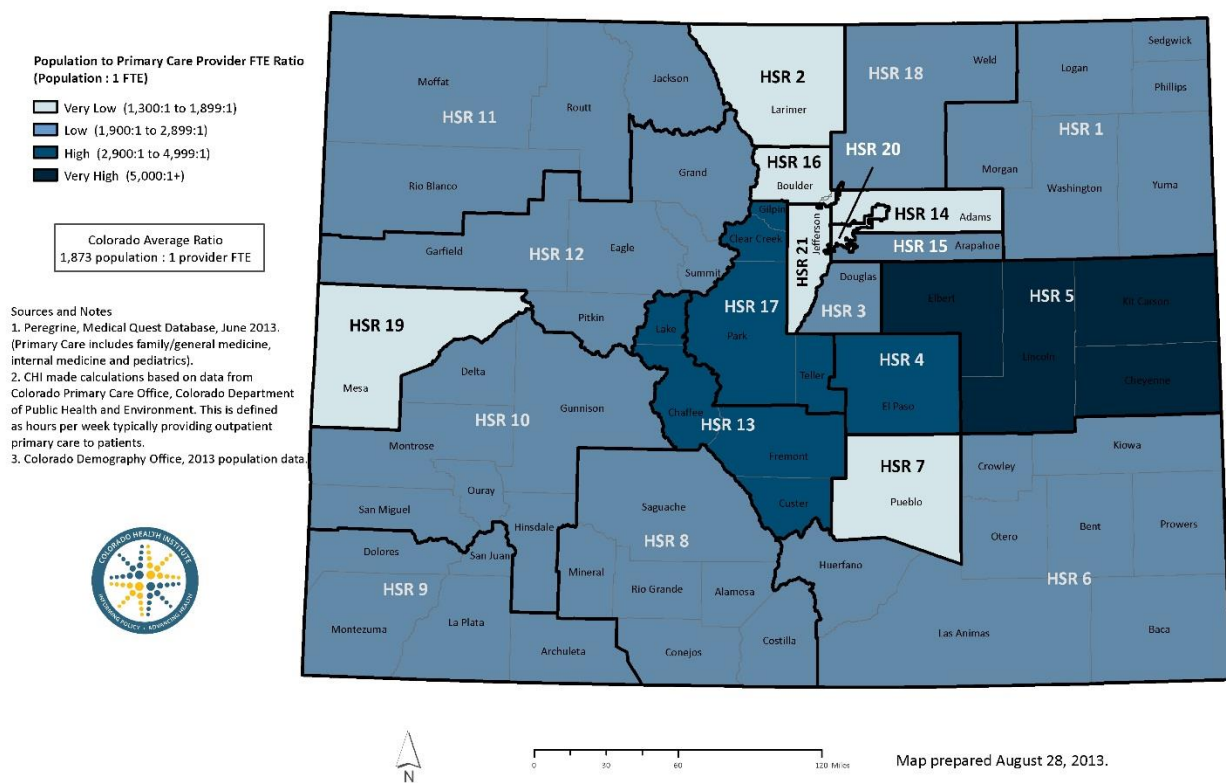


Meanwhile, of Colorado's 64 counties, 56 are either fully or partially designated as primary care health provider shortage areas (HPSAs).[81] Although most of Colorado's population lives in

metropolitan areas, these health professional shortages are cause for concern. Colorado's rural areas are home to one sixth of the state's population, but just one tenth of the state's physicians.[78]

Another measure of workforce adequacy is whether Coloradans have available care when it is needed. Nine of 10 insured Coloradans, no matter whether they have public or private insurance, indicate they have a usual source of care.[77] But among uninsured Coloradans, the rate falls to about 57 percent.

Of course, health coverage does not always equal access to health care. This problem is particularly acute for Medicaid clients. The 2013 Colorado Health Access Survey found that approximately 24.6 percent of Medicaid enrollees—more than 156,000 Coloradans—were unable to get an appointment as soon as one was needed, compared to 14.3 percent of those who are commercially insured (see Table 7). In addition, 23.3 percent of Medicaid enrollees reported being told by a doctor's office or clinic they did not accept their insurance – almost five times as often as the commercially insured (5.5 percent). These problems are common to Medicaid programs nationwide and are not easy to solve. However, we must acknowledge them and seek solutions in order to achieve our goals.

**Table 7: Barriers to Accessing Care, Colorado, 2013[19]**

|  | Commercially Insured | Medicaid | Uninsured |
|---|---|---|---|
| Unable to get an appointment at doctor's office or clinic as soon as needed | 14.3% | 24.6% | 17.5% |
| Doctor's office or clinic wouldn't accept your health insurance | 5.5% | 23.3% | 14.7% |
| Doctor's office or clinic weren't accepting new patients | 6.0% | 20.7% | 13.7% |

Behavioral health

A 2011 study of Colorado's behavioral health workforce found that while Colorado has a relatively good—and increasing—supply of mental health practitioners and certified addiction counselors, there are shortages of psychiatrists and other prescribers as well as specialists in the care of children, seniors, rural residents, minorities and non-English speakers.[14] The number of

behavioral health providers per 100,000 residents climbed from 231 to 281 between 2007 and 2011, a per-capita increase of 22.4 percent (see Table 8). Specifically, the number of mental health and Substance Abuse Disorder (SUD) providers increased by 35 percent, licensed professional counselors grew by 30.1 percent, and the number of licensed addictions counselors or certified addictions counselors grew by 29.4 percent.

While the total number of psychiatrists grew, their numbers per capita declined by 4 percent. The researchers also found a general consensus that the need for certified peer-support specialists and family advocates far outstrips the available supply.

**Table 8: Changes in the Number of Behavioral Health Providers, Relative to the Colorado Population, 2003 to 2010[14]**

| Types of Providers | 2003 | | 2010 | | Change in Number | Change in Per Capita |
|---|---|---|---|---|---|---|
| | Number | per 100,000 | Number | per 100,000 | | |
| Psychiatrist | 713 | 16 | 753 | 15 | 5.60% | -4.00% |
| Licensed Psychologist | 1,812 | 40 | 2,056 | 41 | 13.50% | 3.20% |
| Licensed Clinical Social Worker | 2,656 | 58 | 3,849 | 77 | 44.90% | 32.00% |
| Licensed Marriage & Family Therapist | 476 | 10 | 554 | 11 | 16.40% | 5.90% |
| Licensed Professional Counselor | 2,704 | 59 | 3,868 | 77 | 43.00% | 30.10% |
| Licensed/Certified Addiction Counselor | 2,205 | 48 | 3,137 | 62 | 42.30% | 29.40% |
| **TOTAL** | **10,566** | **231** | **14,217** | **283** | **34.60%** | **22.40%** |

The same study shows that the regional differentiation in Colorado's primary care workforce capacity extends to behavioral health professionals. The ratio of population to mental health providers ranges from a low of 556:1 in Ouray County to a high of 25,530:1 in Montezuma County.[80] The average state population-to-provider ratio is 1,807:1. The regional differences are especially pronounced for mental health providers with higher education and training. The population centers of Denver and Colorado Springs are home to a disproportionate number of these professionals, including 82 percent of the state's practicing psychiatrists, 86 percent of child psychiatrists, nearly all psychiatrists specializing in SUD treatment (95 percent), and all of

the geriatrics specialists. To put these numbers in context, these two metropolitan areas represent 58 percent of the Colorado population.[82,83]

In light of these discrepancies, it is not surprising that 50 of Colorado's 64 counties are either fully or partially designated as Mental Health Professional Shortage Areas (MHPSAs), indicating a shortage of psychiatrists, the most highly trained and expensive behavioral health professionals.[84] To expand integrated care in Colorado, the workforce will need to be broader than doctoral-level psychiatrists and psychologists.

There are a number of ways to measure whether Coloradans have access to behavioral health services when they need them. Using the National Institutes of Health formula that about one of four Americans have a mental health diagnosis, we can estimate that roughly 1.3 million of Colorado's 2013 population of approximately 5.2 million would benefit from mental health services.[83] When substance use disorders are also considered, about three of 10 Coloradans most likely need some level of treatment – or more than 1.5 million people, according to the report.[14]

**Challenges**

Both the primary care and behavioral health workforces in Colorado present challenges to achieving Colorado's health care innovation goal. The strategies outlined later in this chapter are designed to address these challenges.

- The workforce in place today, even in densely populated areas, may not be sufficient in the future. Based on the trends discussed in the previous section, it may be more challenging to add primary care providers than other health care workers.
- While Colorado has fairly robust capacity in primary care and behavioral health in its most populous urban regions, the balance of the state often suffers from shortages, long wait times and prohibitive commutes for care. These issues must be addressed in order to achieve health equity and to support integrated care models statewide. This is most likely to happen through creative innovations in the delivery system.
- Many behavioral health providers are not trained in substance use treatment. If primary care practices are to integrate diagnosis and treatment for both substance use disorders and mental

health, one BHP may not have both skill sets and licensures. Additional training may be necessary to make PHPs ready to operate in an integrated environment.

- Children require specialized mental health interventions, but our behavioral health workforce lacks sufficient numbers of professionals with this expertise. A survey of school-based health centers conducted by the Colorado Health Institute in 2013 found that we need to expand and improve behavioral health services in Colorado schools.[85] Key informants identified a shortage of trained behavioral health workforce, a lack of bilingual behavioral health providers, a demand for services that is exceeding capacity and a lack of administrative staff.

- Transforming today's primary care and behavioral health workforce into a workforce adequate for Colorado's Framework model requires fundamental change. Integrated care requires a different set of skills, knowledge and attitudes than the skill set required to work in traditional models. Most primary and behavioral health providers are not trained to provide integrated, team-based care and may not have the correct competencies. Providers will need training and ongoing support to successfully work in a system of integrated care that truly addresses the patient's needs.

- Training tomorrow's workforce to operate successfully in integrated, team-based care settings requires further attention to the education, training and residency approaches in Colorado. While progress is underway, more needs to be one. For example, the Department of Family Medicine at the University of Colorado School of Medicine (CUSOM) has a strong integrated care focus in its training and clinical programs (see Opportunities and Innovations below), though that agenda is not necessarily shared by other departments within the school or elsewhere. While all family medicine residencies in Colorado are required to maintain a behavioral scientist on staff, there is no requirement that they teach or practice integrated care. Similarly, behavioral health training programs could expand their own focus on teaching and practicing integrated care. There are efforts underway to bridge disciplines in pre-residency curriculum, such as the Interdisciplinary Rural Training and Service Program (IRTS) program at the School of Medicine, though behavioral health is not yet fully integrated into these efforts.

**Opportunities and Innovations**

Colorado has a number of existing opportunities to build the best possible health care workforce. With a history of engaging in innovation both inside and outside of the formal health care sector, there is a great deal of expertise, energy and support available to implement new ideas.

- Colorado is continually assessing workforce concerns and developing projects to enhance the provider pipeline. More than 50 workforce initiatives were underway as of 2010, with programmatic focuses ranging from undergraduates to grade-schoolers.[86] For example, the Colorado Area Health Education Center (AHEC) offers a statewide undergraduate summer program designed to introduce students to health profession careers as well as health career exploration programs for kindergarten through eighth-graders. Additional work focuses on consultation, such as telemedicine and health extension services.

- The state has taken steps to provide incentives for building Colorado's workforce in underserved areas. In 2005, CUSOM established a "rural track" to increase the number of physicians practicing in rural Colorado. The state legislature established the Colorado Health Service Corps in 2010 to provide new incentives for health care professionals to practice in underserved rural and urban communities. The program provides financial incentives to eligible health care professionals who provide primary care services in medically underserved areas. In 2013, the legislature increased funding for the Commission on Family Medicine to support residencies in rural and underserved areas of the State, though the opportunities are limited by several restrictions on potential candidates

- CUSOM is working to develop alternatives to on-the-ground specialists across the state using extensive audio and video links. Using the model created by Project ECHO at the University of New Mexico, researchers are developing a long distance training and consultation program that will allow specialists in the urban areas of the state to assist patients and practitioners in rural parts of the state without the need for extensive travel or expense.

- Colorado's legislature has expanded, within limits, the state's ability to collect information about certain health care professionals' specialties, practice location and other pertinent information. HB 12-1052, passed in 2012, authorizes the state's Division of Registrations and Office of Primary Care to request such data from primary care physicians, advanced practice nurses and pharmacists when they renew their licenses. The legislation's goal is to

create a better picture of workforce distribution for critical types of providers, particularly in rural areas.

- Colorado has a robust academic training environment, with two medical schools, a school of public health, two physician assistant programs, seven doctoral psychology programs and four schools offering Master of Social Work degrees. There are numerous additional programs in nursing and other professions that add to the capacity of the primary care team across the state.

- Rocky Vista University College of Osteopathic Medicine is graduating over 100 Doctors of Osteopathy each year. These DOs frequently practice in primary care and have been trained with the principles of whole person care, making them excellent additions to the integrated care workforce.

- Beth-El College of Nursing & Health Sciences in Colorado Springs is working with community colleges to encourage non-traditional educational tracks in order to increase the number of trained, on the ground nurses.

- Colorado has a strong foundation of integrated care delivery and experience in helping clinicians transition to these models. Integrated care models being tested statewide in both primary care and behavioral health settings (see the Payment and Delivery Design chapter) serve as a starting point for transformation and offer valuable lessons for workforce development. In addition, we have deployed practice facilitators and coaches through multiple grant-supported projects and are in the process of forming a Health Extension System (see the Practice Transformation appendix) to connect practices with practice transformation support.

- CUSOM's Dept. of Family Medicine focuses on efforts to prepare the health professionals of tomorrow. Starting from a philosophy that "we must not simply prepare Family Physicians for practice, but must prepare the primary care workforce," the Department is taking many steps to train students and residents in integrated care, including:[87]
    - Adding a half-time psychologist to teach all medical students during their third-year ambulatory/rural clerkship about the need to integrate behavioral healthcare into the PCMH, and giving them the skills to help their preceptor sites move in this direction.
    - Requiring all family medicine residencies to have a behavioral health professional on staff.

- Hosting a primary care psychology internship and addiction medicine fellowship, both of which operate in an integrated fashion.
- Making joint hires with the University's Depression Center, to take advantage of the resources of both departments.

We can start to develop Colorado's workforce pipeline now. While physicians, psychiatrists and psychologists require at least a decade to train, much of the primary care and behavioral health workforce could be trained in three to four years, enabling us to expand our workforce relatively quickly.

Colorado is an attractive place to live, contributing to successful recruitment efforts. The scenic amenities, a commitment to healthy communities, an active lifestyle and a supportive health care environment are strong recruitment tools for the health care workforce. And people who grow up in Colorado often want to find opportunities to stay.

**Goal for Colorado's Health Care Workforce**

Build a workforce that is sufficient in capacity, training, efficiency and effectiveness to support the Colorado Framework goal of providing 80 percent of all Coloradans with access to comprehensive primary care that integrates physical and behavioral health by 2019.

**Strategies for Achieving Our Goal**

Reaching this goal will require us to transform Colorado's primary care and behavioral health workforces, build new competencies, change workplace interactions, add behavioral health professionals, and increase capacity in underserved regions of the state. New payment models that provide incentives for providers to collaborate and integrate their services will be essential for the success of this process.

A group of nearly 50 expert stakeholders representing behavioral and physical health providers, state government, practice transition specialists, patients and advocates, academia and philanthropic organizations met to focus on a number of issues surrounding the integration of

care.[88-90] In particular, the group focused on workforce innovation, and helped to arrive at Colorado's strategy:

- Increase Colorado's base of workforce data to aid decision-making. We have a good idea of the number and distribution of health care professionals in our state. But we need additional details to refine our understanding of the gaps that remain to be filled to successfully implement our integrated care model. Key elements include:
  - o Gathering data on the readiness level of Colorado's practicing behavioral health workforce to be trained to work in an integrated primary care setting. This could be accomplished by a survey fielded through statewide professional membership organizations. These data would inform the scope and level of training efforts undertaken across the state, and help to target efforts.
  - o Developing a research-based assessment of the behavioral health workforce based on appropriate panel size-to-provider models. For example, the Department of Veteran's Affairs has worked with integrated behavioral and primary care models extensively. It recommends one social worker for approximately every five primary care panels of 1,200 patients.[91] This ratio of one behavioral health provider for every four or five primary care providers is echoed elsewhere, both nationally and in Colorado (e.g., Aspen Pointe in Colorado Springs). Taking a slightly different tack, Salud Family Health Centers (a federally-qualified health center in metro Denver) has developed a pyramid staffing model to provide integrated care, with bachelor's degree-level case managers creating the foundation, a smaller number of master's degree-level mental health professionals, and an even smaller number of doctoral degree-level mental health professionals (see call out box for details). Models such as these will help to advance Colorado's workforce planning, including licensure, scope of practice and efficiently utilizing higher-paid behavioral health staff based on practice populations.
  - o Assessing the workforce needed for both clinical needs and non-clinical needs, such as IT, administration and billing, discharge planning and health navigator services that may be needed to support the system.

- Concentrating workforce needs assessments on the Interstate 25 corridor between Fort Collins and Colorado Springs in order to reach the most populous areas, which will support the goal of reaching 80 percent of the population with integrated care, while developing strategies that address needs in less populated areas.

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**Salud Family Health Centers** has more than 15 years of experience providing integrating care to its clients. Dr. Tillman Farley, Salud's medical services director, is recognized nationally as an expert in providing integrated care.

Salud currently has 20 behavioral health providers and approximately 60 medical providers across its system of nine clinics and a mobile care unit. This translates to a ratio of one behavioral health provider for each three primary care providers.

Salud is rethinking its original concept of the role of behavioral health providers, moving from a singular definition for any level of training to a more stratified definition, with providers with different levels of training providing different services. The aim will be to have each staff person work to the top of their ability and license.

- Case managers would coordinate care, communicate with other agencies and help patients meet their basic needs
- Master's degree-level professionals would work with patients who have less complicated care needs or more straightforward interventions, as well as complete psychosocial and mental health screenings
- Doctoral-level professionals would work with patients with complicated needs to complete diagnostic assessments, psychological and cognitive assessments, and provide interventions for patients who are not responding well with other providers

These providers would also oversee all of the behavioral health staff in the clinic, and help with evaluations, research and quality improvement.

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- <u>Strengthen Colorado's health care workforce pipeline</u>**.** Recruitment and retention will continue to be a major focus, as most of Colorado's counties remain Health Professional Shortage Areas for both primary care and behavioral health.
  - We must continually evaluate our recruitment and retention efforts, adjusting them when necessary and using data to target our resources. At the same time, we should seek out additional methods for effectively serving rural and frontier populations, building on current recruitment and retention efforts previously highlighted.
  - As we pursue these efforts, it will be critical to focus on master degree level licensed providers, such as licensed clinical social workers and licensed professional

counselors. These types of behavioral health professionals will be essential to successfully integrate behavioral health into primary care. They will also provide the majority of the skills necessary to identify, assess and treat the most common behavioral health needs in a primary care setting. Table 8 at the end of this chapter illustrates the competencies that will be required for behavioral health providers to work in an integrated care environment. This information will be useful in planning for the most effective and yet cost-efficient teams. Doctoral level psychologists and psychiatrists will need to remain engaged in specialized mental health practices as well as join primary care teams in clinics with significant numbers of patients displaying both acute physical and mental diagnoses.

- o BHPs in primary care settings may not have the qualifications to treat both behavioral health disorders and substance abuse disorders. While those with more severe disorders will continue to be referred out of the practice to specialty care, many patients will need levels of care that are easily treated within a primary care practices. We can use existing community behavioral health centers and the connections forged through the HES to cross train BHPs or provide access to the right qualifications to help ensure that the appropriate care is available from the appropriate practitioner.

- Provide ongoing leadership by supporting practice transformation with leadership at the state level as well as assistance for individual practices by:
  - o Developing a plan for change management before, during and after the innovation roll-out that will engage health administrators, providers and educators.
  - o Once it is developed, using the HES to engage whole communities and connect practices and providers with regional and statewide resources and guidance.
  - o Launching a state-wide "Get One" integrated care campaign to educate, coach and share tools for incorporating at least one behavioral health specialist in primary care practices.
  - o Providing team training and cultural transformation coaches (See Practice Transformation appendix).

- Address policy barriers related to workforce innovation. Current licensing, credentialing, record keeping, disclosure requirements and other standards pose challenges to collaboration among specialties and increase administrative cost.

- A comprehensive review of current Colorado health professional practice acts, statutes regarding provider credentialing and related issues will help to clarify the changes necessary.
- Review current statutory and regulatory law as is necessary to address barriers, workplace administrative inefficiencies and innovation.

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**Rocky Mountain Health Plans Community Health Worker Integration**

Rocky Mountain Health Plans (RMHP) is partnering with primary care physicians, community mental health centers and Quality Health Network to create a framework for the training, deployment and integration of a new workforce to accelerate the development of the primary care and behavioral health integrated model. This framework is centered on the creation of an interdisciplinary Health Engagement Team (HET) that will help address determinants of health that are typically outside the scope of a traditional primary care practice. This extended scope will support patient activation, shared decision-making and self-management processes across the community.

The increased workforce demands of this health model require the development of new approaches to the care team. The HET will be able to:

- Extend primary care case management and behavioral health resources beyond the practice walls into the community
- Efficiently address complex determinants of patient health that are due to behavior and social circumstances that are outside the scope of primary care and clinical operations
- Improve access to behavioral health services and improve communications about patient status, follow-up and ongoing care management
- Expand community and peer-based interventions that are crucial to the achieving a  true community of care that can support patient activation and appropriate use of medical resources.

In this framework, Community Health Workers (CHW) are a critical part of the care team, responsible for extending primary care interventions and addressing social and behavioral health determinants in homes, community, peer group and other non-clinical settings.

RMHP's work on the HET aligns with efforts through the Colorado Trust. In 2012, the Trust convened a Health Professions Workforce Collaborative to develop competencies and certification requirements for CHWs. The Trust and RMHP are working with partners across the state on a coordinated approach to standardizing CHW training and integrating the new workers into the care team to support the evolution of health care delivery in the state.

- Leverage local technology, innovation and leadership. For example, many Colorado providers and communities are expanding their use of patient navigators and community health workers. It is important that we have a standardized curriculum and approach to certification and credentialing of these important members of the workforce.

**Evaluation Plan**

The ability to meet Colorado's workforce needs for today and tomorrow depends not only on executing the plan in this chapter but on the ability to measure our progress in real time. As we develop the roadmap moving forward, we will set specific milestones that cover the following areas:

- Are we accurately measuring our current baseline? Colorado will have new data sources (e.g., the licensure database being compiled by the State) that will allow us to better understand the number and location of primary care providers in Colorado. This will allow us to measure our progress in terms of providing clinical support to all areas of the state, including rural, frontier and underserved urban areas.
- Are we anticipating future need? As significant as it is to understand today's need, planning for future need is even more important. The impact of the Affordable Care Act on the numbers of insured Coloradans combined with new, integrated models of care will change the numbers and composition of primary care teams. We will model and project future need and base our analysis on them. Our goal will be based on that model and we will in turn quantify our progress toward that goal.

