COLORADO
Lieutenant Governor Dianne Primavera

January 17, 2020

Greetings:

The Colorado State Innovation Model (SIM) changed the way health care is delivered and paid for in Colorado. And while SIM's overarching objectives were directed at systemic reforms across the state's health care landscape, at its core, the initiative was about people- and improving the health of Coloradans by increasing access to "whole person" care.

The final evaluation reports now available on the SIM website – including the SIM Final Report, SIM Final Evaluation Outcomes Report, SIM Final Evaluation Process Report, and SIM Return on Investment (ROI) Analysis – offer a detailed analysis on SIM's many successes, as well as the challenges and lessons learned.

While SIM officially came to an end on July 31, 2019, its impact will be felt for years to come. As Governor Polis and I continue to work with all of you to help implement our "Roadmap to Saving Coloradans Money on Health Care," the following SIM lessons and findings will be at the top of our minds:

- **Integrated physical and behavioral health results in cost savings**. Results from the analyses of SIM's ROI are extremely encouraging, showing an estimated cost savings of $178.6 million through January 1, 2018. In addition, several cost and utilization measures analyzed in the SIM Final Evaluation Outcomes report also showed positive impacts- such as a reduction in emergency department utilization, and lower rates of 30-day hospital readmissions for mental health conditions. Evaluators used different methodologies to calculate cost savings (or avoided costs), and the results of their analyses raise questions that merit future investigation and research.
- **Integrated physical and behavioral health also improves care delivery.** SIM's success in improving access to the right care, at the right time, in the right place is most powerfully expressed through the stories of the patients and the providers who were involved in the initiative, which can be found on the SIM website. The Evaluation Reports offer further evidence of improved care quality, resulting in improved outcomes. This information will be critical in directing future state efforts to strengthen and improve primary care delivery- work that is currently being pursued by the Colorado Primary Care Payment Reform Collaborative.
- **Systems change requires strong relationships and cross-sector partnerships**. Colorado SIM was unique, among other states who received SIM awards, in its level of stakeholder engagement. The relationship and trust building that occurred over the course of the initiatives - between payers and providers, care team members working in integrated setting, state agencies and public partners - were instrumental to SIM's success.

I encourage you not only to read the wealth of information contained in the reports, but to find new ways to engage in care delivery and payment reform efforts currently underway in Colorado. SIM shows that true reform takes sustained engagement, motivation, and cooperation- it is now up to all of us to take up the reigns and work together to advance the health of all Coloradans.

Sincerely,

Dianne Primavera
Lieutenant Governor

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Colorado State Innovation Model

Final Report




July 31, 2019

revised September 4, 2019

SIM

State Innovation Model

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Dear Colorado Health Care Stakeholders,

The Colorado State Innovation Model (SIM) has approached health reform from every angle during its four-year time frame. It has been called a catalyst for change that stakeholders across the state continue to support because of the success shown across the four pillars of practice transformation, population health, payment reform and health information technology.

Colorado was admittedly bold in its approach to health reform and the work has been difficult and challenging to achieve yet I am proud to report that the SIM office has accomplished a great deal that will be sustained and expanded well into the future. The team worked with two Governors' administrations and effectively communicated the depth and breadth of the work required to effectively and sustainably integrate behavioral and physical health in primary care settings, which leads to better patient outcomes and the reduction in and avoidance of unnecessary health care costs.

This work spanned the gamut of health and, as a result, it will continue to produce meaningful results that benefit patients, health care providers and health plans.

The Colorado model, which is explained in detail in this report, provides important lessons learned that can be used by other states and entities that are working to expand patient access to team-based, patient-centered, integrated care. It is difficult work that should be guided by stakeholders who understand what it takes to implement change in practices. The SIM office has learned a great deal about the differences between theory and reality throughout this process and shares many of these lessons learned in the following pages.