Meanwhile, stakeholder involvement will continue to help guide and shape our progress. For example, a stakeholder group like the one gathered for the innovation model work could provide an annual report on our progress toward having enough trained clinicians to make our vision a reality.

The health care provider workgroup had several recommendations around evaluation, ranging from overall evaluation of the project to tracking how many primary care practices offer integrated behavioral health care to the adequacy of the size of the workforce. Recommendations from the group included:

- Design and implement evaluation systems in order to assess whether behavioral health integration increases efficiency, produces better health outcomes, and lowers costs. Evaluation should be an ongoing process.
- Outline the data necessary for integrated care program evaluation and assess if or how the data can be captured from existing sources.

**Table 9: Integrated Care: Examples of Team Functions and Team Members**

| Functional Area | Team Function | Personnel Involved |
|---|---|---|
| Triage/Screening for Mental Health/Substance Abuse Conditions | <ul><li>Identify patients with mental health/substance abuse conditions and associated adverse health behaviors using methods such as screening tools, medical record/history</li><li>Determine appropriate level of behavioral health care</li><li>Connect patients with appropriate treatment resources and engage them in integrated services</li><li>Diagnose mental health/substance abuse conditions</li><li>Identify complex patients who need specialty services</li></ul> | Non-medical staff, medical assistant, nurse, behavioral health provider. Only behavioral health providers, psychiatrists, trained primary care providers may diagnose mental health/substance abuse conditions. Substance abuse counselors may diagnose substance abuse SA conditions.<br><br>Non-medical staff may administer screening tool. But behavioral health provider, psychiatrist or primary care provider must determine appropriate level of care. |
| Triage/Screening For Behavioral Health Factors In Chronic Illnesses And Other Medical Conditions, Such As Headaches, Stomach Aches, Pain, Fatigue. | <ul><li>Identify patients with chronic illnesses that have contributing behavioral health factors using screening tools, medical history</li><li>Determine appropriate level of behavioral health care</li><li>Connect patients with appropriate treatment resources and engage them in integrated services</li><li>Diagnose behavioral health conditions</li><li>Identify complex patients who</li></ul> | Non-medical staff, medical assistant, nurse, behavioral health provider. Only behavioral health providers, psychiatrists, trained primary care providers may diagnose mental health/substance abuse conditions. Substance abuse counselors may diagnose substance abuse SA conditions. |

| | | need specialty services | Non-medical staff may administer screening tool. But behavioral health provider, psychiatrist or primary care provider must determine appropriate level of care. Additional training in behavioral medicine may be necessary to care for this population. |
|---|---|
| Complexity Assessment | • Identify patients with complex behavioral health needs. Determine if care is appropriate in primary care setting or if patient needs to be referred for specialty care<br>• Identify range of psychosocial barriers to care<br>• Provide additional support to patients with complex needs<br>• Link patients to appropriate specialty care | Behavioral health provider, psychiatrist or primary care provider. Non-medical staff may assist with linking patients to specialty services. Care manager may provide support to patients with complex needs.<br><br>Additional training in behavioral medicine likely needed to assess patients with complex behavioral health and chronic illness conditions. |
| Behavioral Activation/Self-Management | • Improve patient-centered outcomes<br>• Increase activity and prevent avoidance behaviors<br>• Help patient take part in positive activities to change behavior<br>• Promote health behavior change, wellness activities, prevention<br>• Encourage patient engagement in care | Clinic nurse, behavioral health provider, care coordinator, trained medical assistant, all supported by treating practitioners. |

| Psychological Support | <ul><li>Increase patient's ability to adhere to treatment</li><li>Increase healthy behaviors</li><li>Decrease impairment</li><li>Teach coping skills, problem solving</li></ul> | Behavioral health providers, substance abuse counselors, psychiatric nurses, trained medical nurses, treating primary care providers, psychiatrists. |
|---|---|---|
| Brief, Focused Mental Health/Substance Abuse Interventions | <ul><li>Perform mental health functional assessment</li><li>Apply primary care interventions to reduce symptoms and impairment, reduce disability, augment performance or function</li></ul> | Behavioral health provider, substance abuse counselor for substance abuse interventions, primary care providers and psychiatrists with additional training. |
| Psychopharmacology Assessments/Treatment | <ul><li>Reduce symptoms, reduce disability, augment performance or function</li></ul> | Psychiatrists, primary care and specialty medical physicians, nurse practitioners, physician assistants with supervision |
| Complex Behavioral Health Condition Medical Interventions | <ul><li>Reduce symptoms and impairment; reduce disability, augment performance or function</li><li>Treatment resistant—non-responders to straightforward care</li><li>Acute interventions and referrals for severe or psychotic—Serious and Persistent Mental Illness, psychotic/suicidal depression, severe eating disorders, chronic disease</li></ul> | Behavioral health providers, psychiatrists. Psychiatric nurse practitioners, psychiatric clinical nurse specialists and psychiatric physician assistants with psychiatrist or behavioral health provider supervision. |
| Follow-Up Care | <ul><li>Track patient symptoms and/or functional status</li><li>Document clinical improvement, health stabilization, impairment reduction or control</li></ul> | All treating practitioners with assistance by support staff.<br><br>Add integrated care managers for the most ill or complicated patients. |

| | | |
|---|---|---|
| Measure Outcomes to Adjust Care | • Document improvement in clinical, functional, fiscal, quality of life outcomes<br>• Change assistance or intervention when outcomes not achieved, especially in high cost-high need patients | All practitioners and non-medical personnel; changing care generally initiated by medical or behavioral health professionals |
| Social Support | • Intervene at family level<br>• Assist with access to community resources<br>• Assist with medically-related financial issues | Nurses, care coordinators, community health workers, promotoras, health educators, behavioral health professionals, substance abuse counselors |
| Crisis Intervention | • Perform crisis assessment or intervention<br>• Place patients on mental health hold when necessary | Behavioral health provider, psychiatrist or physician |

## CHAPTER 5: HEALTH INFORMATION TECHNOLOGY AND HEALTH INFORMATION EXCHANGE

**Executive Summary**

Colorado believes that HIT and HIE implementation is not an end in itself, but rather a means to transform the state's health care system.[92] Health system integration can only be achieved when providers share critical patient information, such as medical history and medication lists, to better coordinate patient care. This integration, including the integration of behavioral health into primary care, will require a robust and fully compatible HIE to support the data and outcomes necessary for the success of the new integrated system of care.

Key HIT challenges include:

- Differing and incompatible electronic health record (EHR) systems among hospital systems and practices, and between state agencies;
- Patients access to their own medical records;
- Different EHRs, different consent requirements and data capture ability for physical and behavioral health care settings; and
- Misperceptions about the limits of information-sharing posed by current state and federal privacy laws.

To advance HIT/HIE in Colorado and move the state towards integrated care, we will:

1. Promote adoption of Health IT tools in an integrated care delivery setting
2. Leverage statewide HIE to promote the integrated care delivery model
3. Promote and align state agency HIT efforts
4. Evaluate State and federal level privacy policies, standardized consent forms, and data use agreements
5. Connect public health to the statewide HIE for enhanced population health reporting and evaluation
6. Target outreach to rural and frontier communities to ensure statewide access and interoperability.

**Current State of Health Information Technology in Colorado**

Through grants and strategic planning efforts, Colorado state agencies and non-state agency partners have implemented sustainable programs to promote health information exchange (HIE) and improve care coordination among providers through health information technology (HIT).

Colorado has robust HIE with the state designated entity, Colorado Regional Health Information Organization (CORHIO), Quality Health Network (QHN), and numerous community HIE-type programs with focused information exchange between organizations. The Colorado communities and health care initiatives that are using HIE to promote integration and quality improvement includes the following (a detailed summary of the programs can be found in the Appendix):

- Avista Integrated Physician Network
- CareEverywhere
- The Children's Hospital, PedsConnect
- Colorado Associated Community Health Information Exchange (CACHIE)
- The Colorado Foundation for Medical Care
- The Colorado Hospital Association's patient safety initiative
- The Colorado Telehealth Network (CTN)
- HealthTeamWorks
- Northern Colorado Health Alliance

As of September 2013, 95 percent of Colorado hospitals with more than 100 beds have been connected or signed agreements to connect with Colorado's two main HIEs. More than 1500 ambulatory providers, 120 long-term, post-acute care facilities, 18 behavioral health organizations, three insurers, national and regional labs, and interfaces between local and state public health agencies are live or in development with statewide HIE. Colorado HIEs have records for almost 3 million unique patients, the second largest HIE patient population in the nation.

In 2012, almost 28 percent of the eligible providers in Colorado had achieved meaningful use of their electronic health records (EHRs) as defined by the federal HITECH Act (see Glossary in

the appendix for an explanation of meaningful use) and were receiving incentive payments from the EHR Incentive Program.[93] By September 2013, with the support of the Colorado Regional Extension Center and the Medicaid EHR Incentive Program, 34 percent of physicians, nurse practitioners, and physician assistants have achieved Meaningful Use.[94] In addition, Colorado has the third highest acute care hospital EHR adoption rate at 68.3 percent (compared to the national hospital EHR adoption rate average of 44.4 percent). Colorado's extensive HIE capabilities reduce redundant testing, improve timely and accurate care, increase access to health information across organizations and services types, provide real-time health information for transitions of care, and aggregate clinical and administrative data for analytics and reporting.

<u>State agency collaboration with HIT / HIE initiatives</u>

State agencies collecting health information need to plan for interoperability with statewide HIE in order to reap the benefits of health information from external sources and share health information across care delivery settings. CORHIO, as the State Designated Entity, is collaborating with multiple state agencies to inform and advise on various HIT initiatives across state agencies and nongovernmental partners (see Table 10).

**Table 10: State HIT Efforts**

| Agency | Summary |
|---|---|
| Department of Corrections (DOC) | • Investigating integrated EHR, replacing Encounters and Pharmacy systems, improving inmate care delivery, care delivery (physical and behavioral health) documentation <br>     ○ Encounter System <br>     ○ DOC-CHP (Correctional Health Partners) Interface <br>     ○ ORILE (Offender Release of Information to Law Enforcement) System |
| Department of Human Services (DHS) | • Colorado Client Information Sharing System (CCISS) interoperability <br> • Replacement for EHR and Pharmacy systems |
| Office of Information Technology (OIT) | • Network Bandwidth Capacity Improvements <br> • Colorado Information Marketplace |
| OIT - Colorado Benefits Management System (CBMS) | • Enterprise Service Bus <br> • CBMS Program Eligibility and Application Kit (PEAK) <br> • CBMS Intelligent Data Entry (IDE) or CBMS Web |

| | |
|---|---|
| | • CHP+ Enrollment Spans Migration |
| Office of Behavioral Health (OBH) | • Colorado Data Integration Initiative <br> • Ongoing request for proposals for Crisis Stabilization Services, Mobile Crisis Services, Crisis Residential / Respite Services |
| Health Care Policy and Finance (HCPF) | • Pursuing 90-10 Federal financial participation (FFP) matching funds for programs advancing Meaningful Use and a Medicaid Agency Data Strategy solution <br>      o Develop core HIE infrastructure and interface development <br>      o Improve public health information reporting <br>      o Support Medicaid provider education on advancing HIE <br>      o Support state data infrastructure and interoperability strategy <br>      o Improved Medicaid population health analytics <br>      o Patient/client identity management <br>      o Statewide provider directory <br>      o Health information services integration <br> • Medicaid Management Information System (MMIS)  Medicaid Information Technology Architecture (MITA) (second self-assessment 2013) <br> • Statewide Data Analytics Contractor (SDAC) <br> • Eligibility modernization systems interfaces <br> • All Payer Claims Database (APCD) (HCPF has statutory authority only, daily administration delegated to CIVHC) |
| Department of Public Health and Environment (CDPHE) | • Vital Statistics Interface Automation (COVIS – Colorado Vital Information System) <br> • Colorado Immunization Information System (CIIS) <br> • Women, Infants and Children (WIC) Regional Program <br> • Electronic labor reporting <br> • Cancer registry <br> • Rehabilitation Information System for Employment (RISE) Implementation |
| Department of Regulatory Agencies (DORA) | • DORA CAVU Implementation (Licensing system replacement) <br> • Prescription Drug Monitoring Program (PDMP) |
| Department of Education | • Relevant Information to Strengthen Education |

<u>Coordinating with other statewide HIT initiatives to accelerate adoption of HIT</u>

Colorado has many health initiatives working towards enhanced data capture and information exchange to in order to improve care, reduce costs and improve health outcomes. Collaboration on these initiatives is critical to reduce duplication and create alignment. In 2009, an Advisory Committee created the State Health Information Technology plan for the state, a roadmap for strategy coordination. The next steps in HIT coordination involve maintaining the alignment of both historic strategic plans and current state health initiatives while taking into account recent technological advances and ongoing innovative community programs.

Colorado state agencies are experiencing the same challenges that private health care systems and providers are encountering including slow adoption of HIT tools, ongoing reliance on paper and faxes, multiple incompatible systems and lack of interoperability. The State is actively working on interoperability (see Table 10) and has multiple, active HIT efforts to increase the scope of health information data capture, analysis and the overall utilization of health information. Table 11 below lists state agencies with active health information projects and examples of discrete data that can be leveraged for improved integration and care alignment.

**Table 11: State Agency Health Information Data**

| Agency | Health information data |
|---|---|
| Department of Corrections | • Physical, behavioral health care delivery information<br>• Prescriptions<br>• Referrals/authorizations via third party administrators (TPA)<br>• Inmate management<br>• Demographics |
| Department of Human Services | • Youth Corrections – inmate management, transfer, release<br>• Physical/behavioral health care delivery information<br>• Medications<br>• Case management |
| Office of Information Technology | • Patient identifiers<br>• Eligibility information<br>• Demographics |
| Office of Information Technology - Colorado Benefits Management System | • Enterprise Service Bus<br>• Eligibility/enrollment/demographic |
| Office of Behavioral | • Colorado Client Assessment Record (CCAR)/Drug and |

| Health (OBH) | Alcohol Coordinated Data System (DACODS) - sharing and release may be restricted per federal privacy policy |
|---|---|
| Health Care Policy and Finance (HCPF) | • Medicaid administrative claims data<br>• Statewide Data Analytics Contractor (SDAC)<br>• Eligibility/enrollment/demographics<br>• Medicare/commercial claims data (through the All Payer Claims Database) |
| Department of Public Health and Environment (CDPHE) | • Vital statistics (patient demographics)<br>• Registries (immunizations, notifiable conditions, etc.)<br>• Behavioral Risk Factor Surveillance Survey (BRFSS)<br>• Colorado Child Health Survey (CCHS)<br>• Colorado Health Access Survey (CHAS) |
| Department of Regulatory Agencies (DORA) | • Provider licensing/enumeration<br>• Controlled prescriptions |
| Department of Education | • Patient identifiers |
| CORHIO/QHN | • Provider identifiers<br>• Master patient index<br>• Labs, radiology, transcriptions<br>• Continuity of Care Documents (CCDs) |

As illustrated above, the State has a variety of data sources that exist in different systems. In order to leverage this data and support integration at the practice level, we also need to integrate data and develop shared metrics.

Rural access to HIT/HIE

Colorado has a large rural footprint with twenty percent of the population living on 80 percent of Colorado's land. These rural counties do not have the health care access common in to the 80 percent of Colorado's population living in urban Front Range communities. CORHIO and QHNs' community and virtual health record can share health information across organizations and facilitate rural and small providers' access to patient records supporting integrated care, no matter where the patient is within the state.

**Challenges**

To get a clear sense of the challenges to expanded HIT/HIE in Colorado, CORHIO conducted interviews with subject matter experts, state agency contacts, leaders from the RCCOs and BHOs, other state HIE leaders and CORHIO's own advisors (complete list of expert interviews available in the Appendix). While there are a wide range of issues facing the development of HIE/HIT in Colorado, we also asked stakeholders about the specific integration of primary care and behavioral health (See Colorado Framework chapter). Through these interviews, three primary concerns emerged:

- Need for universal adoption of advanced and integrated HIT tools for standardized data capture across settings of care in near-real time for all potential data uses (clinical care, care management, administrative reporting, risk stratification).

- Need for bi-directional interoperability with statewide HIE for private and public health information capture and sharing.

- Uniform and robust interoperability with state HIT/HIE efforts and improved data exchange.

Electronic health records

The specific challenges providers, hospitals, and state agencies face with current EHR tools include:

- Many EHRs are insufficient to capture data for both physical and behavioral health. This creates an environment that supports the adoption of separate behavioral health and physical health EHRs with limited compatibility.
- Primary care and mental health care is provided in multiple settings including schools, local public health agencies, primary care offices, mental health community centers, and substance abuse facilities, each with different consent requirements and data capture capabilities.
- As noted earlier in this section, state agencies capturing health data are experiencing similar issues as providers and facilities trying to capture physical, behavioral health, case management, and analytics in one system. Many agencies use two or more systems and abundant paper communication, documentation and scanning to capture health care delivery provided within state agencies.

- Most patients don't have access to their medical records, lab or test results outside of trying to get a physical copy from their provider. This perpetuates one-sided medical care and prevents effective and informed shared-decision making. An online patient portal connected to the EHR would give patients convenient access to their medical records, empower their decision making and support high-quality care across the spectrum. The integration of a secure messaging service into this portal would give patients the ability to connect with their provider and care givers in a more timely and efficient way and improve relationships between patents and providers.

## HIE adoption and needs

- EHR readiness varies across vendors and practices, contributing to longer, more complicated integration implementations. Not all vendors EHRs are easily integrated with existing infrastructure and practices with non-compatible systems face a longer and more expensive integration process

- There is a need for increased interoperability with state entities, including public health, HCPF, and other agencies capturing health information, such as Department of Corrections, Department of Human Services, public health agencies (local and state), and agencies with imperative health data (e.g., provider id, patient identification).

- Additional HIE infrastructure and tools must be developed to reach the next phase of information exchange supporting improved health outcomes. Recommendations include, Alerts/notifications for ER visits and hospital admissions, robust analytics of aggregated claims and clinical health information, and bidirectional interfaces between private health care providers and state agencies.

- There is wide misunderstanding of federal and state privacy policies regarding sharing behavioral health information across organizations and statewide HIE, demonstrating a need for robust education and training on consent requirements and potentially the development of a standard consent model for all care locations. In addition, technical capabilities and operational processes must be developed to support the recommended consent model.

## State program and agency collaboration

- RCCOs and their primary care medical providers (PCMPs) are at different stages of HIT adoption with differing solutions for physical and behavioral health EHR needs.

- HCPF would like to aggregate clinical and administrative data among its internal databases and RCCO and BHO partners to improve reports and reporting timeframes for insurers, providers, patients and policy development.

- The challenges highlighted above regarding privacy policies and consent models are of particular concern to state government, as they create barriers for HCPF and other agencies at the organizational and operational levels.

Challenges to implementing the Colorado Framework model

- *Data capture:* Data capture is often cumbersome and labor intensive, and many data elements and collection processes are not standardized, repeatable or automated. Manual and duplicative data entry for required reporting are commonplace across state and community-based health care programs, disrupting workflows and increasing opportunities for error. In addition to cumbersome data entry, patient reported information is often on paper questionnaires, which are scanned into the EHR as PDFs. Scanned documents cannot be used for reporting purposes.

- *Data capture for behavioral health information:* Data capture for mental health and substance abuse information can be cumbersome if the clinical EHR is not capable of appropriately capturing or securing mental health information. Physical health EHRs may not have the minimum privacy controls or the flexibility to capture sensitive mental health and substance abuse information. Alternatively, the behavioral health EHRs may provide the additional privacy controls and functionality needed for overall behavioral health treatment, but may not meet the minimum data specifications of physical health EHRs. This split forces many providers to acquire separate EHRs for physical and behavioral health. The separation of specialty mental health services information systems and physical health services IT perpetuates the segregation of care for the patient.

  EHR adoption by behavioral health providers is a necessary first step in using HIT to integrate behavioral health and primary care, but there are few financial incentives to adopt behavioral health EHRs (notably, they are not eligible for meaningful use incentives), which

**Reaching Rural Areas, Small Practices and Behavioral Health Providers**

*Expand interoperability with statewide HIE through collaboration with all RCCOs:* RCCOs have an opportunity to increase the ability of uninsured and underinsured patients with access to high quality, evidence-based care, especially to those who live in rural communities across the state. Many of the providers that work with the RCCOs serve rural populations and may not have the resources or motivation to adopt HIT/HIE solutions into their practice. By collaborating with CORHIO and QHN as HIEs, the RCCOs will facilitate data sharing, increase EHR incentive program awareness, and create a path to interoperability with statewide HIE. HIE is an essential component to support care coordination for RCCO patients throughout the region, and the full integration of behavioral health information is a key component to the success of this program.

*Expand telehealth offerings and infrastructure:* Expand telehealth utilizing the existing, fully-operational, statewide health care broadband infrastructure. This expansion will improve the adoption of EHRs and help achieve Colorado's Meaningful Use goals in rural counties. The Colorado Telehealth Initiative is a 5-point plan to advance rapid diffusion of telehealth access throughout both rural and metropolitan Colorado. Plan components are:

1. Statewide video telehealth network platform built on the existing, statewide, dedicated health care network (CTN),
2. Telehealth resource center
3. Telehealth promotion (to advance necessary legislative and regulatory changes in support of reimbursement, credentialing and permissions)
4. Telehealth advisory committee, and
5. Telehealth outcomes monitoring and evaluation program.

Colorado's telehealth initiative is especially pertinent in rural areas as a solution to provide access to a BHP in hard to reach or sparsely populated areas. With telehealth, the care team will have access to BHPs that may not be geographically present, enabling access to behavioral health services otherwise unavailable. Telehealth lets behavioral health care teams provide services when and where they are needed.

*Facilitate access to the technology needed to improve rural health:* None of the HIT advances and HIE developments will be effective in rural communities until we expand access to broadband across rural Colorado. Patient portals, telehealth, and long distance care and collaboration all depend on having access to the EHR and HIE, which in turn require extensive broadband capabilities. Until the broadband infrastructure is built up, any effort to improve access and quality of care in rural settings will be significantly obstructed.

are critical for smaller practices that may lack the resources to implement and maintain an EHR system.[95]

- *Analytics:* Data analytics must be integrated within the care delivery tool for access during a patient encounter for discussion and to monitor clinical information. Easily configurable reports at clinician, care team, department and organization levels could provide immediate feedback on data such as lab results and medications.

- *Need for Clinical Decision Support (CDS) tools in EHRs:* Integrated care requires the use of electronic screening tools in primary care settings to identify a behavioral health risk and to track progress and outcomes.[96] Alignment and utility of CDS is critical in an integrated delivery setting to facilitate care coordination and "warm handoffs."

**Opportunities and Innovations**

Several entities in Colorado are working closely with CORHIO, QHN and providers to accelerate adoption of HIT and expand HIE capacity.

- Colorado Telehealth Network (CTN), funded by grants from the Federal Communications Commission, connects rural and urban providers for specialty telehealth consults; it also provides HIT support to rural practices and hospitals. CTN plays a critical role in facilitating communication for providers and coordination of care for patients in rural Colorado.
- The Colorado APCD is a secure, statutorily-enabled database that collects health insurance claims information from Colorado's private and public health insurance payers. The APCD provides public reports on its website (currently, aggregated spending and utilization comparisons by geography; in 2014, facility and practice price and quality comparisons) and also makes detailed custom reports available to providers for performance improvement purposes.
- All the nonprofit entities in Colorado that store, use and analyze health data—CORHIO, QHN, CIVHC (as APCD administrator) and Colorado Health Institute (as the state's nonpartisan health data analyst)—have joined together as the Federation of Health Information Technology Organizations (FeHITO). FeHITO serves as a forum to align efforts,

identify synergies and generate joint initiatives to speed the use of health data for performance improvement and cost containment.

- Colorado-based health plans such Rocky Mountain Health Plans (RMHP) and Colorado Access are working closely with their HIE partners to support care improvement and cost containment goals. RMHP has a long history of interoperability with QHN and has made information exchange a strategic priority. Colorado Access is working with CORHIO to receive lab results, ADT feeds, and eligibility-based routing information.
- HCPF has contracted with CORHIO to reestablish an HIT Planning Committee to facilitate a public/private partnership with state and non-state entities to identify HIT initiatives throughout the state. This collaborative will facilitate the development of new ideas, standards, and recommendations.

**Goals for HIT/HIE Transformation**

Overall goal

Spur robust and uniform adoption of EHRs and connectivity with HIEs to support Colorado's goal of providing access to coordinated systems of care that integrate physical and behavioral health and connect the clinical care delivery system with the public health system.

Targets

By emphasizing adoption and use of HIT tools and EHRs in all care settings, advancing interoperability with HIE, and establishing and increasing data exchange with and among state agencies, including public health, health information will be truly interoperable regardless of care setting or type, while respecting privacy laws.

**Table 12: HIT Strategies and Recommendations**

| Strategy | Recommendations |
|---|---|
| Promote adoption of HIT tools in an integrated care delivery setting | - Promote adoption of advanced EHRs to adequately capture physical and mental health information in one EHR that meet data standards, privacy controls, and enable treatment of the whole person within one EHR system.<br>  o Identify opportunities to financially support practices for |

| | |
|---|---|
| | universal adoption of compatible EHRs<br>○ Educate providers and practices on the differing consent requirements of an integrated EHR<br>• Identify additional HIT tools to support providers in varied care settings with varying EHR adoption, including:<br>○ Direct secure messaging<br>○ Clinical Decisions Services (CDS) screening and treatment options<br>○ Use of telehealth technologies to serve all communities, but especially rural and small communities<br>• Develop discrete fields, data standards and segmentation for mental health information and consent.<br>• Advance analytics capabilities within EHRs with real-time dashboards at provider, care team and patient levels to promote integration in clinical workflows.<br>• Reduce administrative burden on care delivery staff by standardizing data sets and data reporting across the state to eliminate unnecessary duplication. |
| Leverage statewide HIE to promote the integrated care delivery model | • Develop a consent model for behavioral health information exchange regardless of care setting type (e.g., primary care with mental health provider, mental health center, substance abuse treatment facility, inpatient, or psychiatric hospital).<br>• Support 100 percent participation in statewide HIE to bring together disparate medical records at point-of-care.<br>○ Identify opportunities to financially support practice participation.<br>• Use de-identified medical records from the HIE to aggregate clinical and administrative data for population interventions and expanded analytic capabilities.<br>• Enable consumer access to treatment data (personal health records) available within the HIE.<br>• Develop capabilities for alerts and notifications for ER visits or hospital admissions through HIE |
| Communication, Outreach, and Education | • Develop training curricula for all levels of the care delivery team, medical schools, nursing programs, and state agencies and partner organizations that address the following:<br>○ Privacy policies<br>○ Proper handling of behavioral health data (i.e., substance abuse data and consent to disclose and re-disclose data).<br>○ HIT functionality and HIE capabilities |

| | |
|---|---|
| | o Integration of HIT/HIE into workflow for transitions of care, patient engagement, and cross organization communication<br>• Develop a consumer engagement strategy, using clear language, educating patients on treatment and privacy decisions. |
| Promote and align state agency HIT efforts | • Evaluate potential of centralized state integrated EHR to advance capture physical and mental health information in one system that meets data standards, privacy controls and enables treatment of the whole person.<br>• Evaluate the need for a central EHR solution for local public health agencies for data capture and interoperability with HIE.<br>  o Potential uses of this centralized solution are: care delivery at LPHAs, school clinics data capture, immunization clinics, and secure behavioral health data capture.<br>  o Assess scalability for other uses of central EHR<br>• Advance interoperability with statewide HIE and product offerings to improve health care for state managed populations.<br>• Identify additional HIT and HIE tools to support state agencies<br>• Share aggregated clinical and administrative health information collected through HIE with RCCOs, PCMHs for population health management and monitoring of statewide health goals<br>• Increase interoperability with public health by connecting public health to the statewide HIE infrastructure.<br>  o Share physical and behavioral health information with state and local public health agencies for more accurate population health reporting. |
| State and federal level revisions (privacy policy, standardized consent forms, and data use agreements) | • With stakeholder input, support revisions to public policy to address barriers to information sharing, including advocating for a revision to federal regulations that inhibit integrated care.<br>• Develop framework for statewide consent form for sharing behavioral health information and supporting statewide HIE consent models for sharing health information regardless of care setting type. |
| Public health integration | • Integrate public health (both local and state) into the HIE through infrastructure development<br>• Increase data capture and interoperability with statewide HIE to facilitate data exchange with public health without increased administrative burden |
| Rural outreach | • Support expansion and HIE interoperability in rural and frontier |

| | areas |
| | • Continue to invest in telehealth to improve functionality of rural practices and aid in reaching Meaningful Use standards. |

**Cost allocation plan or methodology for any planned IT system solutions/builds funded in part by CMS or any other federal agency**

Colorado received multiple HITECH grants to advance HIT and establish critical HIE infrastructure in the state. Colorado's Innovation Plan will build upon the technical infrastructure, participants, stakeholders, and best practices developed through these grants. Additional funding to expand the HIT and HIE capabilities across the state is being pursued to expand health information sharing while supporting state and federal objectives to improve costs, patient care and outcomes. HCPF is pursuing 90-10 FFP HITECH and MMIS matching funds to support interoperability between state agencies and statewide HIE, as well as advancing adoption of EHRs and attestation to meaningful use for Medicaid providers. Below is a list of awarded grants and the recipient organizations that have established the foundation for HIT in Colorado. Each grant program will be leveraged to facilitate advancement of HIT and HIE to create a network of information sharing capabilities.

**Table 13: HIE/HIT Grant Awards**

| Grant Name | Recipient | Total Grant Amount |
|---|---|---|
| Telecommunication Grant (FCC) | Colorado Telehealth Network and the Colorado Behavioral Healthcare Council | Researching |
| Health Center Integrated Services Development Initiative (ARRA/HRSA) | Associated Community Health Information Exchange (CACHIE) | Researching |
| Broadband infrastructure grants | Colorado Broadband Data and Development Program – Governor's Office of Information Technology/Nunn Telephone Company/Peetz Co-operative Telephone Company/Wiggins Telephone Association | Researching |
| State HIE Cooperative (ARRA/HITECH) | CORHIO | $10.8 million |
| Beacon (ARRA/HITECH) | Quality Health Network (QHN) | $11.8 million |

| Grant Name | Recipient | Total Grant Amount |
|---|---|---|
| Regional Extension Center (ARRA/HITECH) | CORHIO | $12.5 million |
| Long Term and Post-Acute Care IT Challenge Grant | CORHIO | $1.7 million |
| Community College Consortia (ARRA/HITECH) | Multiple (Pueblo Community College is lead) | $625,000 |
| University Based Training (ARRA/HITECH) | University of Colorado Denver School of Nursing | $2.6 million |

See Table 14 for a visual of the path to full HIT/HIE integration.

**Evaluation and Measures**

The measures to be evaluated for Health Information Technology adoption include:

Primary care setting

- Increased adoption and use of EHRs
- Improvement for data capture in EHRs with ongoing training for privacy and data sharing, best practices, and health IT training on using questionnaires, dashboards, and other features.

Health Information Exchange

- Increased number of users connected to HIE
- Development of consent model
- Increase exchange of BHIE - transactions
- Facilitate aggregation of data for performance measurement and identification of gaps
- Improvement in reporting time for Payer, population, provider
- Increase in consumer usages with personal health record and secure messaging with providers via personal health records or portals

State health information

- Interoperability between statewide HIE and state agencies capturing health information measuring decrease in faxing, time spent communicating about populations/clients
- Hospital ADT feeds sent to statewide HIE shared with public and private insurers

**Table 14: The Path to Full HIE/HIT Integration**

| | PRIMARY CARE SETTINGS | | |
|---|---|---|---|
| | **Near Term** | **Mid Term** | **Long Term** |
| | HIT tools (EHRs, DST, Internal Analytics) | | |
| Use of HIT Tools | • Advocate robust EHR adoption, implementation, and meaningful use<br>• Require clinical EHRs to have sensitive notes capability for integrated mental health services within primary care<br>• Use of telehealth, as appropriate for practice size or geographic location | • Support advanced EHR systems with configurable user roles or privacy control<br>• Discreet data capture, electronic ordering (lab, radiology, pharmacy)<br>• Use of Patient Health Records for patient engagement in treatment | • Use Decision Support Tools for treatment recommendations, best practices, and patient education<br>• Internal EHR dashboard and reports at organizational level, department, care delivery team, provider, registry, and patient level |
| | Education | | |
| Ongoing Education | • Integrating mental health evaluations and best practices into Primary Care setting<br>• Use of HIT tools<br>• Privacy policies<br>• Administrative workflow modification | • Incorporating Decision Support Tools in workflow<br>• Secure messaging with patient workflow<br>• Ongoing Best practices training<br>• Ongoing privacy training<br>• Ongoing EHR tools training | • Benefits of Dashboards and Reports<br>• Incorporation of analytics for treatments decision<br>• Risk Stratification outreach and care coordination<br>• Ongoing privacy training<br>• Ongoing EHR tools training |
| | Interoperability | | |
| Path to Interoperability | • Access to Community Health Record via statewide HIEs<br>• Begin integration with statewide HIE<br>• Use of HISP capabilities for MU Transitions of Care, View/Download/Transmit, and secure messaging objectives | • Share CCDs with mental and physical health information with statewide HIE<br>• Personal Health Records across provider portals<br>• Plan for EHR triggers and alert notifications | • Implement EHR triggers and Alert notification to care team of ER visit or hospital admissions<br>• EHR Integration with PDMP with expanded access by additional levels of the care team |

| | STATEWIDE HEALTH INFORMATION EXCHANGE | | |
|---|---|---|---|
| | **Near Term** | **Mid Term** | **Long Term** |
| | HIE Enhancements | | |
| Use of HIT Tools | • Increased CCD exchange with ambulatory provider EHRs<br>• Consent model for mental health, substance abuse, and sensitive health information exchange in all settings of care<br>• Eligibility based routing | • Technical platform to support consent model<br>• Consumer engagement with provider supported Personal Health Records<br>• Aggregated clinical and administrative health information | • Interoperability with State agencies<br>• Alerts to EHRs<br>• Robust quality measure, community, payer, provider, and policy informing reporting |
| | Communication | | |
| Ongoing Education | **Organizations**<br>• Privacy policy education<br>• Developing HIE capabilities<br>**Consumers**<br>• Privacy policy education | **Organizations**<br>• Privacy policy education<br>• Developing HIE capabilities<br>**Consumers**<br>• Provider supported Personal Health Records for use<br>• Secure messaging with providers | **Organizations**<br>• State interoperability<br>• Developing HIE capabilities |
| | Interoperability | | |
| Path to Interoperability | • Continue connecting RCCOs to statewide HIE<br>• Increased public health reporting through HIE to public health<br>• Develop analytics capabilities<br>• Provider Directory Strategy<br>• Patient Identity Resolution | • Share clinical data with State agencies<br>• Aggregated clinical and administrative information for analytics | • Share BH information with public health<br>• Bidirectional health information sharing with state agencies<br>• Aggregated information sharing among community service partners |

| | STATE AGENCY AND PARTNER ORGANIZATIONS | | |
|---|---|---|---|
| | **Near Term** | **Mid Term** | **Long Term** |
| | HIT tools (EHRs, DST, Internal Analytics) | | |
| Use of HIT Tools | • Increased usage of HIT tools among state agencies<br>• Use of EHRs at local public health agencies | • Integration with Prescription Drug Management Program with EHRs<br>• Implement SDAC/BIDM analytics strategy | • EHR Integration with Prescription Drug Management Program with expanded access by additional levels of the care team |
| | Education | | |
| Ongoing Education | **Privacy Policy and HIT/HIE**<br>• At medical, nursing, and HIT programs in Colorado<br>• State agencies<br>• Partner organizations | **Privacy Policy and HIT/HIE**<br>• At medical, nursing, and HIT programs in Colorado<br>• State agencies<br>• Partner organizations | **Privacy Policy and HIT/HIE**<br>• At medical, nursing, and HIT programs in Colorado<br>• State agencies<br>• Partner organizations |
| | Interoperability | | |
| Path to Interoperability | • Plan strategy for aggregated clinical and administrative health information (SDAC/BIDM)<br>• Continue public health reporting from EHRs through HIE to public health | • Interoperability with statewide HIE for Ostate EHRs: DOC, CDHS, OBH, PDMP<br>• Increased public health reporting through HIE to public health<br>• Provider and Patient ID resolution | • Robust interoperability across primary care, hospitals, statewide HIE, state agencies, and partner organizations<br>• Analytics with clinical and administrative information across insurers, physical and behavioral health at a payer, organization, provider, and patient levels |

# CHAPTER 6: PUBLIC HEALTH

## Executive Summary

Colorado's Innovation Plan aims to create coordinated systems of care that will connect the disparate elements of the health care continuum in a patient-centered system that links direct care delivery with public health and community resources. In order to leverage the potential population-based, prevention impact that the public health system can bring to the rest of the care delivery system, we must do more to link public health with clinical care and the payment models that support it. Key components that will facilitate the integration of public health with the health care delivery system include:

- Building connections between public health and direct care: including resource sharing, goal-setting and community collaboration using a Health Extension Service. Population health goals can only be met with input from the population. Public health has clear connections to the community as a result of required community health assessment and planning, as well as its population focus. Clinical care providers have direct access to influencing health at the individual level. The two sectors must collaborate to improve population health.

- Connecting public health to Health Information Exchange (HIE) statewide: Determining public health priorities requires data about the overall health and health care provision of the population. Currently, the public health system controls population-based data and clinical care controls data about heath care provision. By connecting with HIE, public health agencies can use these multiple levels of data to create a more comprehensive picture of health across communities to aid in more robust health priority setting..

- Developing mechanisms for reimbursement in new payment models: Public health relies on government funding and grants to support ongoing work. With additional sustainable sources of funding, public health will be able to invest in more long term prevention initiatives to improve the health of the public.

**Current State of the Public Health Delivery System**

Public health services in Colorado are provided through the Colorado Department of Public Health and Environment (CDPHE) and 54 local public health agencies (LPHAs) that operate separately and independently from the state agency. Both state and local public health provision is governed by the Colorado Public Health Act of 2008 (C.R.S. 25-1-501 et seq) and other statutes and rules codified at the state level which direct the State Board of Health to establish core public health services and minimum quality standards for public health agencies.[97] In addition to governmental public health, Colorado has numerous community-based organizations that work in the public health and prevention arenas. Partnerships among public health agencies, community-based organizations, safety net providers and other organizations are growing increasingly important as Colorado takes more of a "social determinants of health" approach to health improvement.

Public health frameworks

Public health professionals use the 10 Essential Public Health Services (Figure 18) as a framework to describe the functions of public health. CDPHE and local public health agencies coordinate or support the provision of the 10 Essential Public Health Services in different ways and at different levels, throughout the state.

**Figure 18: Core functions of public health and the 10 essential services[98]**



137
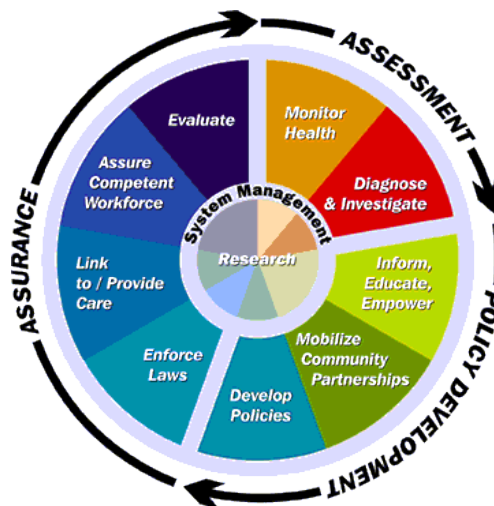
The delivery and prioritization of the 10 Essential Public Health Services is shaped by two conceptual frameworks: the socio-ecological model (Figure 19) and the Health Impact Pyramid (Figure 20). Given limited resources, prioritizing among strategies and across the range of available public health strategies is essential.

**Figure 19: The Socio-Ecological Model[99]**
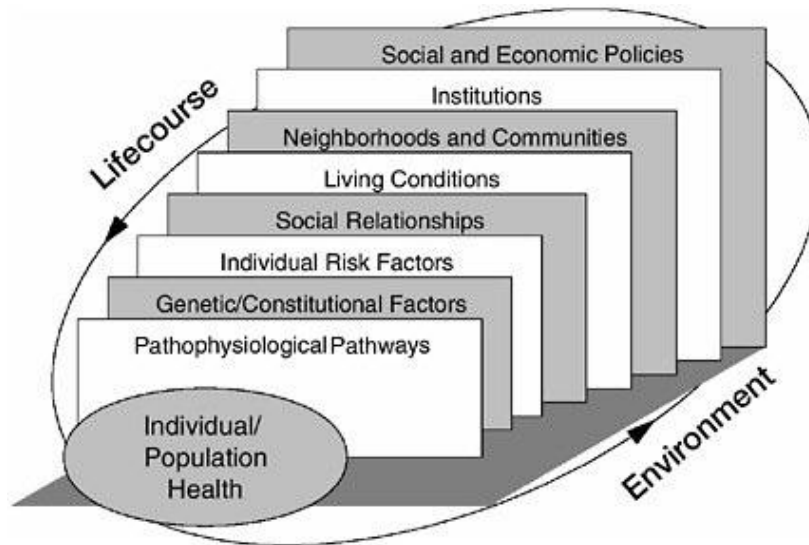


**Figure 20: Health Impact Pyramid[100]**
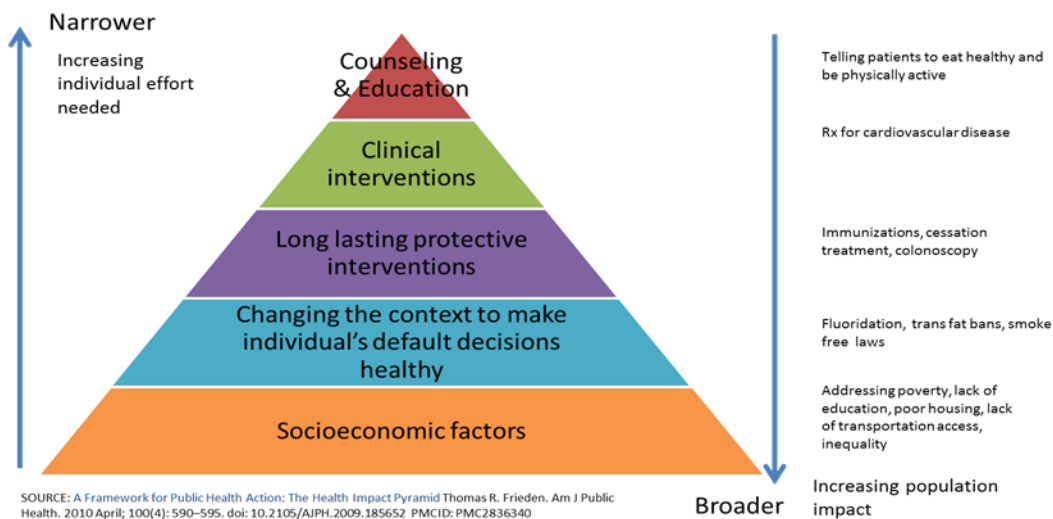


Potential public health services range across a broad spectrum, though the greatest needs and the most efficient use of resources often reside in the broad, foundational elements of social

environments. Strategies that set the conditions for healthy choices, behaviors, and environments have a broad impact on population health. These population health strategies effectively improve health and reduce burdens on and costs by the health care system.

As services become more targeted at the individual level, public health plays multiple roles in assuring the provision of services to those most in need and in encouraging changes to the health system that seek to orient public health and clinical settings towards addressing the upstream sources of illness and injury in a variety of settings. Public health is focused on creating a true health system that maintains the health of the population and prevents illness rather than reinforcing our current system that focuses on the sick and treating existing illness. Evidence suggests that population health strategies can and must be delivered in coordination with client level services for maximum health impact. By examining interventions in the context of these conceptual frameworks, public health and its partners can ensure the provision of complementary strategies that address the root causes of health issues while also assuring health care delivery to patients in need.

Structure and function of CDPHE

CDPHE, as the state-level public health entity, is responsible for aligning priorities and resources to improve and sustain public health and environmental quality. The department is unique among its national counterparts in its structure as both the human public health and environmental public health agency in the state. CDPHE assures communicable disease prevention and control, health promotion and disease management, licensure for hospitals, nursing homes, and other health facilities as well as emergency medical services and preparedness. The environmental component of the agency oversees all water quality, food, and product safety as well as hazardous and solid waste.

Decades of public health work have demonstrated that the factors which affect health arise at various levels within the community and society and involve the physical environment, social and economic conditions, and individual behaviors and choices. CDPHE seeks to work across these different levels in order to target initiatives that ensure health and wellness for the general population.