The SIM office closes with the completion of the initiative on July 31, and produced several reports that are published on the SIM website (www.co.gov/healthinnovation) and will be available as an archive through July 2020. The intent is to encourage colleagues to use, share and implement these resources, which were created for practices, patients and health plans as they continue to reform the system.

This is important work and the Colorado team appreciates the opportunity to influence care across the state and champions the work of the practices that engaged in this difficult work and the health plans that continue to support them in the journey. Improving these partnerships has been a key focus of SIM work in Colorado, which helps ensure long-term success of integrated care.

As one SIM-participating practice representative said, "We have seen that integrating behavioral health care into primary care is providing the right services at the right time. It keeps patients healthier, out of the emergency department, out of the hospital and lowers total cost of care." Words to live by for those who are reforming health care.

Sincerely,

Barbara Martin, RN, MSN, ACNP-BC, MPH
SIM Office Director

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Table of Acronyms

Acronym	Full Phrase
ABCD	Assuring Better Child Health and Development
ACES	Adverse Childhood Experiences Study
AHEC	Area Health Education Center
AHIP	America's Health Insurance Plans
AHRQ	Agency for Healthcare Research and Quality
AMHC	Aurora Mental Health Center
APCD	All Payer Claims Database
APM	Alternative Payment Model
BHIP	Boulder Health Integration Partners
BHO	Behavioral Health Organization
BHP	Behavioral Health Provider
BHTC	Behavioral Health Transformation Collaborative
BRFSS	Behavioral Risk Factor Surveillance System
CAHEC	Centennial Area Health Education Center
CALPHO	Colorado Association of Local Public Health Agencies
CAMS	Collaborative Assessment and Management of Suicidality
CAYAC	Child, Adolescent and Young Adult Connections
CBGH	The Colorado Business Group on Health
CBHC	Colorado Behavioral Healthcare Council
CCHAP	Colorado Children's Healthcare Access Program
CCMCN	Colorado Community Managed Care Network
CDHS	Colorado Department of Human Services
CDPHE	Colorado Department of Public Health and Environment
CHAS	Colorado Health Access Survey
CHEC	Colorado Health Evaluation Committee
CHES	Colorado Health Extension System
CHF	Colorado Health Foundation
CHI	Colorado Health Institute
CHITA	Clinical Health Information Technology Advisor
CIVHC	Center for Improving Value in Health Care
CLS	Collaborative Learning Sessions
CME	Continuing Medical Education
CMHC	Community Mental Health Centers
CMMI	Centers for Medicare and Medicaid Innovation
CMS	Centers for Medicare and Medicaid Services
CORHIO	Colorado Regional Health Information Organization
CPC+	Comprehensive Primary Care Plus

CPCI	Comprehensive Primary Care Initiative
CQI	Clinical Quality Improvement
CQMs	Clinical Quality Measures
CRC	Community Reach Center
CSES	Clinician and Staff Experience Survey
CSU	Colorado State University
CTN	Colorado Telehealth Network
DEA	Drug Enforcement Administration
DPA	Department of Personnel and Administration
e-Consult	Electronic Consultation
ENSW	EvidenceNOW Southwest
ESB	Enterprise Service Bus
FERPA	Family Educational Rights and Privacy Act
FN	Field Note
FQHC	Federally Qualified Health Center
GSSW	University of Denver Graduate School of Social Work
HCF	Healthcare Connect Fund
HCPF	Colorado Department of Health Care Policy and Financing
HDCo	Health Data Colorado
HIE	Health Information Exchange
HIPAA	Health Insurance Portability and Accountability Act
HIT	Health Information Technology
HITECH	Health Information Technology for Economic and Clinical Health Act
HSR	Health Statistics Region
IAPD	Health Information Technology Implementation Advanced Planning Document
IBH	Integrated Behavioral Health
IPAT	Integrated Practice Assessment Tool
LPHA	Local Public Health Agency
MAC	Milestone Attestation Checklist
MACRA	Medicare Access and CHIP Reauthorization Act
MAI	Milestone Activity Inventory
MAT	Medication Assisted Treatment
MCH	Maternal and Child Health
MCPN	Metro Community Provider Network
MGMA	Medical Group Management Association
MHP	Mental Health Partners
MIPs	Merit-based Incentive Payment System
MIRECC	Rocky Mountain Mental Illness Research, Education and Clinical Center
MOC	Maintenance of Certification
MPC	Multi-Payer Collaborative
MSS	Multi-Stakeholder Symposiums
MSU	Metropolitan State University
NeCHD	Northeast Colorado Health Department