In providing the 10 Essential Services and working to make Colorado the healthiest state, CDPHE is focusing on 10 Winnable Battles, key public health and environmental issues where progress can be made in five years. These broad topic areas are being customized by regions, counties and cities based on local priorities and needs.  The Winnable Battles are:

- Clean air
- Clean water
- Infectious disease prevention
- Injury prevention
- Mental health and substance abuse

- Obesity
- Oral health
- Safe food
- Tobacco
- Unintended pregnancy


Structure and function of LPHAs

Local public health agencies have the responsibility and authority to provide public health services to their communities across Colorado. State law requires that each of the 64 counties either maintain a public health agency or participate in a district (multi-county) health department. Most LPHAs exist as a department within a single county, and four district agencies serve a combined total of 17 counties. LPHAs can also be non-profit agencies contracting with a county, combined health and human services agencies, or a multi-county arrangement without the formal district distinction. In many cases, especially in rural areas, multiple LPHA jurisdictions are served by one regional behavioral health center.

Colorado LPHAs are required by state law to provide, or assure the provision of, certain core public health services (see Table 15).[101] While these are the minimum core services, most public health agencies perform additional community-focused activities and initiatives. The 2010 National Association of County and City Health Officials Profile of Local Public Health Departments shows the following activities as the most commonly provided by Colorado LPHAs—making them a critical component of the health care delivery system, particularly in underserved areas.[102] In addition, as either a primary or "safety net" provider, LPHAs may offer certain direct care services in the community.

**Table 15: Core, Health Care Delivery and Safety Net Services provided by LPHAs**

| Core Public Health Services | Health Care Delivery Services | Direct or Safety Net Services |
|---|---|---|
| Assessment, planning, and communication | Child immunization provision | Services for children with special health needs (including care coordination, pediatric clinics and development of medical homes) |
| Vital records and statistics | Adult immunization provision | Immunizations |
| Communicable disease prevention, investigation and control | Communicable/infectious disease surveillance | Nutritional support for women and children |
| Prevention and population health promotion | Tuberculosis screening and treatment | Nurse home visitor programs |
| Emergency preparedness and response | Population-based nutrition services | Disease screening and treatment (e.g., tuberculosis) |
| Environmental health | Tobacco prevention | Chronic disease self-management |
| Administration and governance | High blood pressure screening | Oral health services |
| | Maternal/child home health visits | Family planning services |
| | Environmental health surveillance | |

Most LPHA funding comes from federal funds that flow through CDPHE and local funds, supplemented by state funds. Many of the state and federal flow-through funds come to LPHAs through competitive grant programs. Most LPHAs do not have a robust capacity to bill public or private insurers for their work, though some LPHAs are now billing health plans for immunizations and other limited services. These limitations mean that LPHAs must tailor their service provision to the restrictions and requirements that accompany grant funding. Connecting LPHAs to insurance payment and funding mechanisms to support preventive services will help ease the restrictions of grant funding.

All LPHAs are in some phase of the state-required community health assessment and planning process, and many have worked with their community members and leaders to select a few key health priorities. The priorities selected by communities align with Colorado's 10 Winnable

Battles in a way that allows state and local leaders to determine statewide interest, as well as needed support and potential system changes. This approach allows communities to target efforts and resources on locally important issues while still contributing to the overall goals of the state. Figure 21 shows the Winnable Battles that have been selected by LPHAs.

**Figure 21: Winnable Battles Selected by LPHAs[103]**
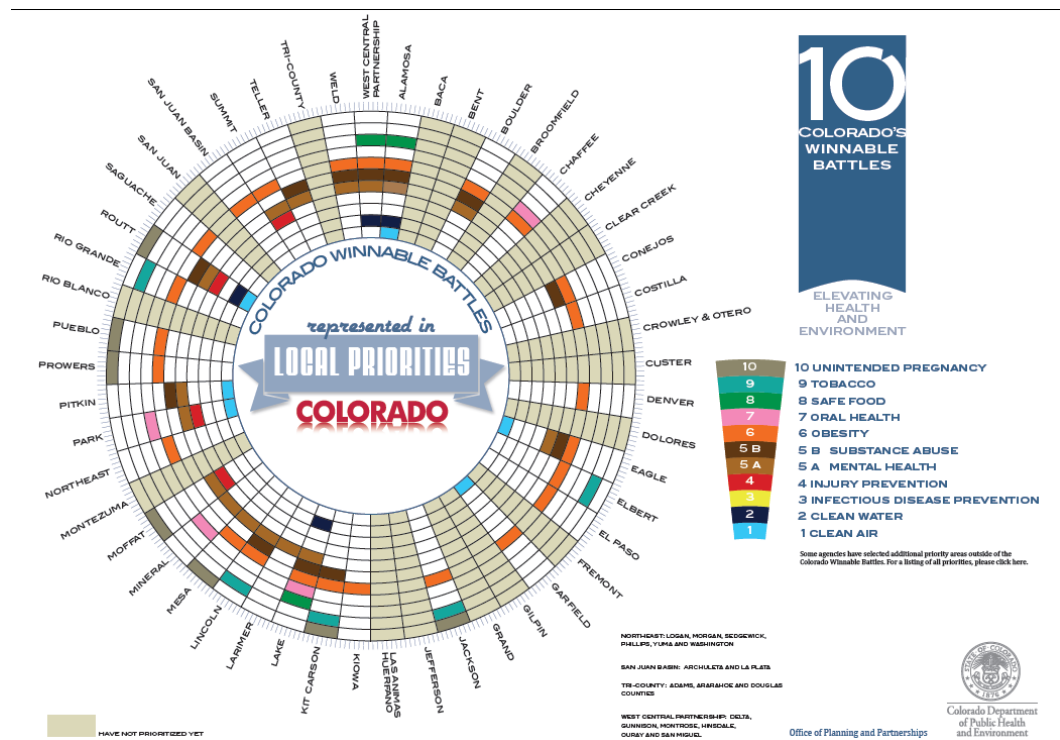


Many LPHAs and communities have independently decided to prioritize mental health and substance abuse in their communities. Among these communities, some of the more common interventions include: media outreach, social marketing, and influencing perceptions (such as perceived risk); treatment and receipt of care; early detection, screening, referral; primary prevention and social support; collaborative, integrative care and treatment for co-occurring disorders; and data collection/surveillance and evaluation.

Information exchange between public health and clinical delivery systems

Both state and local public health departments have limited connectivity to Colorado's HIE networks. Though much of the state's population data is compiled and analyzed by these

departments, there is little communication between public health entities and health facilities. The lack of communication means we are missing opportunities for more robust surveillance to more carefully tailor population health strategies to the local populations.

Both CDPHE and LPHAs monitor a wide variety of physical and behavioral health indicators and risk factors. Data is captured through reports from hospitals and clinicians, death certificates and public surveys. The initial focus for public health data collection included electronic newborn screening orders and results delivery, electronic submissions of immunizations to the state registry (CIIS) from provider electronic health records (EHRs), and electronic submission of reportable conditions to the state registry (CEDRs).

This data arrangement is primarily unilateral and limits the interaction and true data exchange between public health and clinical providers. This makes it challenging to directly connect the rich information in these public health databases with clinicians and health care facilities to inform their intervention strategies and help them meet Meaningful Use criteria. It is also challenging to link clinical records into public health databases. For example, there are no standards for data extraction from EHRs, so data coming from clinicians varies from one system to another. Other complications: behavioral health providers have different EHR capabilities than physical health providers, privacy and release-of-information policies are required for the release of sensitive information, and the misunderstanding around the requirements of the privacy laws.

CDPHE is working with Colorado's HIEs CORHIO and QHN, and some local public health agencies to begin connecting these disparate components. CORHIO and CDPHE have identified providers and hospitals to begin pilots to report public health data from statewide clinical records services. These projects will facilitate electronic reporting of communicable diseases, cancer cases, and immunization records to CDPHE.

Community-based organizations

Community-based organizations are critically important in improving population health, especially in connecting with underserved communities; for example, the Chronic Care Collaborative with 28 member organizations including the Colorado chapter of the MS Society, and the American Diabetes Association, among others. Through their member organizations, the

Collaborative represents the one in four Coloradans who are living with chronic disease. Another community organization is the Center for African American Health, providing culturally-sensitive disease prevention and management programs to African-Americans in the Denver area. Integration of public health and clinical care delivery should include full engagement with community-based organizations in finding and implementing solutions.

<u>Workforce</u>

The public health workforce in Colorado is evolving as much as the system itself. Prior to the establishment of the Colorado School of Public Health (CSPH) at the University of Colorado, accredited in 2010, the Rocky Mountain region lacked a comprehensive school of public health. The new school is training new professionals and offering degree-granting and professional development opportunities for those already in the workforce and. Two schools have also started undergraduate programs in public health.

While we know that these programs will increase future numbers of public health professionals, the current public health workforce is difficult to capture. This is not just a Colorado issue. A recent American Public Health Association issue brief stated "Due to its diversity and range of settings, and the absence of funding for enumeration efforts, the exact size and composition of the public health workforce remain uncertain."[104]

To assist with estimating the current public health workforce, we can gain some limited information from the profiles complied by the National Association of County and City Health (NACCHO) and Association of State and Territorial Health Officials (ASTHO), and state level data collection. In 2011, more than 2,700 people were employed in Colorado local public health agencies across Colorado. Approximately 22 percent of the workers are public health nurses, 26 percent are administrative and clerical staff, 17 percent are environmental health professionals and 6 percent are health educators—including many who are trained in theories and interventions to change behavior at the individual, family, community and policy levels.[102] CDPHE employs more than 1,200 full-time equivalents.[105]

In addition to the evolving workforce in governmental public health, we are seeing increasing use of community health workers, patient navigators and other individuals who can provide tailored assistance to patients. In late 2011, The Colorado Trust convened the Community Health Workers/Patient Navigator (CHW/PN) Workgroup to begin working to define the roles of community health workers and patient navigators, establish core competencies and licensing requirements, and identify reimbursement methods and sustainable funding for these health workers. According to a recent survey from that group:[106]

- Fewer than 25 percent of CHW/PNs work in public health settings; most are in non-clinical community settings.
- More than 70 percent of CHW/PNs see their primary role as a link between clinical services and community resources for patients.
- Fewer than 20 percent of CHW/PNs are reimbursed through public or private insurance or other permanent funding source. Most are grant funded or volunteers.
- 40 percent of CHW/PNs have had no formal training in their role.

The CHW/PN Workgroup has worked over the past year to develop a set of competencies that takes into account the roles that CHW/PNs have been filling and how they are being used within existing health systems and LPHAs. Establishing core competencies is the first step towards developing a consistent training curriculum for CHW/PNs.

Community colleges have already started offering formal CHW and PN training. It is unclear whether these programs cover the competencies the group at The Colorado Trust have identified or if they will lead to funded and reimbursable positions after completion of the program.

**Challenges**

Over several months, stakeholders from across the state came together in a series of facilitated meetings to explore how to better connect public health and clinical care. Several challenges emerged from these discussions:

- *Public health in Colorado is disconnected from clinical care.* While LPHAs are critical for creating effective interventions tailored to the local community, communication between

public health and clinical health has to be improved. Effective coordination of services will remain a challenge until public health and clinical care systems have the time, resources and clear purpose to work together to advance population health goals.

- *Public health needs access to the patient-level data that informs population-level interventions.* There is a lot of data available across the state, but the data is provided through dozens of different databases and sources. Clinical data in EHRs and patient registries is not in a form that can be of use to LPHAs or anyone focused on improving population health. In order to take full advantage of the data available, public health must be integrated into the state HIE. Along with clinicians, hospitals, and laboratories, public health must become part of the larger data exchange in order to be able to track the effectiveness of interventions and programs on an ongoing basis.

- *Public health needs reimbursement that reflects the current and future roles and payment that aligns with the work being done*. State funding supports much of the surveillance and prevention efforts of CDPHE. Some of these funds flow through to LPHAs, but not in sufficient quantities to support expanded efforts. If public health is going to become more active in achieving a healthy population, there must be ongoing funding for the services provided. This may include incorporating some public health agencies and services into insurance reimbursement. By reimbursing public health agencies for preventive work on the front end, we will realize later cost savings that can be reinvested for community health improvement and education to more effectively improve population health.

**Opportunities and Innovations**

Colorado's emphasis on local priority-setting versus a uniform statewide approach encourages local innovations. These innovations act like pilot programs, allowing us to see the effectiveness of a certain approach on local priorities. Many local initiatives have the potential to help transform health care delivery statewide. In addition to program-level work, Colorado is also involved in public health systems and services research that can help investigate, inform and guide how these innovations are implemented. We can't describe every program in the state, but there are several strong examples that demonstrate the power of local collaboration and innovation to transform population health and care delivery.

Community/regional health improvement collaboratives

- *Northwest Colorado Community Health Partnership (NCCHP) Community Care Team (CCT):* Each member of the CCT (e.g., local public health agency, federally qualified health center, community mental health center, community service provider, etc.) encounters clients at different stages on the care continuum and can assist or refer them to the appropriate team member. Key elements include:
  - Integrated behavioral health and primary care in federally qualified health center and private primary care practices, using resources from community mental health center and Northwest Colorado Visiting Nurse Association.
  - Care coordination services for Medicaid clients, providing both primary and behavioral health care coordination.
  - Outreach and prevention, specifically focused on tobacco cessation, cardiovascular health, and patient navigation.
- *North Colorado Health Alliance (NCHA):* Established in 2002, NCHA is a community venture that brings together public and private health care providers (primary care, behavioral health, hospital, etc.) with the local public health agency, county commissioners, paramedics and community service providers. Its goal is a healthy population with 100 percent access to high quality care at an affordable reduced cost, with a special emphasis on the underserved. Key initiatives include:
  - Make Today Count! Community health campaign.
  - Project LAUNCH, a SAMHSA grant program, to promote the physical and mental wellness of young children birth to age eight.
  - Care management for two Medicaid Regional Care Coordination Organizations.
- *Mental Health First Aid (MHFA):* MHFA is an evidence-based training program to help citizens identify mental health and substance abuse problems, connect individuals to care, and safely de-escalate crisis situations when needed. MHFA helps to prevent the onset and reduce the progression of mental health and substance use disorders while promoting acceptance, dignity and social inclusion of people experiencing behavioral health problems. Key accomplishments include:

- In conjunction with the Colorado Behavioral Healthcare Council (CBHC), MHFA has trained a statewide network of 230 instructors who have certified nearly 10,000 Coloradans as Mental Health First Aiders to date.
- CBHC is partnering with the Colorado Office of Behavioral Health to build up the infrastructure and implementation supports to take MHFA to scale statewide.

- *Practice-Based Public Health System Research/Multi-state investigation of primary care and public health integration:* The Colorado Public Health Practice-Based Research Network, housed at the Colorado Association of Local Public Health Officials, is part of a new public health services and systems research project funded by the Robert Wood Johnson Foundation. The goals of the project are to
  - Examine variation in the degree of primary care and public health coordination across local jurisdictions
  - Identify factors that may contribute to or impede coordination
  - Assess whether increased coordination leads to better health outcomes

  Colorado joins Minnesota, Wisconsin and Washington in this project that will produce publishable findings as well as practical tools for local communities.

Federally-funded initiatives

Colorado communities also benefit from numerous federal public health programming investments (see Appendix for a selected list of current federal grant-funded programs in the public health arena). In 2009, CDPHE reported that 46 percent of its funding came from federal sources. Approximately 30 percent of the total, statewide funding for LPHs comes from federal sources (direct or pass-through). Colorado has a history of leveraging federal dollars into state and local investments, including:

- *CDC Communities Putting Prevention to Work (CPPW)/*Peak Wellness Program (Tri-County Health Dept.): This program blends multiple screening programs supported by diverse state and federal funding sources into a comprehensive wellness package for low-income, uninsured, and under-insured women ages 40-64 in three metro Denver counties.

- *Colorado Oral Health Surveillance System* (COHSS) monitors the burden of oral disease among Coloradans by collecting, analyzing, and disseminating data to inform and support oral health decision-makers in Colorado.
- *National Public Health Improvement Initiative (NPHII)* funding has been used to support local public health agencies with data collection and technical assistance for community health assessments. This work has fed into the creation of a statewide health assessment that will be used for the next public health improvement plan for the state. The funding has also been used to support a number of quality improvement efforts.

Public-private partnerships

Colorado has several efforts that bring together public and private agencies to improve care for the state. This willingness to collaborate supports ongoing and future innovation. Some examples include:

- *The Colorado Prevention Alliance* (CPA)—a collaboration among state and local health agencies, Medicaid, private health insurers, providers and purchasers—has created a forum to work together toward population health goals such as smoking cessation, immunization and diabetes prevention.
- *Immunization services* – With the regulation change in the use of the Vaccines for Children 317 funds, Colorado was a pilot site to develop alternative payment systems for local public health agencies. Initial tracking estimated that 20 percent of immunization patients had some type of private insurance coverage. Multiple local public health agencies were successful in contracting with private insurers, using a state-developed contract template.

**Performance and Evaluation**

CDPHE maintains the Colorado Health Indicators for the state. The current set of indicators were selected through a collaborative process among public health professionals in 2011 and include county, regional and state level data on a variety of health, environmental and social topics. They are used in Colorado's Health Assessment and Planning System (CHAPS), a standardized process created to help local public health agencies meet assessment and planning requirements

from the Public Health Act of 2008. These indicators are organized based on the Health Equity Model (see Figure 22), which takes into account the wide range of factors that influence health.

**Figure 22: Health Equity Model[107]**



## Health Equity
### An Explanatory Framework for Conceptualizing the Social Determinants of Health

| LIFE COURSE | DETERMINANTS OF HEALTH | | | + | HEALTH FACTORS | | | = | POPULATION HEALTH OUTCOMES |
|---|---|---|---|---|---|---|---|---|---|

**NATIONAL INFLUENCES GOVERNMENT POLICIES U.S. CULTURE & CULTURAL NORMS**

| LIFE COURSE | ECONOMIC OPPORTUNITY | PHYSICAL ENVIRONMENT | SOCIAL FACTORS | HEALTH BEHAVIORS & CONDITIONS | MENTAL HEALTH | ACCESS, UTILIZATION & QUALITY CARE | POPULATION HEALTH OUTCOMES |
|---|---|---|---|---|---|---|---|
| PREGNANCY<br>EARLY CHILDHOOD<br>CHILDHOOD<br>ADOLESCENCE<br>ADULTHOOD<br>OLDER ADULTS | • Income<br>• Employment<br>• Education<br>• Housing | • Built Environment<br>– Access to recreational facilities<br>– Access to healthy food<br>– Transportation<br>• Safety<br>• Environmental quality | • Participation<br>• Social network/ social support<br>• Leadership<br>• Political influence<br>• Organizational networks<br>• Violence<br>• Racism | • Nutrition<br>• Physical activity<br>• Tobacco use<br>• Injury<br>• Oral health<br>• Sexual health<br>• Health conditions | • Mental health status<br>• Substance abuse<br>• Functional status | • Health insurance coverage<br>• Received needed care<br>• Provider availability<br>• Preventive care (immunization and screenings) | QUALITY OF LIFE<br><br>MORBIDITY<br><br>MORTALITY<br><br>LIFE EXPECTANCY |

**Public Health's Role in Addressing the Social Determinants of Health**

• Advocating for and defining public policy to achieve health equity
• Coordinated interagency efforts
• Creating supportive environments to enable change
• Data collection, monitoring and surveillance
• Population based interventions to address individual factors
• Community engagement and capacity building

The Health Equity Model is a framework we use to conceptualize a variety of interventions at the policy, community and individual levels. CDPHE and LPHA use of the Health Equity Model sets the stage for these interventions to have an impact on the root causes of poor health.

The Colorado Health Indicators also align with Colorado's 10 Winnable Battles that were listed at the beginning of this chapter. By measuring the health outcomes, environmental improvement and other strategies associated with each Winnable Battle, we will know where progress has been made and where more needs to be done. See Appendix for a table illustrating specific measures and targets for the Winnable Battles.

In addition to the Colorado Health Indicators and Winnable Battles, the state's public health entities are responsible for the ongoing data reporting and monitoring of many national surveillance programs run through agencies like the Centers for Disease Control and Prevention. Some of these surveillance system measures also contribute to the state evaluation metrics.

Earlier this year, representatives from CDPHE, HCPF and DHS-OHB joined forces to examine the current evaluation measures used by the three departments. Many of the measures used internally by these groups and publically throughout the state are duplicative or not in clear alignment with the rest of the state. This group created a Tri-agency Collaborative Data Set designed to ensure a highly effective, efficient, and elegant service system infrastructure to further integrate health care service and improve behavioral health care in the State of Colorado.

This data set will combine the Governor's State of Health Goals, the Colorado Winnable Battles and essential measures from each of the departments and place them in a framework that emphasizes the social determinants of health. The determinants of health are those resources necessary for achieving good health, such as access to safe food, water, and housing. Underlying these factors is the need for quality education and jobs that pay a living wage. Poverty is a strong predictor of ill health. Health behaviors also play a role in determining health outcomes.

Colorado will be using the Social Genome Model from The Brookings Institution's Center on Children and Families. The initial model structured around social mobility over the life cycle and has identified key goals at each stage across the developmental continuum that contribute to attainment of "ensuring that as many individuals as possible are middle class by middle age."[108]

Utilizing the Social Genome Model as a framework for social mobility and collectively reporting on aligned measures on a statewide basis will allow for enhanced information for policy and decision making, and analysis for interventions impacting population health.

**Our Goal**

*Facilitate the creation of coordinated systems of care through a statewide infrastructure that supports and coordinates community-driven solutions to population health needs within a framework of common statewide goals and metrics.*

This goal is designed to support the broad goal of Colorado's SHIP as well as the integrated care model. Recognizing that "most efforts to integrate care delivery and improvement in primary care and public health are locally led and defined, and there are very few examples of successful integration on a larger scale," we propose to build on the strong foundation of existing community-driven initiatives around the state to promote population health.[109] At the same time, though, we must ensure that every community in our state is pulling in the same direction and has access to resources to support its efforts.

The Public Health Workgroup for the SHIP decided to ground its thinking in a population-based health framework where solutions to health problems are directed toward changing systems, policies and environments to alter norms and behaviors for the entire population. Evidence-based or evidence-informed practices and programs are used as much as possible and primary prevention (e.g. preventing health issues in susceptible populations) is given priority. Partnering with community organizations is also essential in assessment, planning, and implementation.

Population health in the context of integrated care can be envisioned as a continuum of care progressing from a clinic-based coordination model to a comprehensive, prevention-focused model that goes beyond clinical care to keep the population healthy:[110]

**Figure 23: Continuum from Clinic-Based Treatment to Community-Based Prevention**



**Status Quo**
Focus on coordination within a clinical setting.

**More Integrated, Still Focused on Sick Care**
Coordinate services with community-based efforts. Emphasis on managing populations with chronic conditions.

**Prevention-Focused**
Add coordinated services aimed at keeping healthy populations healthy and addressing influences on health outside of the health care system.
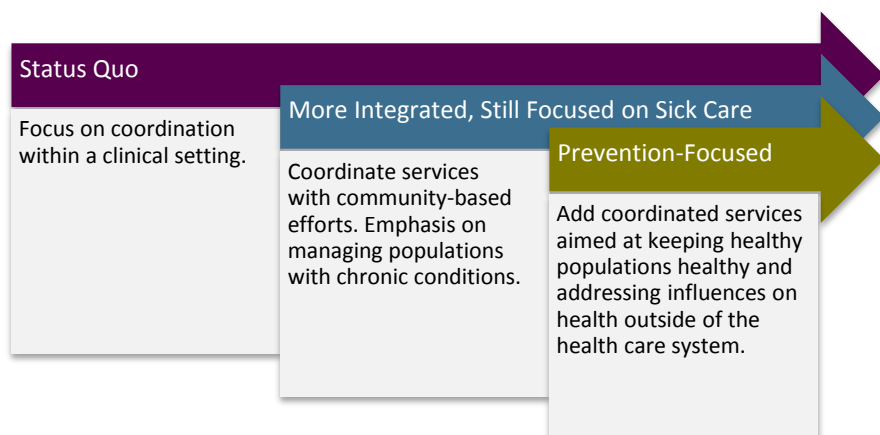
**Strategies to Reach our Goal**

In order to truly integrate public health, health care and behavioral health, we have to establish the system to support it. The obstacles identified by the workgroup are far from the only things

that need to happen in public health across Colorado, but they were common themes that can be addressed to move us down the path towards an integrated, supported approach to population health. As potential solutions to these issues, stakeholders identified programs and solutions already on the ground or in development that could be scaled and used as a starting point for public health innovation in Colorado.

- Deploy a "Health Extension System" to connect community health and private practice

  Colorado has begun to develop a "Health Extension System" (HES) that can support and build on the work of community and regional health alliances by bringing additional resources to the community, fostering linkages with new participants, and coordinating local and state health improvement initiatives. The HES originates in the concept of a Primary Care Extension Service funded through Section 5405 of the ACA. The first steps to creating the Colorado HES have been taken by a broad range of stakeholders, including HealthTeamWorks, the Center for Improving Value in Health Care, the University of Colorado, CDPHE and others.

  Colorado's approach to extension is broader than the original vision in ACA, which was focused on connecting primary care practices with resources to become medical homes. While supporting primary care transformation is a key component (see the Colorado Framework chapter and the Appendix), Colorado's approach will also link primary care practices more closely with community-based health improvement efforts and additional statewide resources. The HES can be thought of as a connector that helps align existing services and directs organizations to resources available both within their community and outside their area. The HES must be flexible enough to address the needs of every community across the state. By using input from a wide variety of stakeholders, we can ensure that the HES will be able to take advantage of state level infrastructure while tailoring assistance, resources and supports at the local level.

  The HES would not supplant existing coordinating organizations such as the Network of Community Health Alliances or the Colorado Association of Local Public Health Officials. Rather, it would be a statewide hub to connect these organizations, and the groups they serve,

with additional resources, and help them to inform statewide research and planning outside their existing spheres.

For example, the HES would serve as an interface connecting public health, private health care systems, local community organizations and others by:

- o Connecting primary care practices with community health improvement efforts as part of practice transformation support and advancing a shared vision of population health.
- o Establishing connections and collaboration between primary care practices, public health, other health care facilities and community care supports.
- o Training primary care practices on how to use community health workers and collaborate effectively with community service providers, local public health agencies and other organizations.
- o Bolstering local health alliances by linking them with private primary care practices and statewide resources such as the Colorado Clinical Translational Science Institute, a NIH-funded initiative that connects community organizations with the University, and hospital-sponsored research to accelerate improvements in population health.
- o Helping LPHAs and local hospitals execute their community health improvement plans by connecting them with primary care practices and university resources.
- o Linking communities with resources/common curriculum for training community health workers, and best practices for deploying these workers for primary prevention initiatives.
- o Establishing common measures to assess both the impact of interventions ("did it work?") and their structure ("why did it work?") to identify strategies that can be exported to other communities.
- o Acting as a resource center for providers and community organizations seeking partners and resources, fielding requests and facilitating linkages.

One of the primary focus areas of the HES would be connecting and supporting existing community efforts. As a resource and information hub for the community, the HES will be able to help coordinate local efforts to avoid duplication and increase the effectiveness of

local programs and initiatives. The HES would have the advantage of state and national resources that may be otherwise unavailable to community level efforts. With the support and resources coming from the HES, LPHAs would be better equipped to coordinate with other local care providers to create solutions to the community's identified health priorities and contribute to the overall health of the state.

- Connect public health with clinical HIT systems

  Successfully integrating public the structure of public health into the clinical delivery system will depend on communication and coordination between the different elements of the system – data collection and evaluation are critical to demonstrating the opportunities, challenges and overall success of the system. By connecting clinical care and public health planning and service delivery we will be able to:

  - Use epidemiological data to identify care priorities and target health promotion/disease prevention efforts at a clinical level.
  - Add certain mental illness markers to epidemiological reporting to develop a better understanding of the population dealing with mental illness and how they interact with the clinical care and behavioral health delivery system.
  - Incorporate behavioral health priorities and outcomes targets into public health planning for more comprehensive, whole person approaches to population health.

In order to integrate public health into the clinical delivery system, public health must also link into the HIE. Currently, several statewide public health surveys are already collected by CDPHE and shared with LPHAs, including the ARIES program tracking data on alcohol and drug abuse within HIV populations and the CIIS that provides consolidated immunization information. These programs are designed to support public health initiatives but are not designed to be reported back to physical and behavioral health providers. Likewise, there are data collection requirements that feed essential outcomes data to clinicians through the EMR, but are not shared or exported to the state or local public health agencies. The benefits of integrating public health into the HIE include:

- o Connecting population health records to clinical data systems to support evaluation, surveillance and priority setting at a community level as well as statewide.
- o Interconnecting all health data systems in order to provide whole person care. CORHIO has already been working with CDPHE to build interoperability for public health data transmission and collection to support meeting Meaningful Use requirements and serving overall population health.
- o Working with communities and regional alliances to create interoperability and the health information infrastructure to support the integration of physical, mental, behavioral and public health. This is already being developed by the Public Health Information Exchange Steering Committee (PH HIE), in coordination with CORHIO and QHN.

- Incorporate public health services and functions into outcomes-based reimbursement models

Currently, public health receives much of its funding through unsustainable, project-based grants. Even when public health is able to bill insurers for specific services, the reimbursement for service provision in a public health setting is substantially lower than the reimbursement would be in a traditional care delivery setting.

In order to effectively coordinate public health agencies and clinical care, and advance population health goals, we must expand outcomes-based reimbursement mechanisms. These reimbursement mechanisms will integrate the public health system with accountable care organizations (ACOs) and allow public health to contract directly with private insurers. As the focus of the health care system moves toward prevention and population health, public health agencies are ideally positioned to help meet these goals in a high-quality, cost-effective fashion. LPHAs should not be expected to provide these services solely through their existing government and grant funding sources. As Medicaid and commercial insurers develop clinical ACOs in partnership with hospitals and primary care providers, they should explore ways to bring LPHAs into those contracts for preventive care services. In addition, expanded use of and reimbursement for community health workers will help Colorado achieve its population health goals.

- <u>Strengthen and modernize the public health workforce</u>

In order to be successful in our integration efforts, we need the workforce to support the new infrastructure. Colorado must create a comprehensive health care workforce development and training strategy in that includes both "supply" (i.e., academic institutions) and "demand" (i.e., communities, clinics, hospitals) perspectives. By mapping the supply against population health priorities and community health needs we will be able to estimate the anticipated workforce needs. While there have been several high-quality studies of the existing workforce in Colorado, those studies have focused on the traditional health service provider workforce of doctors, nurses, and medical assistants, and not on the needs of the public health workforce. There are, however, many existing sources of data around the state that can contribute to the public health mapping process:

  o Department of Regulatory Agencies database of licensed professionals
  o The Colorado Health Institute's workforce maps
  o Profile of Local Health Departments from the National Association of County and City Health Officials (NACCHO)
  o CDPHE and CALPHO data collection on the structure, function and staffing of local public health agencies
  o The Colorado Community Health Worker/Patient Navigation Survey, supported by The Colorado Trust.

Each of these databases contains critical information for determining Colorado's existing public health workforce and its distribution, but they are housed in different locations, making it very difficult to paint a comprehensive picture of Colorado's needs. By combining the available databases, we will be able to evaluate exactly what kinds of health care and public health workers are needed and where the need is most severe. In addition, Colorado should participate in national efforts in defining the public health workforce and quantifying workforce needs; this can be accomplished through the Colorado Public Health Practice-Based Research Network.

*The role of Community Health Workers and Patient Navigators:* We know we have a shortage of non-professional public health staff across the state. These staff could be an affordable way to meet many population health needs, including providing educational services and basic community-public health connections. The development and promotion of community health workers and patient navigators is critical to the successful integration of public health into physical and behavioral health. These community health workers will be able to:

- o Bridge the gap between clinical and population health.
- o Focus on community resources and transitional care so providers can focus more exclusively on direct care provision.
- o Decrease costs by allowing us to designate appropriate work force to appropriate tasks.

Colorado has a growing number of community health workers and patient navigators, but the competencies of these positions have not yet been defined in a concrete way that will allow these roles to be built into the public health infrastructure. The Colorado Trust's CHW/PN Workgroup work to establish core competencies and licensing requirements, and identify reimbursement methods and sustainable funding, is critical to this development. Once these competencies are accepted and a certification program is developed, these new staff positions can become an integral part of the health care workforce.

# CHAPTER 7: PATIENT EXPERIENCE

## Executive Summary

The patient experience of health care services in Colorado varies based on one's health insurance coverage, ability to pay for needed care, age, health care needs and location. Many Coloradans have adequate access to affordable care from health care providers they trust and that are providing high quality, comprehensive care. Coloradans with chronic conditions or unique health care needs report greater challenges successfully accessing needed health care services. Coloradans want more respectful interactions with the health care system, better information sharing and coordination of care, and transparency about costs and billing.

The ideal patient experience for Coloradans is: convenient, respectful and timely interactions with the health care provider that leads to appropriate treatment and access to needed health care services when a Coloradan is sick, needs routine preventive care, or needs advice about health; supported by an health care system infrastructure that allows for the appropriate sharing of clinical information between patients and health care providers involved in the patient's care and pricing and billing systems that enable transparency on cost.

## Priorities for Action

The roadmap of recommendations for achieving the ideal patient experiences includes six key recommendations:

1. Ensure consistent access to needed care for patients.
2. Improve basic customer service and administrative structures in all parts of the health care system to ensure respectful encounters with patients.
3. Build more accessible clinical sites that allow for convenient access, full engagement of patients in their care, integration of behavioral health care services and easier access to needed specialty services.
4. Change policies that are barriers to an improved patient experience including confusion and misinformation about patient privacy and structural barriers that don't allow health care providers to collaborate or work together as a team.

5. Create a system that rewards health care providers for providing high quality health care that improves patients' lives and follows clinical guidelines.

6. Create full transparency of health information and costs for health care.

**The Current Patient Experience in Colorado**

The experience of patients accessing health care services in Colorado is variable based on one's health insurance coverage, ability to pay for needed care, age, health care needs and location. Many Coloradans describe a high quality experience with health care – they have stable insurance coverage, an established relationship with a health care provider and when they need intensive services, they have high quality support and care coordination. However, some Coloradans experience many challenges with the health care system including episodic health insurance coverage and care from unknown providers or from providers who they don't perceive to be fully engaged in their care. Some patients in Colorado struggle to navigate the complexity of the health care system and many do all that they can to simply avoid interacting with the system at all.

These different patient experiences in Colorado are captured in various health care surveys and reports and by people themselves. The Colorado Health Access Survey is an extensive survey of health care coverage, access and utilization in Colorado. In 2011, over 1.5 million Coloradans reported that they did not believe that the current health care system is meeting the needs of their family.[19] On the positive side, this means that more than two-thirds of Coloradans, or over 3.4 million Coloradans, do believe that the health care system is meeting the needs of their family. However, in addition to reflecting their own experiences, the Colorado Health Access Survey also asked, "Generally speaking, do you believe the current health care system is meeting the needs of most Coloradans?" Approximately 2.5 million Coloradans disagreed or strongly disagreed with this statement indicating that while some Coloradans are not experiencing challenges with the health care system themselves, they recognize that others in the state are not getting their health care needs adequately met.[19] Additional data from the Colorado Health Access Survey shows significant variation in health status among Coloradans of different racial and ethnic groups and among Coloradans with different levels of educational attainment and income.[111]

**Figure 24: Health Status by Race, Education and Income**



| | Fair to Poor Health | Good Health | Very Good to Excellent Health |
|---|---|---|---|
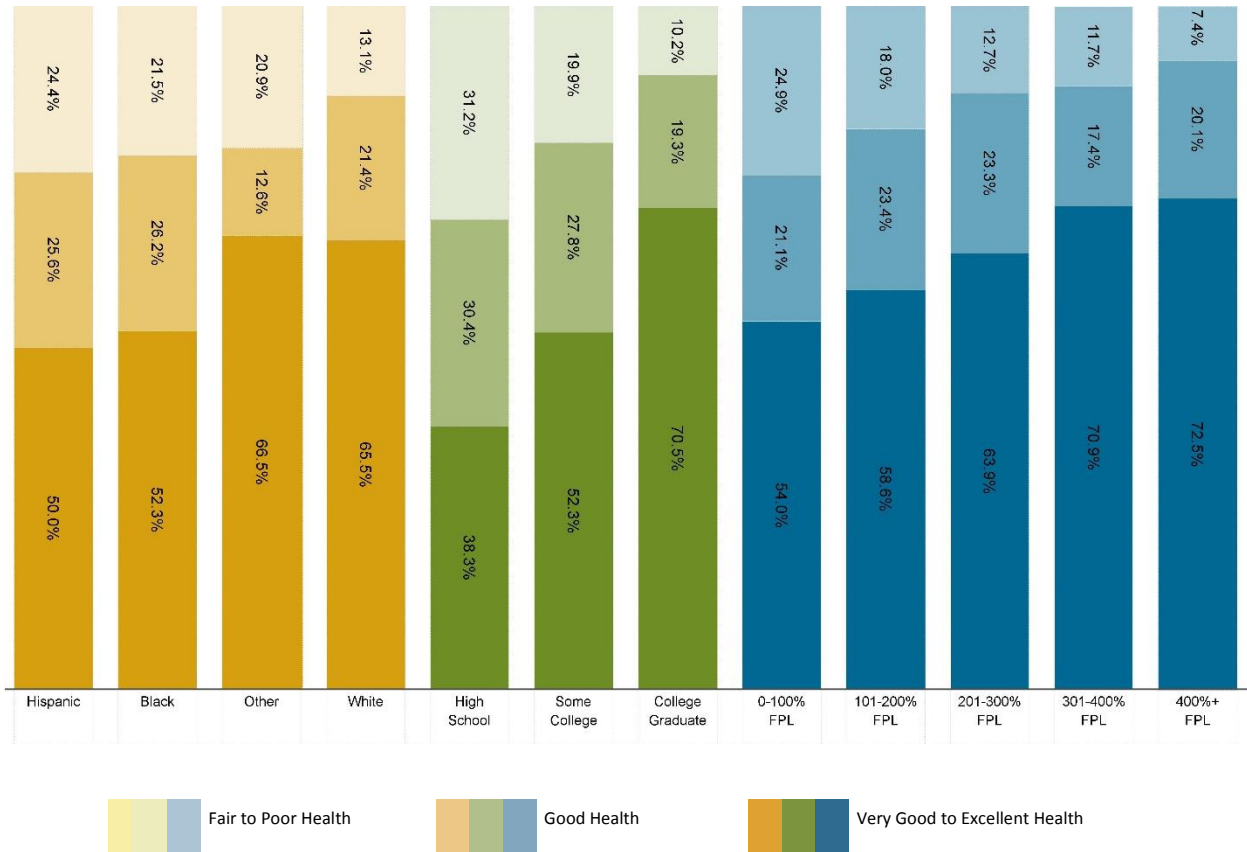
For the Colorado SHIP, the patient experience was evaluated through data and research analysis, key informant interviews with twelve health care experts, reviews of patient stories, focus groups with twenty-three demographically representative Coloradans, and a structured conversation with representatives from nine voluntary chronic disease organizations.

Access to health care

Access to needed health care services is a key component of the patient experience. In 2011, the Commonwealth Fund ranked Colorado 40th in the nation in terms of access to care and 41st among the states for equity.[9] For low-income populations, the Commonwealth Fund ranks Colorado 47th in the nation for access and affordability.[9] In 2013, approximately 17 percent of Coloradans did not have a usual source of care, a place where they usually go when they are sick or need health advice.[19] In addition, an estimated 829,000 Coloradans did not have health insurance and an additional 675,000 Coloradans were underinsured. Utilization of emergency

department services are another metric used to measure access to care. Coloradans who report they do not have a usual source of care were more likely to have sought care from an emergency department. Additionally, a majority of people who visited an emergency department reported that they were unable to get an appointment at doctor's office or clinic as soon as one was needed or that they needed one outside the normal operating hours of the office or clinic.[19]

Individuals with consistent coverage and high quality relationships with providers describe being "*very satisfied with care*" in Colorado. Many say they enjoy trusting relationships with providers who work with them to manage health conditions and maximize their health. However, some Coloradans are frustrated by trying to access health care services because of things such as limits on the providers they can see based on their insurance network, long wait lists for care, short visits, expense, failure to coordinate care, and non-transparent billing systems. These barriers can be difficult to overcome and often lead to a frustrated patient wondering if the care they receive is worth the headache. For those without consistent insurance coverage or who do not have strong relationships with providers, their negative experiences can discourage them from seeking care, following health care provider instructions, or addressing serious health care needs.

> *"I think that our health care system, in a lot of places, because it's so massive, that personal connection and the humanity of it gets lost really easily. Even when I did have health insurance... I would put off seeing the doctor because more often than not it was a really sterile experience and dehumanizing. I am a short and curvy woman and I get really tired of going to the doctor time and being asked if I'm trying to lose weight. If you don't have a relationship with your doctor in a way where they can understand and appreciate what your personal goals are, you'll be asked the same and asinine questions every single time. And it will make you hate going to doctor. It will make you hate getting things taken care of that need to get taken care of. That sterilized health care that assumes that every single person has the exact same needs and that their health care looks the same is totally false."* – **Colorado Patient, Alamosa, CO**

Because of frustrations with accessing traditional health care services, some Coloradans are maximizing their health by seeking resources outside of the health care system. Coloradans regularly report that they seek out alternative medicine treatments like chiropractic care, acupuncture, and massage therapy. They identify other providers like massage therapists, wellness counselors and personal trainers as their trusted source for health care advice. Coloradans who do not have significant health care needs are also using clinics located in grocery stores and pharmacies as easier places to access care. One Colorado patient shared, "*I avoid my primary care provider. I don't have time to sit in the office. I go to the clinics in the store or the urgent care. I can just go and they are clean and nice.*" Both Coloradans and health care experts in Colorado stress the importance of a usual source of care or medical home for children given their unique developmental and health care needs.

For patients with high health care needs, accessing needed health care services can be particularly frustrating because of the complexities of their needs and the fragmentation of the health care system. Patients with complex chronic diseases in Colorado often struggle to get timely and appropriate diagnosis, or may have wide variation in treatment options based on the provider caring for them. Patients with complex chronic diseases also often struggle with getting accurate and consistent information about what treatments or pharmaceuticals are covered by their insurance plan and coordinating care between their primary care and specialty providers. One health care expert noted the irony that, "*the patient [with a chronic disease] has to have the energy and wherewithal to make sure they are coordinating.*"

Many Coloradans with complex chronic diseases are not getting adequate behavioral health support. Many report that community support groups and voluntary health organizations play a critical part in providing behavioral health support, however, as one patient noted, *"I have never been asked a single question about my mental status even though I have a chronic disease where 50% of the people have depression."*

Quality of health care

Colorado ranks 28th nationally from the Commonwealth Fund for prevention and treatment indicators, however many Coloradans still do not get all recommended care. For example, 43.9

percent of adult diabetics in Colorado received the recommended preventive care while 85.2 percent of surgical patients received appropriate care to prevent complications and 78.6 percent of Colorado children received the recommended doses of five key vaccines.  Additional health care quality data from Office of Health Equity at CDPHE shows differences in access to screenings and mortality rates among ethnically and racially diverse Coloradans.[20]

Health care experts interviewed in Colorado have identified the lack of understandable and consistent quality data as a major barrier for people to be able to assess quality in their health care experience. They also noted that many patients are hesitant to interview their providers or challenge them with questions about the quality of the care they are getting and may be reluctant to leave a practice and find another provider.

In focus group conversations with a demographically representative sample of Coloradans, many participants struggled to link evidence-based quality metrics with their personal assessment of quality health care.  When asked what they would look for to assess quality for a health care provider, focus group participants said, *"personality, class rank in medical school, whether they had been reprimanded or sued, the provider's age, the turnover of their front office staff, practice utilization of mid-level providers, time limits for patient visits."*

Coloradans with chronic diseases are particularly impacted by the delivery of sub-standard care. An accurate and timely diagnosis of a chronic disease is critical to ensure needed treatments are started as soon as possible and to ensure eligibility for medications or treatment protocols. Inconsistent treatment approaches in different areas of the state can lead to variations in treatment for people with the same disease. In addition, an accurate diagnosis of a mental illness or a developmental disability can impact the availability of certain supports and benefits for patients and families.

Individuals' perceptions of quality care vary by race and ethnicity in Colorado.  In a recent survey conducted by the Center for African American Health in Colorado, the majority of survey respondents felt that African Americans receive lower quality health care compared to white Coloradans. For example, 63 percent of respondents disagreed with the statement, "Doctors treat African-American and white patients the same."[112]

In addition, access and quality of health care services can be impacted by language barriers. Roughly 17 percent of Coloradans speak a language other than English in their home, and 7 percent of Colorado's population (nearly 328,000 individuals over the age of 5) are considered "limited English proficient (LEP)." After English, Spanish is the most common language spoken at home in Colorado, followed by Vietnamese, German, French, Chinese, African languages, Korean, Russian and Arabic.[113]

Cost and affordability

Data from multiple sources describe the impact of high health care costs in Colorado. Among uninsured Coloradans, 85 percent say that "costs are too high" is one of the reasons they do not have health insurance. Additional data from the Colorado Health Access Survey shows that 29 percent of uninsured Coloradans said they were unwilling or unable to pay anything for health insurance. Another 8.5 percent said they were able and willing to pay, at most, between $1 and $25 per month.[19] Health care experts in Colorado who follow health insurance coverage closely expressed concerns about trends toward high deductible and high co-pay health insurance products since they put people at significant risk for high health care expenditures.