OeHI	Office of eHealth Innovation
OHSU	Oregon Health Sciences University
OIT	Governor's Office of Information Technology
ONC	Office of the National Coordinator
PARTNER	Program to Analyze, Record, and Track Networks to Enhance Relationships
PCMH	Patient-Centered Medical Home
PF	Practice Facilitator
PIP	Practice Improvement Plan
PTO	Practice Transformation Organization
QA	Quality Assurance
QE	Qualified Entity
QHN	Quality Health Network
QI	Quality Improvement
QPP	Medicare Quality Payment Program
RAE	Regional Accountable Entity
RFA	Request for Applications
RFP	Request for Proposal
RHC	Regional Health Connector
ROI	Return on Investment
SAMHSA	Substance Abuse and Mental Health Services Administration
SBIRT	Screening, Brief Intervention, Referral and Treatment
SHG	Southeast Health Group
SHIP	State Health Innovation Plan
SIM	Colorado State Innovation Model
SJBPH	San Juan Basin Public Health
SME	Subject Matter Expert
SNA	Social Network Analysis
SWOT	Strengths Weaknesses Opportunities Threats
TCHD	Tri-County Health Department
TWV	Together With Veterans
VA	Veterans Administration
VHC	Veteran Health Connector
VISION	Visual Information System for Identifying Opportunities and Needs
WIC	Special Supplemental Nutrition Program for Women, Infants, and Children
WICHE BHP	Western Interstate Commission for Higher Education Behavioral Health Program

Introduction

Executive Summary

In December 2014, the Centers for Medicaid and Medicare Innovation (CMMI) awarded Colorado up to $65 million in the form of a cooperative agreement to test its State Innovation Model (SIM). Colorado's vision for SIM was founded on the core belief that the integration of physical and behavioral health is central to successful and sustainable health care reform. Colorado established a dedicated SIM Office that has worked across agencies, sectors and geographic regions to achieve its ambitious goal: to integrate physical and behavioral health care services in coordinated community systems, with value-based payment structures, for 80% of state residents by 2019.

In working to make this vision a reality, SIM has touched nearly every aspect of health care in Colorado. SIM supported 344 primary care practices and four Community Mental Health Centers across the state as they progressed along a continuum of integrated care. Recognizing the crucial role that health plans play in sustaining change and driving value, SIM worked with seven public and private payers in a unique Multi-Payer Collaborative to support practices with Alternative Payment Models. SIM engaged the public health system in Colorado to create a robust Plan for Improving Population Health and then invested in Local Public Health Agencies and Behavioral Health Transformation Collaboratives to advocate for progress at the local level. To ensure that integrated care was delivered in coordinated community systems, SIM launched an innovative new workforce of Regional Health Connectors dedicated to linking practices with community resources.

SIM supported the professionals undertaking integration with specialized workforce development and education opportunities. SIM also worked to expand existing Health Information Technology (HIT) infrastructure and to create new HIT solutions in order to facilitate data sharing and ease provider burden. Throughout the initiative, SIM monitored practice-level, claims and population health data to track progress and identify areas needing improvement.