Cost is also a barrier to accessing needed health care. According to an analysis done by the Urban Institute, 45 percent of uninsured adults aged 19-64 report having unmet health needs due to cost. In comparison, 11 percent of adults with insurance have unmet health needs due to cost. Additionally, nonelderly adults without health insurance were about half as likely to have had routine check-ups and dental visits compared to adults with insurance.[114]

When asked to use one word to describe health care, "*expensive*" was the word chosen by many consumers. In addition to overall costs, consumers and health care experts identified the lack of transparency around costs as a major issue with our current health care system. "*In today's world, it is crazy not to know how much something is going to cost.*" They cited the lack of ability to shop and compare prices for health care services as a barrier, as well as the complete lack of transparency in the billing processes after care has been delivered. Some also shared stories of getting different answers about the procedure or visit costs they would be responsible for depending on whether they asked staff at the hospital, their provider or their insurer.

<u>Patient engagement and provider relationships</u>

The treatment of a patient during a health care interaction and their engagement in decisions about their care is an important aspect of the patient experience. Research about the link between the patient experience and involvement in their care consistently finds a connection between the patient experience, quality of care and health outcomes.[115]

Health care consumers in Colorado and health care experts agree that the way the patient is treated, respected, and engaged in decisions about their health is critical to the patient experience. One aspect of the patient experience is simply respect and customer service. *"They need to be nicer. Period."* Health care experts and low-income Coloradans also have concerns about the differential in respect and customer service for those enrolled in Medicaid or who are low-income compared to non-Medicaid, higher income Coloradans.

Beyond improved customer services, patients consistently expressed an interest in having their knowledge about their own bodies and health conditions honored as equal to the medical knowledge of health care providers. One Coloradans said simply, *"no one knows my body better than me."* Coloradans also recognized the role and responsibility as a patient for being an equal partner in health care decisions and health improvement efforts noting, *"If you don't care about yourself, you can't expect other to do so."*

In addition to having their knowledge about their own bodies honored, health care experts and Colorado patients cited the distraction or seeming lack of interest of providers as another challenge for a high quality patient experience.

> *"In growing up, I had a pediatrician that I had from the time that I was a baby until I turned 18. He was always so kind and caring and he looked at our whole family. That's what I would hope for every child, that they had a medical home. When it came time for me to get a doctor as an adult, I looked for those same qualities. It took a while. It took me about three times before I found the physician that made me feel the same way my pediatrician did. These first two were very impersonal. They had a clipboard, they asked me these questions, but they never really did look up at me. And I'm not sure I want people touching me who won't*

*look up at me. I wonder if these people really care about my health, or are they just trying to get through the list of people that they need to see? I felt like I was quantity versus quality."* – **Colorado Patient, Denver, CO**

For patients that may identify a specialist as their main health care provider, the task of coordinating information or getting coordinated care from both their specialist and primary care provider fell squarely on the patient.

<u>Integrated care</u>

Integrated physical and behavioral health care is a relatively unfamiliar concept for many health care consumers in Colorado. Consistent with published articles on patient's understanding of integrated care, once focus group participants learned about the concept of integration, they were supportive of the concept and wanted a greater focus on access to behavioral health services.[116] Many in Colorado are supportive of the approach because they believe stigma around mental illness can be a barrier for people seeking care and an integrated care model could play a role in reducing stigma. Additionally, some people noted the intersection between mental and physical health issues especially around issues such as menopause or depression.

Data from the Colorado Health Report card shows variation in poor mental health days among Coloradans with different income levels. In Colorado, 31.9 percent of adults with incomes below $10,000 compared to 8.1 percent among adults with incomes over $75,000 report poor mental health eight days or more during the past month.[12] Additional data from the Colorado Department of Public Health and Environment Office of Health Equity shows that Hispanic and African Americans have worse mental health indicators compared to all other Coloradans.[117]

Patients who have experienced integrated care are pleased with the approach:

*"Everybody is coordinating so nicely. They all seem to talk to together so you know that everybody knows. It has been much easier knowing that everything is coordinated. It's kind of like a football team, you've got your team and they all know what's going on. This is not a single player, they all coordinate. It's just fabulous! I wouldn't hesitate to go back if I felt myself in that situation again.*

*There might be a tendency of some people to be too embarrassed to go back and talk but I certainly would not. This integrated physical and mental health thing is really pretty good." –Integrated Care Practice Patient, Grand Junction, CO*

Some concerns raised about integration include the changing disease classifications for developmental disabilities or persistent mental illness. Diagnosis changes the path of care. "*There are continuously changing definitions in the mental health field. A broken arm is plainly a broken arm, but a kid on the autism spectrum…you have kids who are functioning and kids you can't speak.*" Another concern raised was about which care provider is the primary contact for the patient in an emergency or during a mental health crisis. Coloradans did not express concerns about sharing personal health information between providers but did make it clear they did not want to share any health information, physical or behavioral, with employers.

**Challenges**

Health care experts and Colorado patients have identified many key barriers to changing health care and creating a better patient experience.

Complexity

- Health care is "*fragmented*" and "*frustrating and confusing.*"
- The complexities of the system make it difficult for patients and providers to create optimal experiences of care, coordinate care easily, and accomplish their goals within the system.
- We need improvements in clinical practice, technology to support better clinical practice and payment that rewards high quality clinical practice to create a functioning system.

Competing interests

- The health care system is not designed to optimize the patient experience and the patient's engagement in their care.
- There are competing interests between providers, health care systems, health plans and patients.

- The fee-for-service focus on quantity over quality is both a major issue impacting the current patient experience and a huge barrier to change.

Power and control

- Those in control are unwilling to share power. Examples include providers who are hesitant to share electronic health records with patients and providers, and health care systems that are hesitant to improve transparency around quality and billing procedures.

- Some perceive that insurance companies are exerting too much control over medical decisions. As one focus group participant said, *"I don't like my medical care being controlled by a business major at the insurance company."*

Variability in needs

- Coloradan's experiences with health care vary greatly by their health insurance coverage, ability to afford care, age, health status, race and ethnicity, location and personal preferences.

- Must recognize and adequately support patients in Colorado with diverse health needs.

Structural barriers between physical health, mental health and substance use treatment

- Differences in privacy protections, different billing systems and requirements, different phone numbers at insurance companies for questions or pre-authorizations between physical health and behavioral health benefits are major barriers to parity and integration.

- There are concerns about having enough BHPs to meet the needs of an integrated system since behavioral health services are hard to get now with limited provider availability and long wait times.

**Opportunities and Innovations**

Colorado has a number of innovations underway to understand and improve the patient experience and test models of integrated care. These innovations are being implemented through a variety of partnerships which vary in size and location including: hospitals, school based health centers, private practices, and government funded clinics. Across these innovations, aspects that may influence the patient experience include patient involvement in decision making, provider interactions, navigation of the system, and patient perceptions of their care experience.

The Center for Improving Value in Health Care has compiled the Colorado Payment Reform and Delivery System Redesign Inventory which includes information on the integrated care models and pilots taking place across the state (see Appendix ).  A few examples from this inventory, in addition to other notable current programs, have been highlighted below to illustrate the current status of innovations and testing of integrated health models in relation to the patient experience.

- Patient Centered Medical Home: In 2009, the Colorado Multipayer Patient-Centered Medical Home Pilot (PCMH) launched to transform 74 Colorado medical practices.  This pilot added patients to the quality improvement teams within the practices, created Patient Advisory Councils, developed patient education materials, and surveyed 200 patients per practice every six months. Example questions from the patient survey are:  At this office, do people listen and respond to what you have to say in a way that is respectful and courteous?  Does your doctor or health care team explain things in a way that is easy to understand?  Do you feel that our practice and your specialist(s) communicate with each other about important information regarding your care?[118]

- Medicaid Medical Home and Accountable Care Collaborative: In 2007, Colorado passed legislation defining a medical home for children enrolled in Medicaid.  At the end of 2012, 214 practices, representing 904 physicians were designated as medical homes including 97 percent of all Pediatricians and 48 percent of Family Medicine providers.  Medicaid has also created the Accountable Care Collaborative which includes a primary care medical provider, care coordination and medical management, as well as assistance accessing needed specialty services and community resources.

- Safety Net Medical Home: Federally qualified health centers (FQHC) in Colorado participate in the national Safety Net Medical Home Initiative.  The participating clinics evaluate their performance based on the National Committee on Quality Assurance's Patient Centered Medical Home standards.  One of the key 'change concepts' of this program is Patient Centered Interactions which includes an expanded role in patient decision making, culturally appropriate communication, and patients providing feedback on their healthcare experience to be used for quality improvement.

- High Health Care Utilizers: "Hot-spotting" initiatives are continuing to grow within the state of Colorado to identify and work with the highest utilizers of our health care system. Two

specific initiatives in Colorado, Bridges to Care in Aurora, Colorado and 21st Century Care in Denver, Colorado have a specific focus on supporting the physical and behavioral health needs of patients with complex health care, behavioral health and social needs.  Colorado is also participating in an effort led by the National Governors Association to improve coordinated and targeted services for "super-utilizers."

- Advancing Care Together: Advancing Care Together (ACT) is piloting eleven programs in Colorado to "discover practical ways to integrate care for people whose health problems and health care needs span physical, emotional and behavioral domains". These pilot programs will give insight into the effective models of integrated care. Three pilots that have specific activities focused on the patient experience include:[119]

  o The Axis Health System is working to develop a personal health profile including the patient's personal health goals that will be used by all providers within their collaborative.

  o Denver Health is currently working to improve behavioral health related challenges often encountered during integration. The pilot program plans to identify preferred treatment approaches among their adult patient population in order to minimize future care related challenges.

  o Plan de Salud de Valle, Inc is focusing on their OB patients, to better understand the patient experience of a certain population within integrated health.

- The Jefferson Center for Mental Health: JCMH has pursued bi-directional integration, bringing mental health services into the medical setting and making physical health services available in the mental health center offices.  Some examples of their integrated programs include Healthcare Homes Without Walls where a physician's assistant from the community FQHC provides primary care services at three Jefferson Center outpatient offices and a clinical specialist contracted through the center offers substance abuse treatment and case management. The entire integrated program is overseen by a Health Care Coordinator who ensures the appropriate flow of care. As part of the effort to integrate behavioral health services into the physical health setting, three behavioral health professionals from Jefferson Center work as part of the care team at the FQHC locations across the community.

- The Nurse-Family Partnership is another innovative approach to providing community based behavioral and physical health services to mothers in Colorado.  Nurse home visitation is

delivered by 19 different agencies including public health departments, community health centers, community nursing agencies and hospital systems in 59 of Colorado's 64 counties.

- Engaged Benefit Design is a newly structured health care benefit plan focusing on providing resources to patients and providers to make decisions based on medical evidence in addition to patient values. The initiative uses a set of evidence-based tools, called a Patient Decision Aid, to help a patient consider their personal values and make informed decisions.

Other integrated pilot programs are developing integrated care models which are targeted at specific patient populations. These programs work to alleviate population specific points of conflict within the patient experience.

- The Asian Pacific Development Center focuses on the cultural influences of a patient's experience within an integrated care system. The group focuses on "blending Eastern, Western and Pacific Islander traditions" within an integrated care system.
- The PATH program is a federal grant to assist homeless persons with mental health care needs by providing an integrated health care option for the homeless population within their community. The health care services are offered through a collaborating mental health care center and  community health center. The services are offered at housing and supportive services locations where the patient population already receives many of its services.
- Silver Key and AspenPointe Care have collaborated to bring accessible behavioral healthcare to the elder adult population. The collaboration hopes to "…address the barrier of stigma in the older adult population to access behavioral health care" by integrating behavioral health into locations where this population seeks other types of services.
- Right Start for Infant Mental Health is an outpatient program at the Mental Health Center of Denver that is designed to deliver evidence-based programming that support the parent-child relationship to heal mental health symptoms in young children.  It includes extensive case management and supports for young families.
- The Adams County Middle Schools and High Schools provide integrated health care options within their school based health centers. The services are coordinated with the school calendar, and located within the school which eliminates many barriers that this patient population tends to experience.

**Evaluation and Measures**

Health care providers and systems of care in Colorado use a range of surveys and tools to evaluate the patient experience including the nationally recognized Healthcare Effectiveness Data and Information Set (HEDIS) and the Consumer Assessment of Healthcare Providers and Systems (CAHPS).

The state of Colorado uses the CAHPS to evaluate both adult and child experiences with Medicaid coverage. This year, in partnership with the Colorado Health Institute, HCPF will also use the CAHPS survey to provide patient satisfaction measures for the Accountable Care Collaborative. A current Medicaid pilot is using the Patient Activation Model to measure patient engagement as part of their patient experience analysis.

Many hospitals in Colorado use the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey of patients to measure items including provider communications, responsiveness about staff, pain management and cleanliness.

In addition to these nationally recognized surveys, the State has created the Hospital Report Card which includes standardized quality and clinical outcome measures for health care providers and hospitals in the state and the Colorado PCMH Pilot developed its own patient satisfaction survey. Many health care experts agree that more work needs to be done to fully understand the patient experience across the entire health care system as well as during point in time health care experiences.

**Our Goal**

Our goal is to create the ideal patient experience for Coloradans. This experience will be convenient and respectful with timely interactions with the health care provider leading to appropriate treatment and access to needed health care services. The health care experience will be uniform across insurers and not vary by coverage. We are seeking to create a single system with a smooth and patient experience for all Coloradans. This access will include routine preventive care, advice about health when needed and will be supported by a health care system infrastructure that allows for the appropriate sharing of clinical information between patients and

health care providers. Finally, patients will be informed of the costs and coverage of their care through pricing and billing systems that enable cost transparency.

**Priorities for Action**

The biggest opportunities to improve the patient experience in the current health care system include:

- Ensure consistent access to care for patients. Coloradans recognize that not everyone in the state has equal access to care and that everyone is at risk of having a life changing event that leaves them with gap in coverage or care. Efforts should focus on ensuring access to basic health care services and creating protections in the system to support people's health during challenging times so they still have access to needed coverage, including primary and specialty care.

- Improve basic customer service and administrative structures in all parts of the health care system to ensure respectful encounters with patients. Help health care providers in Colorado embrace the concepts of patient- and family-centered care, spend more concentrated time with patients during clinical encounters, and value individuals' knowledge of their own bodies in the conversation about their health and health care choices.  Pursue improvements in customer service from all different positions within the health care system including front desk staff, financial services staff, clinical technicians, nurses, doctors, administrators, and health insurance company staff.

- Build more accessible clinical sites that allow for convenient access, full engagement of patients in their care, integration of behavioral health care services and easier access to needed specialty services.  Build a health care system that honors where patients are most comfortable getting their health care needs met and embraces full patient (or family member or care giver) engagement in their health care. Increase the length of time for visits with primary care providers for patients with complex health questions or medical needs while at the same time make routine or quick evaluation services more convenient for patients.

- Change policies that are barriers to an improved patient experience including confusion and misinformation about patient privacy and structural barriers that don't allow health care providers to collaborate or work together as a team. Some health care experts have suggested

that the Ten Rules for Redesign outlined by the Institute of Medicine in their landmark report, *Crossing the Quality Chasm,* should be the guide for all changes made to improve the patient experience:

Ten Rules for Redesign[120]

1. Care is based on a continuous healing relationship
2. Care is customized according to patient needs and values
3. The patient is the source of control
4. Knowledge is shared and information flows freely
5. Decision making is evidence-based
6. Safety is a system property
7. Transparency is necessary
8. Needs are anticipated
9. Waste is continuously decreased
10. Cooperation among clinicians is a priority.

- <u>Create a system that rewards health care providers for providing high quality health care that improves patients' lives and follows clinical guidelines</u>**.** Ensure a standard level of care and basic clinical competency in health care encounters to ensure patients in every Colorado community get appropriate preventive care and when needed, an accurate diagnosis and evidence-based treatment. Align payment structures to support clinical quality and also pay for services that support patient success such as care coordination and case management.
- <u>Create full transparency of health information and costs for health care</u>**.** Improve information flow so that timely and accurate information is available to patients and providers at the point of care and available to patients at all times so they can keep track of their medical history. Define and make available meaningful quality information for patients to use to evaluate their care and their health care experiences overall. Pursue explicit transparency in cost and billing procedures from all health care providers.

The essence of the ideal patient experience was eloquently described by a physician in Basalt, CO:

*"The model that we would like to see evolve…is that the physician has enough time to spend with the patient, to ask enough, or the right, questions, not be pressured time-wise to get answers, to allow the patients to present their story the way they need to present it to us, and then we are able to communicate with them in a more relaxed, patient-centered interaction. The model that we have currently, that is a fee-for-service model, ends up having the medical practice on what we refer to as "the hamster wheel" or "the treadmill". Where we're just pressured all day long to stay working very high paced, seeing a lot of patients, not having enough time to focus on the patient's needs at that moment has been shown to be ineffective. So if we can transform to a model that we are able to see patients a little bit slower and be able to be a little bit more patient centered, we can prep the individuals a little bit better to be open to more medical care and services….The patients know immediately when they're pressured and that tends to close down the conversation. It's not a safe environment for patients to communicate. It's not really a safe environment for us to communicate because we needed to be in the next room ten minutes ago."*

**Policy and Regulatory Changes Needed**

Policy and regulatory changes that need to be made to improve the patient experience in Colorado include:

- <u>Training and clarity for health care providers and health care facilities about the true limits of information sharing between health care providers.</u>   Many health care experts in Colorado identify confusion about the details and limits of the Health Insurance Portability and Accountability Act (HIPAA) as a major barrier to effective team based care delivery and care coordination between care providers in different locations (See the Legal Barriers to Integrated Care chapter for more details).

- <u>Facility rule changes and a commitment to allowing patients full access to their health information.</u>  Patients in Colorado have experienced limited access to their own health information by staff at health care facilities who claim they are "limited by HIPAA" from sharing the patient's own medical record with the patient.  Regulations about sharing patient

information as part of Meaningful Use standards will likely improve access to patient records for some patients, but there should be a thorough review and overhaul of rules that create unnecessary barriers to patients' ability to access their medical records.

- <u>Administrative policy changes that will streamline and reduce unnecessary paperwork and costs within the health care system.</u> In 2008, a bill was passed to create a standardized health insurance card for identification and plan information. The taskforce that worked on implementing this legislation adjourned in 2009, after which time the Department of Insurance adopted CRS 4-2-29. Other "administrative simplification" policy includes legislation designed to simplify claims processing for private plans which is currently being addressed by workgroups in HCPF and at the Department of Regulatory Agencies.

- <u>Continued implementation of laws and rules for price transparency.</u> In addition to the All Payer Claims Database, created by state statute in 2010, Colorado should continue implementation of:
  - o CRS 6-20-101 which requires hospitals and other licensed or certified health facilities to disclose the average facility charge for treatment that is a frequently performed inpatient procedure prior to admission
  - o CRS 10-16-134 which states that each carrier shall submit to DOI a list of average reimbursement rates, either statewide or by geographic area, for the average inpatient day or average reimbursement rate for 25 most common inpatient procedures based upon the commonly reported DRGs. The commissioner has to post this on the website in consumer-friendly language.
  - o CRS 25-3-705 which requires the commissioner of insurance with the hospital association to approve an information system that records charges for common inpatient procedures and DRGs; requires hospital charges to be available on the CHA [website](website) and requires carriers to report charges.

**CHAPTER 8: LEGAL BARRIERS TO INTEGRATED CARE**

**Executive Summary**

As Colorado moves forward with its commitment to integrate care, it will undoubtedly have both short and long-term impacts on Colorado's legal and regulatory landscape. The fragmented development of laws and regulations needs to be updated to address population-wide needs and to streamline administrative infrastructure to better serve Coloradans. For example, statutory provisions currently regulate providers without reference to their collaboration with other professionals, and regulations differ significantly among professions, even if they provide similar services to patients. Colorado must ensure that its legislative and regulatory infrastructure supports sustainable, long-term integrated care models.

Key informant interviews, SIM workgroup meetings, analysis of key Colorado legal and regulatory provisions, and a comparison of legal enactments from other states informed the following considerations and areas for future conversations. There are several areas that need to be reviewed before full integration is achieved in Colorado:

Short-term

- Clarify privacy and confidentiality rules under HIPAA and Colorado law
- Seek federal approval for Medicaid to move away from FFS while maximizing hospital provider fees
- Ensure state agencies have the ability to appropriately and securely access and utilize existing state data sources to help facilitate patient-centered, integrated care.

Long-term

- Assess fragmented regulatory oversight of mental health, behavioral health, and substance use disorder providers
- Analyze continued use of differing payment for behavioral and physical health services

- Ensure consistency and lack of conflict among regulations that apply to health facilities Identify areas of professional and facility licensing that impede integrated care at the clinical, operational, or financial levels
- Identify areas of anti-trust law that impede integrated care at the clinical, operational, or financial levels

*The general assembly hereby finds, determines, and declares that the rapidly changing health care market provides unique opportunities for health care providers to organize themselves into new forms of collaborative systems to deliver high quality health care at competitive market prices . . . . The general assembly also recognizes that to effect such new forms of collaborative systems and integration of providers to service the market will require an analysis of existing methods of providing services, contracting, collaborating, and networking among providers and the extent and type of regulatory oversight of licensed provider networks or licensed individual providers which is appropriate to protect the public.*

Legislative Declaration, Colo. Rev. Stat. § 6-18-301 (1994).

Ideally, Colorado's legal infrastructure would work in conjunction with federal laws to enable new forms of collaborative systems and allow for the integration of providers to service the market and accomplish the general assembly's goal.

**Short Term Needs**

There are potential short-term changes that would support the Colorado framework, integrated delivery of behavioral health in primary care settings.

Confusion around patient privacy and confidentiality rules repeatedly come up as barriers to integrated health care in Colorado; many of these were perceived issues regarding HIPAA. There is extensive confusion about data sharing between physical and behavioral health entities (such

as between a primary care provider and BHO or mental health provider) as well as the limitations of the sharing of sensitive information such as substance abuse treatment. The most relevant federal regulations governing patient privacy are the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act of 1970, the Drug Abuse Office and Treatment Act of 1972, and the Health Insurance Portability and Accountability Act of 1996 (HIPAA).[121-123] Together, these laws protect the privacy of personal health care information, including treatment for substance use disorders and data retained by health providers, health plans, health care clearinghouses, and treatment agencies. Ensuring our state agencies that provide services to individuals and populations have access to data that is consistent with HIPAA for the purpose of improve these services is a crucial component to overcoming existing confusion.

These federal laws, in conjunction with state laws, often create confusion about what information can be shared with whom and in what circumstances. A comprehensive educational campaign targeted at the professionals primarily impacted could help facilitate the understanding and better, more appropriate use of these regulations.

Colorado's hospital provider fee, which will fund coverage for an additional 160,000 people over the next ten years, is based on maximizing the Upper Payment Limit in a fee-for-service system. In order to align that funding source with broader payment reform efforts, Colorado will need to determine the best model to ensure consistent federal matching rates while moving along the payment reform continuum.

**Long Term Needs**

There are several challenges impeding statewide integration of physical and behavioral health that may need to be further discussed and addressed with a broad group of Colorado stakeholders in order to create an infrastructure that supports integrated care.

The disjointed flow of funds to finance behavioral health services operates as a barrier to integrated care in Colorado. Public funding for mental health services is primarily provided through Medicaid in Colorado, although funding comes through mental health managed care (via the BHOs) for some services and in a fee-for-service model for other services. In addition,

federal block grants are provided for integrated treatment of serious mental illness and co-occurring substance abuse through Colorado's Department of Human Services, and still other funds – particularly those that target population-level health behaviors – flow through the Department of Public Health and Environment, all of which mirrors the federal administrative infrastructure.[124]

Federal legislation – through the Mental Health Parity and Addiction Equity Act as well as the ACA – has mandated parity among mental health, substance use, and physical health treatments in most insurance plans, making coverage of mental health and substance abuse mandatory.[125] However, we are just now learning what that parity requirement means in practical terms, and may not have the capacity to meet consumer needs for access in the short term.

Current billing rules sometimes prohibit reimbursement for treatment by two different practitioners on the same day, or prohibit a single practitioner from billing for medical and mental health services provided on the same day, if not separately licensed to provide both services. This is true even if the organization under which the practitioner bills is certified to deliver both services. The origin of these restrictions is a 2004 report from the Office of the Inspector General titled *Applying the National Correct Coding Initiative to Medicaid Services.* Because of the non-regulatory source and detailed intricacies of this federal policy, it creates significant confusion among consumers and providers.

As Colorado moves to integrated models of care, we need to rethink how we regulate health care providers and the facilities in which they practice. Health providers working in close-knit integrated teams may need a different regulatory structure than the one we currently have in place. In some circumstances, professional regulation differs by the type of facility in which one practices, causing unnecessary confusion. Further compounding the complexities of professional and facility licensing, current law does not clearly provide the authority to create new facility types that may be necessary for – or help facilitate - integrated care. Finally, separate authorities for licensing, payment, and compliance of the physical structure often precludes creativity in the delivery of care, and instead promotes "siloed" decision-making by facility type. The current regulatory structure may inhibit collaboration among providers, particularly at the financial and operational levels.

As a next step, Colorado should conduct a state legislative and regulatory survey of the systems in place in other leader states to identify best practices for legal infrastructures to support integrated care.

## CHAPTER 9: THE FINANCIAL CASE FOR TRANSFORMATION

Using data from the State of Colorado and health plans, the SIM financial contractor, Milliman, completed the Financial Plan, cost savings analysis, return on investment analysis, and model sustainability analysis of the payment model reforms in the Colorado Framework. Complete details of the financial analysis are available in the Appendix.

### Data Sources, Methods and Assumptions

The starting point for the development of the Financial Plan was actual historical data on incurred per member per month (PMPM) healthcare costs by beneficiary type and healthcare service category. The data was provided separately for commercially insured, Medicare and Medicaid beneficiaries. We developed detailed data on incurred claim costs and membership for calendar years 2009 through 2011 for the commercial and Medicare populations, and for calendar years 2010 through 2012 for Medicaid populations. The data used to develop the complete picture of the commercial experience in Colorado came from commercial claims and membership information, combined with data obtained from the Truven MarketScan databases. The data used to develop the picture of the Medicare experience came from Medicare claims and membership information from Medicare carriers in Colorado, combined with data obtained from the CMS Medicare 5% sample files for Colorado. The Medicaid experience was developed from Medicaid claim and membership data from the Colorado Department of Health Care Policy and Financing (HCPF). We used membership eligibility and claims data to separate different population categories contained in the projection model template (Medicaid adults, children, duals, and people with disabilities/elderly, Medicare duals and fee-for-service, and Commercial).

Because of the nature of the Colorado Framework, we separated the data into four different population cohorts, based on the medical and behavioral conditions of the eligible members using analyses of their historical claims data:

1. Members with comorbid chronic medical and behavioral conditions
2. Members with behavioral conditions but no comorbid chronic medical condition
3. Members with chronic medical conditions but no comorbid behavioral conditions
4. Members with neither chronic medical conditions nor behavioral conditions

There was insufficient diagnostic claim detail to develop these separate member cohorts for the Medicaid population, so we used the 2012 Medicaid experience in total across all medical/behavioral diagnostic groups for each Medicaid eligibility category. A similar process was used for the dual eligible Medicare/Medicaid population. The dual-eligible populations are unique in that the members included in the Medicaid dual population include members that accessed Medicaid benefits only (those that had any Medicaid benefits paid that showed up in the data), though we realize the actual number of dual eligibles should be the same for both Medicare and Medicaid. Including only the treated Medicaid dual eligibles implies less savings on the Medicaid side for duals, which is consistent with our assumptions.

We developed these various cohorts because we believe that the Colorado Framework will impact the healthcare costs of these cohorts differently and we wanted our projections to be representative of the impact of the program on different populations and their healthcare costs through the intervention and beyond. For example, we expect that the largest healthcare savings will be obtained from the Framework's impact on members with comorbid chronic medical and behavioral conditions, while the smallest impact will be on members with neither of these conditions. These detailed projections by cohort are combined within the projection model template for each eligibility category. Table 16 below shows the most recent year's (baseline) total per member per month (PMPM) costs for each of these 4 cohorts for each of the eligibility categories included in our financial projection model.

**Table 16: Baseline Per Member Per Month Costs by Population Cohort and Eligibility Category**

| Eligibility Category | Cohort 1: Chronic Medical and Behavioral Conditions | Cohort 2: Behavioral Conditions Only | Cohort 3: Chronic Medical Conditions Only | Cohort 4: No Chronic Medical nor Behavioral Conditions | All Cohorts Combined |
|---|---|---|---|---|---|
| **Commercial, 2011 Costs** | $1,183.92 | $373.65 | $660.70 | $160.36 | $334.53 |
| **Medicare <65, 2011 Costs** | $947.89 | $230.89 | $696.63 | $131.49 | $322.88 |
| **Medicare 65+, 2011 Costs** | $1,353.76 | $687.39 | $602.39 | $117.12 | $352.12 |

We then used these 2011 calendar year PMPM costs as our baseline costs for the Commercial and Medicare populations and developed adjustments for annual utilization and unit cost trends by service category and beneficiary type. These baseline healthcare costs PMPM and our selected annual trend assumptions for utilization and unit cost trends were used to project the Base Year cost information (CY2014) PMPM costs and the three model test years (CY2015, CY2016 and CY2017) for the Financial Plan template. Table 17 below shows the historical baseline PMPM costs for the target populations by service category, for each eligibility category.

We did not include prescription drug costs for the Medicare population because the template instructions specified Medicare Parts A and B on every tab but Table 4A (See Appendix). There are some small amounts of Medicare prescription drug (outpatient) costs included in the summaries and the template due to office-administered drugs in the medical claims data.

The membership populations underlying our PMPM claim cost development represent a subset of the Colorado state totals for each eligibility type. We used publicly available data sources to balance our membership to Colorado state totals by eligibility type, including U.S. Census data, State Health Facts as published by the Kaiser Foundation, estimates of potential new covered lives through Medicaid expansion, etc. This represents 100% of the estimated Colorado population in 2012. We then applied population growth estimates for each eligibility type to project total eligible lives through the 5-year projection period. We then assumed a ramp-up period for PCP participation and patient access to the care provided by the interventions: 50% in year one of the program, 65% in year two, and 80% in year three, which is consistent with the grant requirement of at least 80% participation for the pilot program. Years four and five also expect increased participation and access, at 85% and then 90%. These percentages were applied to the total projected Colorado population, by eligibility type, for each year. Because of the significant change in each eligible group's population year over year, we decided to add these eligibility/participation counts for reference into the financial template where applicable.

**Table 17: Baseline Per Member Per Month Costs by Eligibility Category and Service Category**

| Service Category | Medicaid/CHIP | | | | Commercial | Medicare | |
| | Adult | Child | Dual Eligible (Medicaid Only) | People with diabilities/ Elderly (No Duals) | Total | Dual Eligible | Fee for Service/Non-Duals (Parts A and B) |
|---|---|---|---|---|---|---|---|
| Inpatient Hospital | $85.41 | $14.21 | $25.65 | $79.80 | $73.56 | $306.31 | $141.72 |
| Outpatient Hospital (total) | $123.99 | $39.21 | $64.28 | $120.23 | $133.19 | $133.92 | $70.94 |
| *Emergency Dept (subtotal)* | *$9.70* | *$2.89* | *$4.11* | *$3.25* | *$4.55* | *$22.04* | *$7.87* |
| Professional Primary Care | $15.62 | $9.69 | $9.79 | $6.12 | $15.97 | $11.38 | $16.27 |
| Professional Specialty Care | $38.35 | $17.89 | $1.84 | $12.54 | $23.09 | $21.66 | $15.27 |
| Diagnostic Imaging/X-Ray | $5.28 | $0.58 | $4.22 | $2.02 | $7.76 | $9.65 | $9.06 |
| Laboratory Services | $7.00 | $1.17 | $3.42 | $1.45 | $6.62 | $8.51 | $6.41 |
| DME | $32.60 | $3.24 | $9.59 | $47.30 | $3.98 | $28.93 | $13.82 |
| Dialysis Procedures | $0.16 | $0.00 | $0.30 | $0.38 | $0.06 | $0.21 | $1.02 |
| Professional Other (e.g., PT, OT) | $4.68 | $3.34 | $0.26 | $0.26 | $4.06 | $3.42 | $4.68 |
| Skilled Nursing Facility | $37.62 | $0.00 | $0.00 | $708.97 | $0.71 | $78.66 | $38.46 |
| Home Health | $58.27 | $3.53 | $1.73 | $33.10 | $2.13 | $28.33 | $18.26 |
| ICF/MR | $20.70 | $0.00 | $0.00 | $10.65 | $0.00 | $0.00 | $0.00 |
| Home and Community-Based Services | $240.46 | $1.67 | $0.00 | $341.95 | $0.00 | $0.00 | $0.00 |
| Other | $5.90 | $3.94 | $0.41 | $4.70 | $2.01 | $1.85 | $2.97 |
| *Subtotal* | *$676.05* | *$98.47* | *$121.49* | *$1,369.47* | *$273.13* | *$632.83* | *$338.88* |
| Prescription Drugs (Outpatient) | $114.71 | $22.08 | $75.10 | $52.01 | $61.41 | $8.56 | $10.36 |
| **Total** | **$790.76** | **$120.55** | **$196.59** | **$1,421.49** | **$334.53** | **$641.39** | **$349.24** |

These starting costs (plus trends) were used to project the 2012 PMPM costs to the Baseline Year of the Financial Plan template (CY2014) and to project Test Period Years 1, 2 and 3 of the award period (CY2015 – CY2017). Our trend rates can be found in the various tabs of the Financial Template (See Appendix). Utilization trends can be found in Table 2D, as the percent changes between program years. Similarly, average unit cost trends can be found in Table 2E, as the percent changes between program years. Historical costs from Table 2, trended from the baseline period using these annual trend rates, are the costs entered in "Year 0" of the template. Projecting these costs for three more years yields the results that are entered in Test Periods 1, 2 and 3 of the template.

We then developed assumptions for the expected impact of our integrated medical-behavioral initiative for each of the healthcare service categories, separately for each eligibility category. We developed separate assumptions for the impact of the Colorado Framework on utilization levels and also on average unit costs. Some service categories were projected to have decreases in utilization and are shown as negative numbers in the tables below, while some have increases in utilization and are shown with positive numbers. We project that the Framework can impact some average unit costs by service category. In the Appendix, the values in Table 3 are cumulative, that is savings in Year 2 are in addition to savings in year 1, etc. Tables 3A – 3Q show these management impact factors by eligibility cohort.

**Results and Savings by Eligibility Category and Cohort**

**Table 18: Commercial, No Chronic Conditions – Expected Impact of Management**

| Service Category | Utilization Levels | | | Average Charge Levels | | |
|---|---|---|---|---|---|---|
| | Year 1 2015 | Year 2 2016 | Year 3 2017 | Year 1 2015 | Year 2 2016 | Year 3 2017 |
| Inpatient Hospital - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Inpatient Hospital - Behavioral | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Outpatient Hospital - Behavioral | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Emergency Services | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Professional Primary Care - Physical | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Professional Specialty Care - Behavioral | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Diagnostic Imaging/X-Ray | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Laboratory Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Durable Medical Equipment/Prosthetics | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dialysis Procedures | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Skilled Nursing Facility | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Long Term Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Hospice | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home Health Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Ambulance | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Prescription Drugs - Physical | 1.00% | 0.50% | 0.25% | -1.50% | -0.75% | -0.38% |
| Prescription Drugs - Behavioral | 2.00% | 1.00% | 0.50% | -1.50% | -0.75% | -0.38% |
| ICF/MR | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home and Community-Based Services | 0.50% | 0.25% | 0.13% | -1.00% | 0.00% | 0.00% |
| Professional Other | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| All Other Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

**Table 19: Commercial, Chronic Medical Conditions – Expected Impact of Management**

| Service Category | Utilization Levels | | | Average Charge Levels | | |
|---|---|---|---|---|---|---|
| | Year 1 2015 | Year 2 2016 | Year 3 2017 | Year 1 2015 | Year 2 2016 | Year 3 2017 |
| Inpatient Hospital - Physical | -1.00% | -0.50% | -0.25% | -1.00% | 0.00% | 0.00% |
| Inpatient Hospital - Behavioral | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Physical | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Behavioral | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Emergency Services | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Professional Primary Care - Physical | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Physical | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Behavioral | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Diagnostic Imaging/X-Ray | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Laboratory Services | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Durable Medical Equipment/Prosthetics | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dialysis Procedures | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Skilled Nursing Facility | -0.50% | -0.25% | -0.13% | -1.00% | 0.00% | 0.00% |
| Long Term Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Hospice | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home Health Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Ambulance | -1.00% | -0.50% | -0.25% | -1.00% | 0.00% | 0.00% |
| Prescription Drugs - Physical | 1.00% | 0.50% | 0.25% | -1.50% | -0.75% | -0.38% |
| Prescription Drugs - Behavioral | 2.00% | 1.00% | 0.50% | -1.50% | -0.75% | -0.38% |
| ICF/MR | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home and Community-Based Services | 0.50% | 0.25% | 0.13% | -1.00% | 0.00% | 0.00% |
| Professional Other | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| All Other Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

**Table 20: Commercial, Chronic Behavioral Conditions – Expected Impact of Management**

| Service Category | Utilization Levels | | | Average Charge Levels | | |
|---|---|---|---|---|---|---|
| | Year 1 2015 | Year 2 2016 | Year 3 2017 | Year 1 2015 | Year 2 2016 | Year 3 2017 |
| Inpatient Hospital - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Inpatient Hospital - Behavioral | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Outpatient Hospital - Behavioral | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Emergency Services | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Professional Primary Care - Physical | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Professional Specialty Care - Behavioral | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Diagnostic Imaging/X-Ray | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Laboratory Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Durable Medical Equipment/Prosthetics | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dialysis Procedures | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Skilled Nursing Facility | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Long Term Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Hospice | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home Health Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Ambulance | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Prescription Drugs - Physical | 1.00% | 0.50% | 0.25% | -1.50% | -0.75% | -0.38% |
| Prescription Drugs - Behavioral | 2.00% | 1.00% | 0.50% | -1.50% | -0.75% | -0.38% |
| ICF/MR | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home and Community-Based Services | 0.50% | 0.25% | 0.13% | -1.00% | 0.00% | 0.00% |
| Professional Other | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| All Other Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

**Table 21: Commercial, Chronic Comorbid Medical and Behavioral Conditions – Expected Impact of Management**

| Service Category | Utilization Levels | | | Average Charge Levels | | |
|---|---|---|---|---|---|---|
| | Year 1 2015 | Year 2 2016 | Year 3 2017 | Year 1 2015 | Year 2 2016 | Year 3 2017 |
| Inpatient Hospital - Physical | -1.00% | -0.50% | -0.25% | -1.00% | 0.00% | 0.00% |
| Inpatient Hospital - Behavioral | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Physical | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Behavioral | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Emergency Services | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Professional Primary Care - Physical | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Physical | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Behavioral | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Diagnostic Imaging/X-Ray | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Laboratory Services | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Durable Medical Equipment/Prosthetics | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dialysis Procedures | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Skilled Nursing Facility | -0.50% | -0.25% | -0.13% | -1.00% | 0.00% | 0.00% |
| Long Term Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Hospice | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home Health Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Ambulance | -1.00% | -0.50% | -0.25% | -1.00% | 0.00% | 0.00% |
| Prescription Drugs - Physical | 1.00% | 0.50% | 0.25% | -1.50% | -0.75% | -0.38% |
| Prescription Drugs - Behavioral | 2.00% | 1.00% | 0.50% | -1.50% | -0.75% | -0.38% |
| ICF/MR | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home and Community-Based Services | 0.50% | 0.25% | 0.13% | -1.00% | 0.00% | 0.00% |
| Professional Other | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| All Other Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

**Table 22: Medicaid Adults – Expected Impact of Management**

| Service Category | Utilization Levels | | | Average Charge Levels | | |
|---|---|---|---|---|---|---|
| | Year 1 2015 | Year 2 2016 | Year 3 2017 | Year 1 2015 | Year 2 2016 | Year 3 2017 |
| Inpatient Hospital - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Inpatient Hospital - Behavioral | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Outpatient Hospital - Behavioral | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Emergency Services | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Professional Primary Care - Physical | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Professional Specialty Care - Behavioral | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Diagnostic Imaging/X-Ray | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Laboratory Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Durable Medical Equipment/Prosthetics | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dialysis Procedures | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Skilled Nursing Facility | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Long Term Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Hospice | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home Health Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Ambulance | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Prescription Drugs - Physical | 1.00% | 0.50% | 0.25% | -1.50% | -0.75% | -0.38% |
| Prescription Drugs - Behavioral | 2.00% | 1.00% | 0.50% | -1.50% | -0.75% | -0.38% |
| ICF/MR | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home and Community-Based Services | 0.50% | 0.25% | 0.13% | -1.00% | 0.00% | 0.00% |
| Professional Other | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| All Other Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

**Table 23: Medicaid Kids – Expected Impact of Management**

| | Utilization Levels | | | Average Charge Levels | | |
|---|---|---|---|---|---|---|
| Service Category | Year 1 2015 | Year 2 2016 | Year 3 2017 | Year 1 2015 | Year 2 2016 | Year 3 2017 |
| Inpatient Hospital - Physical | -1.00% | -0.50% | -0.25% | -1.00% | 0.00% | 0.00% |
| Inpatient Hospital - Behavioral | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Physical | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Behavioral | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Emergency Services | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Professional Primary Care - Physical | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Physical | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Behavioral | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Diagnostic Imaging/X-Ray | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Laboratory Services | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Durable Medical Equipment/Prosthetics | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dialysis Procedures | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Skilled Nursing Facility | -0.50% | -0.25% | -0.13% | -1.00% | 0.00% | 0.00% |
| Long Term Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Hospice | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home Health Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Ambulance | -1.00% | -0.50% | -0.25% | -1.00% | 0.00% | 0.00% |
| Prescription Drugs - Physical | 1.00% | 0.50% | 0.25% | -1.50% | -0.75% | -0.38% |
| Prescription Drugs - Behavioral | 2.00% | 1.00% | 0.50% | -1.50% | -0.75% | -0.38% |
| ICF/MR | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home and Community-Based Services | 0.50% | 0.25% | 0.13% | -1.00% | 0.00% | 0.00% |
| Professional Other | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| All Other Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

**Table 24: Medicaid Disabled/Elderly – Expected Impact of Management**

| | Utilization Levels | | | Average Charge Levels | | |
|---|---|---|---|---|---|---|
| Service Category | Year 1 2015 | Year 2 2016 | Year 3 2017 | Year 1 2015 | Year 2 2016 | Year 3 2017 |
| Inpatient Hospital - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Inpatient Hospital - Behavioral | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Outpatient Hospital - Behavioral | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Emergency Services | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Professional Primary Care - Physical | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Professional Specialty Care - Behavioral | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Diagnostic Imaging/X-Ray | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Laboratory Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Durable Medical Equipment/Prosthetics | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dialysis Procedures | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Skilled Nursing Facility | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Long Term Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Hospice | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home Health Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Ambulance | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Prescription Drugs - Physical | 1.00% | 0.50% | 0.25% | -1.50% | -0.75% | -0.38% |
| Prescription Drugs - Behavioral | 2.00% | 1.00% | 0.50% | -1.50% | -0.75% | -0.38% |
| ICF/MR | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home and Community-Based Services | 0.50% | 0.25% | 0.13% | -1.00% | 0.00% | 0.00% |
| Professional Other | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| All Other Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

**Table 25: Medicaid Dual Eligible – Expected Impact of Management**

| Service Category | Utilization Levels | | | Average Charge Levels | | |
|---|---|---|---|---|---|---|
| | Year 1 2015 | Year 2 2016 | Year 3 2017 | Year 1 2015 | Year 2 2016 | Year 3 2017 |
| Inpatient Hospital - Physical | -1.00% | -0.50% | -0.25% | -1.00% | 0.00% | 0.00% |
| Inpatient Hospital - Behavioral | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Physical | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Behavioral | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Emergency Services | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Professional Primary Care - Physical | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Physical | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Behavioral | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Diagnostic Imaging/X-Ray | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Laboratory Services | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Durable Medical Equipment/Prosthetics | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dialysis Procedures | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Skilled Nursing Facility | -0.50% | -0.25% | -0.13% | -1.00% | 0.00% | 0.00% |
| Long Term Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Hospice | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home Health Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Ambulance | -1.00% | -0.50% | -0.25% | -1.00% | 0.00% | 0.00% |
| Prescription Drugs - Physical | 1.00% | 0.50% | 0.25% | -1.50% | -0.75% | -0.38% |
| Prescription Drugs - Behavioral | 2.00% | 1.00% | 0.50% | -1.50% | -0.75% | -0.38% |
| ICF/MR | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home and Community-Based Services | 0.50% | 0.25% | 0.13% | -1.00% | 0.00% | 0.00% |
| Professional Other | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| All Other Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

**Table 26: Medicare Dual Eligible – Expected Impact of Management**

| | Utilization Levels | | | Average Charge Levels | | |
|---|---|---|---|---|---|---|
| Service Category | Year 1 2015 | Year 2 2016 | Year 3 2017 | Year 1 2015 | Year 2 2016 | Year 3 2017 |
| Inpatient Hospital - Physical | -1.00% | -0.50% | -0.25% | -1.00% | 0.00% | 0.00% |
| Inpatient Hospital - Behavioral | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Physical | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Behavioral | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Emergency Services | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Professional Primary Care - Physical | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Physical | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Behavioral | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Diagnostic Imaging/X-Ray | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Laboratory Services | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Durable Medical Equipment/Prosthetics | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dialysis Procedures | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Skilled Nursing Facility | -0.50% | -0.25% | -0.13% | -1.00% | 0.00% | 0.00% |
| Long Term Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Hospice | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home Health Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Ambulance | -1.00% | -0.50% | -0.25% | -1.00% | 0.00% | 0.00% |
| Prescription Drugs - Physical | 1.00% | 0.50% | 0.25% | -1.50% | -0.75% | -0.38% |
| Prescription Drugs - Behavioral | 2.00% | 1.00% | 0.50% | -1.50% | -0.75% | -0.38% |
| ICF/MR | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home and Community-Based Services | 0.50% | 0.25% | 0.13% | -1.00% | 0.00% | 0.00% |
| Professional Other | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| All Other Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