Advancements made during the initiative reflect the expertise and tenacity of hundreds of stakeholders who guided SIM strategies and implementation. These partners will continue to play a critical role in maintaining momentum toward providing sustainable, whole-person care. While progress was not always easy, lessons learned from challenges in implementation will help to guide future health care reform initiatives. The entire SIM team is proud to have played a role in Colorado's

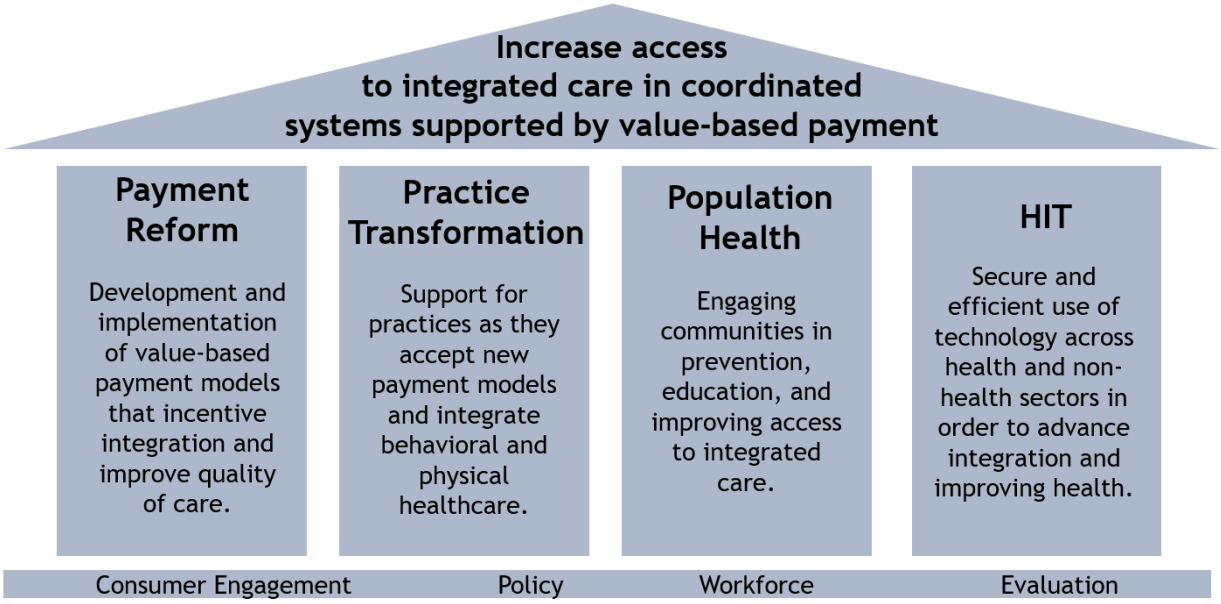
ongoing journey to become the healthiest state in the nation and look forward to supporting new innovations in the future.

Model Summary

To achieve its bold vision, SIM synthesized payment reform, practice transformation, public health and HIT strategies into a "four pillar" approach to advancing integration and success with value-based payments.