**Table 27: Medicare Under Age 65, No Chronic Conditions – Expected Impact of Management**

| | Utilization Levels | | | Average Charge Levels | | |
|---|---|---|---|---|---|---|
| Service Category | Year 1 2015 | Year 2 2016 | Year 3 2017 | Year 1 2015 | Year 2 2016 | Year 3 2017 |
| Inpatient Hospital - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Inpatient Hospital - Behavioral | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Outpatient Hospital - Behavioral | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Emergency Services | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Professional Primary Care - Physical | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Professional Specialty Care - Behavioral | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Diagnostic Imaging/X-Ray | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Laboratory Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Durable Medical Equipment/Prosthetics | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dialysis Procedures | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Skilled Nursing Facility | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Long Term Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Hospice | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home Health Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Ambulance | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Prescription Drugs - Physical | 1.00% | 0.50% | 0.25% | -1.50% | -0.75% | -0.38% |
| Prescription Drugs - Behavioral | 2.00% | 1.00% | 0.50% | -1.50% | -0.75% | -0.38% |
| ICF/MR | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home and Community-Based Services | 0.50% | 0.25% | 0.13% | -1.00% | 0.00% | 0.00% |
| Professional Other | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| All Other Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

**Table 28: Medicare Under Age 65, Chronic Medical Conditions – Expected Impact of Management**

| Service Category | Utilization Levels | | | Average Charge Levels | | |
|---|---|---|---|---|---|---|
| | Year 1 2015 | Year 2 2016 | Year 3 2017 | Year 1 2015 | Year 2 2016 | Year 3 2017 |
| Inpatient Hospital - Physical | -1.00% | -0.50% | -0.25% | -1.00% | 0.00% | 0.00% |
| Inpatient Hospital - Behavioral | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Physical | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Behavioral | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Emergency Services | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Professional Primary Care - Physical | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Physical | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Behavioral | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Diagnostic Imaging/X-Ray | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Laboratory Services | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Durable Medical Equipment/Prosthetics | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dialysis Procedures | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Skilled Nursing Facility | -0.50% | -0.25% | -0.13% | -1.00% | 0.00% | 0.00% |
| Long Term Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Hospice | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home Health Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Ambulance | -1.00% | -0.50% | -0.25% | -1.00% | 0.00% | 0.00% |
| Prescription Drugs - Physical | 1.00% | 0.50% | 0.25% | -1.50% | -0.75% | -0.38% |
| Prescription Drugs - Behavioral | 2.00% | 1.00% | 0.50% | -1.50% | -0.75% | -0.38% |
| ICF/MR | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home and Community-Based Services | 0.50% | 0.25% | 0.13% | -1.00% | 0.00% | 0.00% |
| Professional Other | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| All Other Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

**Table 29: Medicare Under Age 65, Chronic Behavioral Conditions – Expected Impact of Management**

| Service Category | Utilization Levels | | | Average Charge Levels | | |
|---|---|---|---|---|---|---|
| | Year 1 2015 | Year 2 2016 | Year 3 2017 | Year 1 2015 | Year 2 2016 | Year 3 2017 |
| Inpatient Hospital - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Inpatient Hospital - Behavioral | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Outpatient Hospital - Behavioral | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Emergency Services | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Professional Primary Care - Physical | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Professional Specialty Care - Behavioral | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Diagnostic Imaging/X-Ray | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Laboratory Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Durable Medical Equipment/Prosthetics | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dialysis Procedures | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Skilled Nursing Facility | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Long Term Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Hospice | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home Health Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Ambulance | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Prescription Drugs - Physical | 1.00% | 0.50% | 0.25% | -1.50% | -0.75% | -0.38% |
| Prescription Drugs - Behavioral | 2.00% | 1.00% | 0.50% | -1.50% | -0.75% | -0.38% |
| ICF/MR | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home and Community-Based Services | 0.50% | 0.25% | 0.13% | -1.00% | 0.00% | 0.00% |
| Professional Other | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| All Other Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

**Table 30: Medicare Under Age 65, Chronic Comorbid Medical and Behavioral Conditions – Expected Impact of Management**

| Service Category | Utilization Levels | | | Average Charge Levels | | |
|---|---|---|---|---|---|---|
| | Year 1 2015 | Year 2 2016 | Year 3 2017 | Year 1 2015 | Year 2 2016 | Year 3 2017 |
| Inpatient Hospital - Physical | -1.00% | -0.50% | -0.25% | -1.00% | 0.00% | 0.00% |
| Inpatient Hospital - Behavioral | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Physical | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Behavioral | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Emergency Services | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Professional Primary Care - Physical | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Physical | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Behavioral | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Diagnostic Imaging/X-Ray | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Laboratory Services | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Durable Medical Equipment/Prosthetics | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dialysis Procedures | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Skilled Nursing Facility | -0.50% | -0.25% | -0.13% | -1.00% | 0.00% | 0.00% |
| Long Term Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Hospice | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home Health Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Ambulance | -1.00% | -0.50% | -0.25% | -1.00% | 0.00% | 0.00% |
| Prescription Drugs - Physical | 1.00% | 0.50% | 0.25% | -1.50% | -0.75% | -0.38% |
| Prescription Drugs - Behavioral | 2.00% | 1.00% | 0.50% | -1.50% | -0.75% | -0.38% |
| ICF/MR | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home and Community-Based Services | 0.50% | 0.25% | 0.13% | -1.00% | 0.00% | 0.00% |
| Professional Other | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| All Other Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

**Table 31: Medicare Over Age 65, No Chronic Conditions – Expected Impact of Management**

| Service Category | Utilization Levels | | | Average Charge Levels | | |
|---|---|---|---|---|---|---|
| | Year 1 2015 | Year 2 2016 | Year 3 2017 | Year 1 2015 | Year 2 2016 | Year 3 2017 |
| Inpatient Hospital - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Inpatient Hospital - Behavioral | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Outpatient Hospital - Behavioral | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Emergency Services | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Professional Primary Care - Physical | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Professional Specialty Care - Behavioral | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Diagnostic Imaging/X-Ray | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Laboratory Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Durable Medical Equipment/Prosthetics | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dialysis Procedures | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Skilled Nursing Facility | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Long Term Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Hospice | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home Health Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Ambulance | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Prescription Drugs - Physical | 1.00% | 0.50% | 0.25% | -1.50% | -0.75% | -0.38% |
| Prescription Drugs - Behavioral | 2.00% | 1.00% | 0.50% | -1.50% | -0.75% | -0.38% |
| ICF/MR | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home and Community-Based Services | 0.50% | 0.25% | 0.13% | -1.00% | 0.00% | 0.00% |
| Professional Other | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| All Other Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

**Table 32: Medicare Over Age 65, Chronic Medical Conditions – Expected Impact of Management**

| Service Category | Utilization Levels | | | Average Charge Levels | | |
|---|---|---|---|---|---|---|
| | Year 1 2015 | Year 2 2016 | Year 3 2017 | Year 1 2015 | Year 2 2016 | Year 3 2017 |
| Inpatient Hospital - Physical | -1.00% | -0.50% | -0.25% | -1.00% | 0.00% | 0.00% |
| Inpatient Hospital - Behavioral | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Physical | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Behavioral | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Emergency Services | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Professional Primary Care - Physical | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Physical | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Behavioral | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Diagnostic Imaging/X-Ray | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Laboratory Services | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Durable Medical Equipment/Prosthetics | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dialysis Procedures | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Skilled Nursing Facility | -0.50% | -0.25% | -0.13% | -1.00% | 0.00% | 0.00% |
| Long Term Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Hospice | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home Health Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Ambulance | -1.00% | -0.50% | -0.25% | -1.00% | 0.00% | 0.00% |
| Prescription Drugs - Physical | 1.00% | 0.50% | 0.25% | -1.50% | -0.75% | -0.38% |
| Prescription Drugs - Behavioral | 2.00% | 1.00% | 0.50% | -1.50% | -0.75% | -0.38% |
| ICF/MR | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home and Community-Based Services | 0.50% | 0.25% | 0.13% | -1.00% | 0.00% | 0.00% |
| Professional Other | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| All Other Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

**Table 33: Medicare Over Age 65, Chronic Behavioral Conditions – Expected Impact of Management**

| Service Category | Utilization Levels | | | Average Charge Levels | | |
|---|---|---|---|---|---|---|
| | Year 1 2015 | Year 2 2016 | Year 3 2017 | Year 1 2015 | Year 2 2016 | Year 3 2017 |
| Inpatient Hospital - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Inpatient Hospital - Behavioral | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Outpatient Hospital - Behavioral | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Emergency Services | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Professional Primary Care - Physical | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Physical | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Professional Specialty Care - Behavioral | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Diagnostic Imaging/X-Ray | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Laboratory Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Durable Medical Equipment/Prosthetics | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dialysis Procedures | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Skilled Nursing Facility | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Long Term Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Hospice | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home Health Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Ambulance | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Prescription Drugs - Physical | 1.00% | 0.50% | 0.25% | -1.50% | -0.75% | -0.38% |
| Prescription Drugs - Behavioral | 2.00% | 1.00% | 0.50% | -1.50% | -0.75% | -0.38% |
| ICF/MR | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home and Community-Based Services | 0.50% | 0.25% | 0.13% | -1.00% | 0.00% | 0.00% |
| Professional Other | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| All Other Services | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

**Table 34: Medicare Over Age 65, Chronic Comorbid Medical and Behavioral Conditions – Expected Impact of Management**

| Service Category | Utilization Levels | | | Average Charge Levels | | |
|---|---|---|---|---|---|---|
| | Year 1 2015 | Year 2 2016 | Year 3 2017 | Year 1 2015 | Year 2 2016 | Year 3 2017 |
| Inpatient Hospital - Physical | -1.00% | -0.50% | -0.25% | -1.00% | 0.00% | 0.00% |
| Inpatient Hospital - Behavioral | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Physical | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| Outpatient Hospital - Behavioral | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Emergency Services | -2.00% | -1.00% | -0.50% | -1.00% | 0.00% | 0.00% |
| Professional Primary Care - Physical | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Physical | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Professional Specialty Care - Behavioral | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Diagnostic Imaging/X-Ray | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Laboratory Services | 2.00% | 1.00% | 0.50% | -1.00% | 0.00% | 0.00% |
| Durable Medical Equipment/Prosthetics | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Dialysis Procedures | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Skilled Nursing Facility | -0.50% | -0.25% | -0.13% | -1.00% | 0.00% | 0.00% |
| Long Term Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Hospice | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home Health Care | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Ambulance | -1.00% | -0.50% | -0.25% | -1.00% | 0.00% | 0.00% |
| Prescription Drugs - Physical | 1.00% | 0.50% | 0.25% | -1.50% | -0.75% | -0.38% |
| Prescription Drugs - Behavioral | 2.00% | 1.00% | 0.50% | -1.50% | -0.75% | -0.38% |
| ICF/MR | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Home and Community-Based Services | 0.50% | 0.25% | 0.13% | -1.00% | 0.00% | 0.00% |
| Professional Other | 1.00% | 0.50% | 0.25% | -1.00% | 0.00% | 0.00% |
| All Other Service | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

Based on these tables and the expected effects of integration savings in the first 3 years of the Colorado Framework could save hundreds of millions of dollars (see Appendix).

# CHAPTER 10: EVALUATING COLORADO'S STATE HEALTH INNOVATION PLAN

Colorado's SHIP highlights the state-wide efforts to achieve the Triple Aim in Colorado. This plan will change as milestones are achieved and as we learn from experiences and implementation. Prior to the implementation of the SHIP, and specifically the model, we will work with evaluation consultants to develop a comprehensive plan that will track progress throughout the implementation period. Colorado's evaluation plan will be based on the state's driver diagram to ensure progress aligns with the state's goals and aims. The state will employ a multi-level strategy to evaluate the extent to which the state innovation plan and delivery model is implemented, which variants of basic model seem especially successful and efficient, its effect on health care spending, and its impact on health care quality and population health. To assess the full impact of the state innovation plan, we will use data from multiple sources including providers and practices, patients, insurers, community organizations and key stakeholders.

**Figure 25: The Innovation Plan Driver Diagram:**
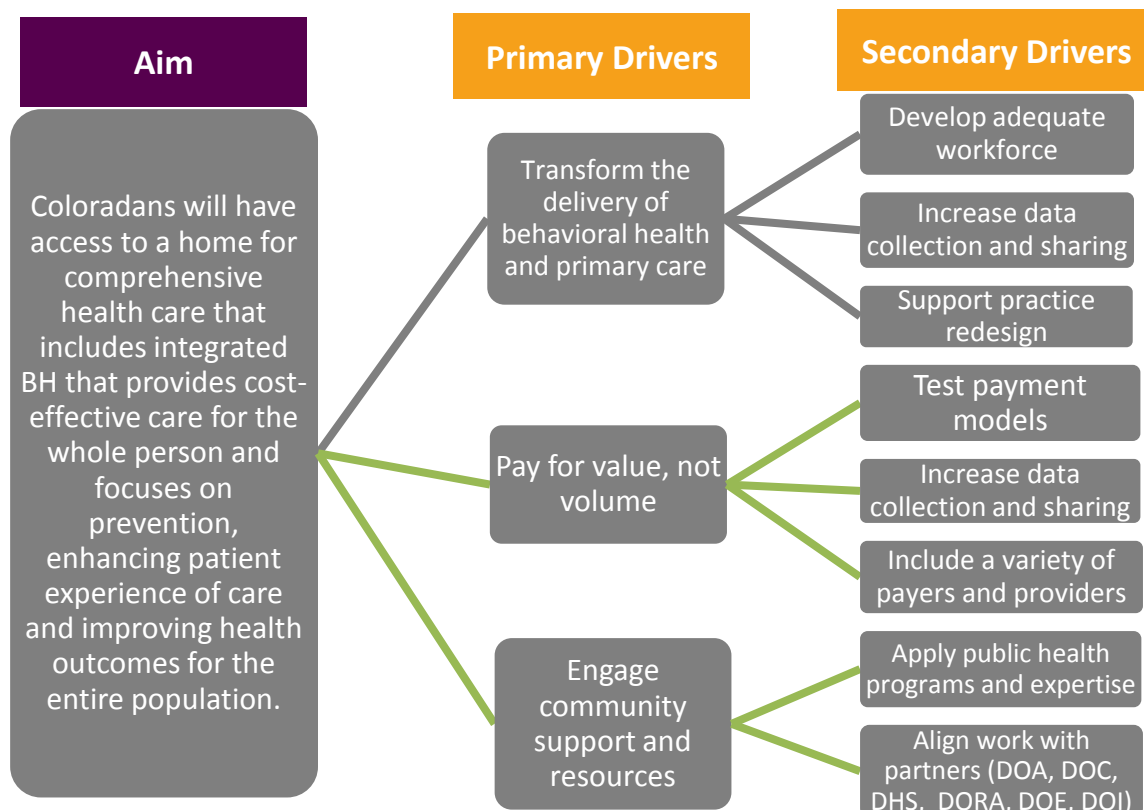
**Evaluating the Delivery Model**

Colorado's model to integrate behavioral health into primary care will be evaluated using a mixed methods approach based on the RE-AIM framework (please see delivery model chapter for more detail). The evaluation will include measures of integration to assess the degree to which the model and the key elements of integration are implemented. The model evaluation will also examine the impact of the model on important clinical, financial, and experience of care outcomes.

As much as possible, the outcome measures will align with existing measures for current initiatives in the state, including ACC and CPC Initiative measures. With the CPC Initiative's emphasis on CMS's Adult Medicaid Core Measures, there is already widespread agreement on this as an initial set of common measures. In addition, the CPC initiative utilizes patient and family as well as provider satisfaction data to evaluate quality of care. A similar methodology will be reviewed for SIM.

A set of clinical measures (shown in the table below) that has been developed for the SHAPE project, is currently being considered for the model evaluation. The state will work with stakeholders to review the SHAPE minimal data set, which builds on ACC and CPC measures and adds three behavioral health measures. The combination of process and outcome measures included in the SHAPE minimal data set can be used not only at the practice level for continuous quality improvement, but also as tools for evaluating health care quality and population health.

**Table 35: SHAPE Minimal Data Set**

| Measure | Citation | Steward |
|---|---|---|
| Diabetes: Low Density Lipoprotein (LDL) Management and Control. | NQF #0064 | NCQA |
| Controlling high blood pressure | NQF #0018 | NCQA |
| Preventive Care and Screening: Screening for Clinical Depression and Follow-up Plan | NQF #0418 | CMS |
| Adult BMI Assessment | NQF #0421 | NCQA |
| Comprehensive diabetes care - HbA1c poorly controlled (>9.0%) | NQF #0059 | NCQA |
| General anxiety disorder - GAD-7 or equivalent to show change.<br>• Percentage of patients 18-75 screened annually for general | | SHAPE |

| | | |
|---|---|---|
| anxiety disorder using the GAD-7 or equivalent. <br> • AND of those patients with GAD, percentage of patients with an improved GAD-7 score | | |
| Substance abuse disorder - AUDIT or equivalent to show change. <br> • Percentage of patients 18-75 screened annually for substance abuse using the AUDIT or equivalent. <br> • Of the patients w substance abuse disorder, percentage of patients w an improved AUDIT score. | | SHAPE |
| Tobacco Use Assessment and Tobacco Cessation Intervention | NQF #0028 | AMA-PCPI |

Patient, caregiver, and provider surveys will be used to assess satisfaction and quality of care. Site surveys are an important component of the evaluation and may be facilitated by the health extension service. In addition, based on the recommendations of the evaluation team, we will facilitate focus groups to identify the patient experience with integrated behavioral health and to foster dialog and feedback throughout the program. The surveys as well as the focus groups will allow an in-depth analysis of individuals' experience with access to care and identify gaps and opportunities for improvement.

The evaluation of the model will also include a plan to evaluate spending and determine the extent to which cost-savings and cost offsets are achieved. As behavioral health is integrated into the primary care setting it is necessary to evaluate the additional costs incurred as investments in health and build in the potential for cost savings in the middle to long term.

**Existing and Potential Sources for Data**

Table 36 identifies current existing data sources utilized in Colorado. As the evaluation plan for is developed these sources of data may be useful in capturing the components of the Triple Aim.

**Table 36: Current Data Sources in Colorado**

| Clinical and Population Data Sources | Claims Data Sources | Survey Data Sources |
|---|---|---|
| Practice level quality measures—process and outcome –from registries and HIE | APCD | CAHPS |
| HEDIS | SDAC | PAM |
| CDPHE Disease surveillance databases | HEDIS | CHAS |
| LPHA's | Medicare Administrative Claims Data | BRFSS |

The Colorado Department of Public Health and Environment, HCPF, and the Colorado Department of Human Services is creating a Tri-agency Collaborative Data Set that would ensure a highly effective, efficient, and elegant service system infrastructure to further integrated health care service and improve behavioral health care in the State of Colorado. This data set will combine the Governor's State of Health Goals, the Colorado Winnable Battles and essential measures from each of the three departments and place them in a framework that emphasizes the social determinants of health. This will align the measures with the state's goals to minimize duplication and streamline the evaluation of public health across the state. These measures will complement the clinical measures highlighted above and further align the evaluation throughout the continuum of health and well-being for the state. These measures will be publically reported on an annual base with the potential for quarterly reporting on some measures.

In addition to the above-mentioned measures, the evaluation of the state innovation plan will include focus groups of consumers and stakeholders to evaluate the impact of the plan components that are not measured in the delivery model focus groups. This may include focus groups of HIE stakeholders, public health and community organization representatives, different workforce groups or other entities identified as levers or  key components in the state plan. Ensuring that all populations benefit from the state innovation plan and that health disparities are reduced, not exacerbated is crucial to success.

As outlined above, the goal is to minimize the administrative burden for providers, insurers and public agencies while aligning measures that are used for the evaluation. The evaluation contractor will work with stakeholder groups to minimize the need for new data collection procedures. At this point there is no plan to modify existing data or add new procedures, other that the addition of the behavioral health measures listed in the SHAPE minimal data set.

The evaluation plan will provide two core functions: it will evaluate the impact of our interventions, and it will provide continuous feedback to foster improvement. The health extension service as well as the exiting RCCO infrastructure will provide a platform for feedback and learning. An entity such as a University-based evaluation team will possess the necessary expertise and operational capacity to develop and facilitate a statewide evaluation plan.

# CHAPTER 11: MANAGING THE INNOVATION PLAN

Colorado's State Health Innovation Plan (SHIP) seeks to build a comprehensive and person-centered statewide system that works to deliver the best care at the best value, and helps Coloradans achieve the best health possible. It is an extension of several goals and metrics identified in Governor John Hickenlooper's report, *The State of Health: Colorado's Commitment to Become the Healthiest State*.[126] The State of Health lays out the administration's vision for health and sets objectives across four dimensions, all of which have the potential to impact and be impacted by the integration of physical and behavioral health:

- <u>Promoting prevention and wellness</u>: Integrated primary care will facilitate better health behaviors, enabling individuals to reduce substance dependence and maintain or achieve a healthy weight, among other behaviors.
- <u>Expanding coverage, access and capacity</u>: By committing to integrated primary care, we are also committing to building a healthcare workforce capable of achieving our goal and ensuring access to integrated care.
- <u>Improving health system integration and quality</u>: Building integrated primary care atop our strong foundation of primary care medical homes and other system-level innovations will support its long-term sustainability.
- <u>Enhancing value and strengthening sustainability:</u> Integrated care will help us achieve our Triple Aim goals.

The State of Health and the SHIP are complementary declarations of our administration's commitment to making Colorado the healthiest state. As such, the SHIP will be owned and managed by the administration with continued contributions from and input of stakeholders and partners. In developing the SHIP, stakeholders have made careful choices about how to balance competing priorities in order to best accomplish its charge. This balancing of priorities will continue to be important as we move forward.

Determining a precise management structure for the Colorado Framework model and the SHIP's implementation is premature in the absence of implementation funding. However, we will ensure the plan continues to make progress by:

- Continuing to discuss the SHIP, emerging issues and concerns with the Steering Committee and other stakeholders in order to build additional support to implement the Colorado Framework;

- Beginning to develop a funding and implementation framework once sufficient funding streams become apparent; and

- Prioritizing the Plan's recommendations in the event implementation must occur in a partial or phased approach.

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