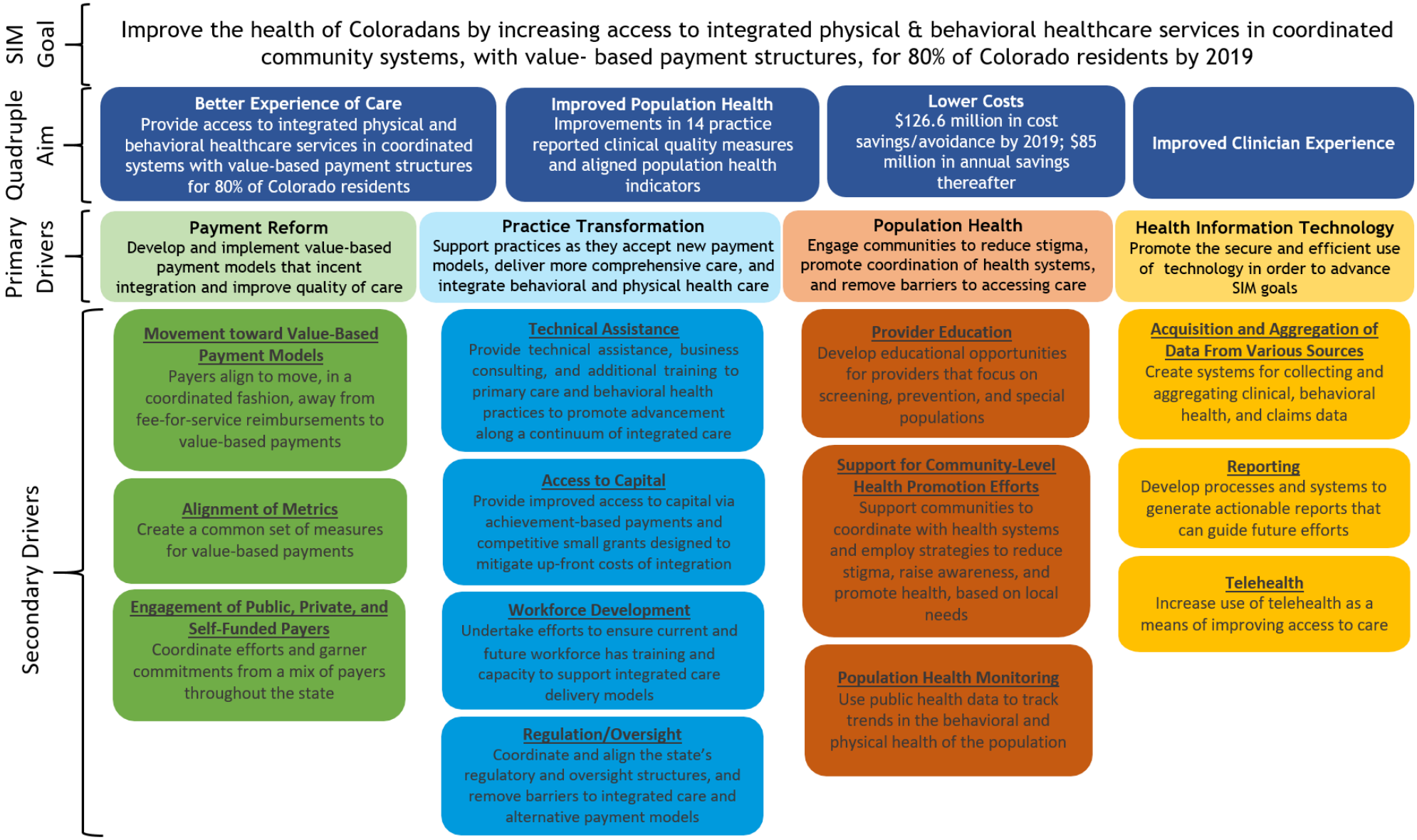
Each pillar of this approach is supported by a foundation focused on ensuring that:

- Consumers are engaged in all elements of the SIM model;
- Policy and regulatory levers are utilized to address barriers and create opportunities to advance work under each pillar;
- Workforce capacity is developed to support these strategies; and
- Processes and outcomes are evaluated to identify areas of high impact, measure progress and quickly determine areas that needed improvement.



In coordination with CMMI, SIM identified primary and secondary drivers used to advance work across all four pillars. Drivers evolved as the SIM Office worked with stakeholders to identify new needs and adjust strategies in response to a shifting health care landscape. The figure on the following page represents the drivers used to guide work in the last year of the initiative.

Final SIM Driver Diagram



Report Roadmap

This report discusses key activities undertaken to achieve SIM's vision and goal, identifies lessons learned throughout the initiative, makes recommendations for future health care innovation efforts and identifies next steps to sustain the momentum achieved throughout the initiative. The report is intended to both capture past progress and to inform future efforts.

The report begins with chapters outlining the Governance and Administrative structures that underpin the initiative as well as the Stakeholder and Consumer Engagement efforts that guided its work. The report then features chapters dedicated to each of the four pillars of SIM: Payment Reform, Practice Transformation, Population Health, and Health Information Technology. Each of these chapters begins with a one-page summary of SIM strategies, major accomplishments and future considerations related to that pillar. The report concludes with chapters dedicated to the cross-cutting workforce development and data and evaluation efforts that supported advancement across all SIM pillars. Policy considerations are interwoven throughout the relevant chapters in the document.

Each chapter includes "call out" boxes that highlight major accomplishments, lessons learned and recommendations. Tables addressing the current status and future vision for all key activities identified in the Award Year 4 Terms and Conditions are included throughout the relevant narrative in the report. All chapters address sustainability.

Relationship to Other Reports

This report builds on and complements the following reports and key documents. All reports are available on the SIM website's resources page, with the exception of the Sustainability Plan, which is included as **Appendices A1 & A2**.

- State of Health: In April 2013, Governor Hickenlooper released *The State of Health: Colorado's Commitment to Become the Healthiest State*, a report that outlined 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 called upon public and private organizations, as well as Colorado citizens, to work together to specific targets across four strategic focus areas:
    - Prevention and wellness
    - Coverage, access, and capacity
    - System integration and quality
    - Value and sustainability

- State Health Innovation Plan (SHIP): Colorado was selected to receive a SIM pre-testing award that was used to develop the SHIP, which built on several of the objectives, goals and metrics outlined in the State of Health. The State of Health and the SHIP were complementary declarations of the Hickenlooper

administration's commitment to making Colorado the healthiest state in the nation. The Final SIM Proposal was guided by both documents.

- Final SIM Proposal: In July 2014, Colorado submitted its proposal for SIM Test Assistance to CMMI. This document outlined Colorado's end-state vision of integrating behavioral and physical health care and moving toward alternative payment models. The Proposal outlined initial objectives and goals. This report indicates areas where implementation has significantly differed from major activities and objectives originally envisioned in the proposal.

- SIM Operational Plans: The SIM Office submitted three Operational Plans during Award Years 2, 3 and 4. These plans mapped out how the SIM Office planned to operationalize the goals in the SHIP to achieve the end-state vision articulated in the Final SIM Proposal. The Operational Plans discussed any changes to goals, the evaluation strategy or SIM objectives. This report draws on information from these plans to discuss progress made and the evolution of key activities.

- Sustainability Plan (Parts 1 and 2): The SIM Office submitted a Sustainability Plan to CMMI that outlines recommendations for sustaining key investments and activities implemented with SIM funding to ensure ongoing payment and delivery system reform. The Sustainability Plan was divided into two parts. Part 1 was submitted to CMMI in October 2018 and Part 2 was submitted in February 2019. Since submission of the second plan, the SIM Office has continued to work with key partners to identify next steps toward achieving SIM's end-state vision. This report clearly identifies which key activities will continue and what partners will take responsibility for their oversight.

This report also reflects the work of numerous stakeholders and vendors. Many of these partners submitted individual reports and deliverables to the SIM Office that summarize their work on the initiative. Chapters of this report that draw significantly from partner materials reference the original documents. To ensure that the maximum amount of detail is available, these materials are included as appendices.

While data is used throughout the report to help create a comprehensive narrative, it is not intended to evaluate the impact of SIM or return on investment (ROI). To address impact, TriWest, the state-led evaluator will submit a separate Process Evaluation Report and an Outcome Evaluation Report to CMMI. Milliman will submit an actuarial analysis of the initiative that addresses estimated ROI.

Governance & Administration

Overview

Given SIM's ambitious and broad-reaching scope, development of a balanced and robust governance structure was critical to Colorado's success. Several state agencies helped guide the initiative. The SIM Office was established and overseen by the Governor's Office. The Colorado Department of Health Care Policy and Financing (HCPF) served as the SIM Office's fiscal agent and provided critical administrative functions. The Colorado Department of Public Health and Environment (CDPHE) also provided office and meeting space and acted as a key partner in leading SIM's population health work. The SIM Office's work with the three state agencies ensured that no one department was unduly burdened in supporting the initiative. This structure also promoted collaboration between agencies that had the greatest involvement in the initiative's work.

In addition to operational support provided by the Governor's Office, HCPF and CDPHE, a SIM Advisory Board and Steering Committee provided guidance to the SIM Office. This section describes the initiative's governance and administrative structures. A description of specific workgroups and other governance structures related to each pillar is included at the beginning of each corresponding chapter of the report.

The SIM Office

The SIM Office - established in March 2015 through Executive Order B 2015-001 issued by Governor John Hickenlooper, and extended by Governor Jared Polis in January 2019 – was tasked with:

- Coordinating with the Centers for Medicare and Medicaid Services (CMS), the Office of the National Coordinator (ONC) and the Colorado Governor's Office to ensure all deliverables were met;
- Establishing standards for the SIM initiative;
- Executing and monitoring vendor contracts;
- Reporting on progress toward SIM goals and objectives;
- Ensuring all legal, regulatory, and administrative requirements were met; and
- Hiring or contracting staff, as needed, to fulfill the work outlined above.

The SIM Office also housed the Transforming Clinical Practices Initiative (TCPi), a federally funded health reform initiative designed to help care teams navigate provider compensation changes resulting from the Medicare Quality Payment Program

(QPP) and commercial insurance moves toward value-based payment. This structure helped to ensure coordination between the two initiatives, which shared common goals.

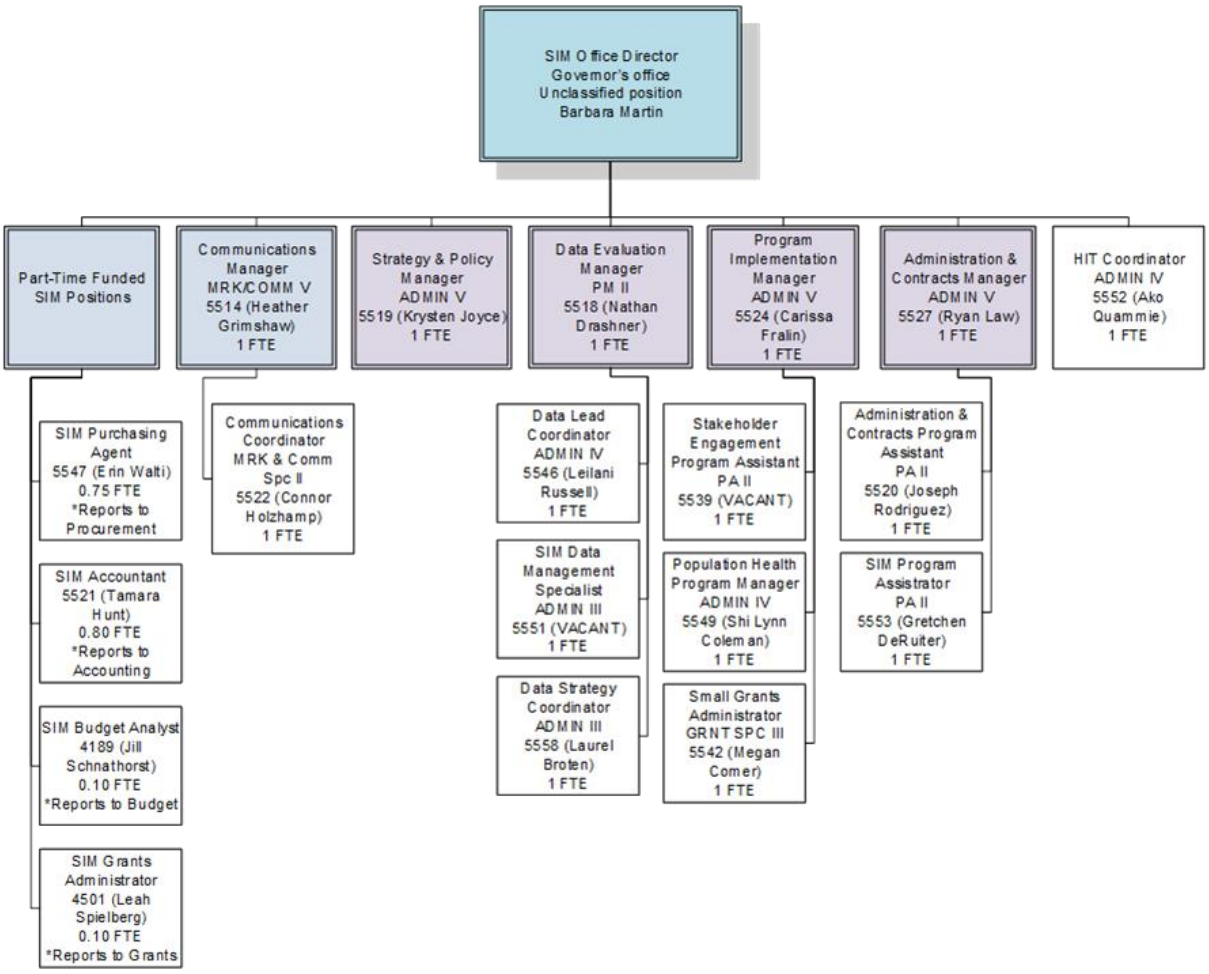
SIM Office director:

Vatsala Kapur Pathy was appointed as the Director of SIM by Governor Hickenlooper and served in that role through February 2016. Barbara Martin, RN, MSN, ACNP-BC, MPH, became interim director in March 2016 and served as the SIM Office director beginning in September 2016. Ms. Martin brought more than 15 years of clinical and leadership experience in health care delivery, care coordination and working across complex systems of care to the role. As director of the Health Systems Unit at CDPHE, she served on the core SIM team during the grant planning process and led state public health efforts to implement population health strategies to support SIM. She initially joined the SIM Office in 2015 as the director of TCPi.

SIM Office staff:

The SIM Office staff grew substantially throughout the initiative. The staffing structure reflects changes made in response to lessons learned and changes in the health care landscape. SIM leadership recognized the importance of fully staffing the management of data streams that were necessary to monitor and evaluate progress. In January 2019, which marked the final six months of the initiative, the SIM Office employed 15 FTE, organized in the following manner:

SIM Office Organization Chart



Governor's Office engagement

Since establishing the SIM Office, the Governor's Office guided implementation. Key support provided by the Governor's Office included:

- Appointment of SIM advisory board members;
- Support and evaluation of the SIM director; and
- Assurance that SIM efforts aligned with broader policy initiatives and state goals

Hickenlooper Administration:

The Hickenlooper administration played an active role in supporting SIM. At the start of the initiative, Governor Hickenlooper convened a group of payers at the Governor's

Mansion to encourage alignment and movement toward value-based payment models. He mentioned SIM regularly in his state of the state addresses and personally visited a SIM pediatric practice in Colorado Springs in 2017. Kyle Brown, Governor Hickenlooper's Senior Health Policy Advisor, served as the co-chair of the Consumer Engagement Workgroup until he left his position in late 2018.

Office of the Lieutenant Governor:

Joseph Garcia: For the first year of the SIM initiative, Joseph Garia served as the Lieutenant Governor of Colorado and helped establish avenues of communication within the Governor's Office to support the SIM Office.

Donna Lynne: In May 2016, Donna Lynne, DrPH, was sworn in as Colorado's 49th Lieutenant Governor and Chief Operating Officer. During her time in office, Dr. Lynne leveraged her expertise in the health care sector to offer guidance to the SIM team. She participated in the inaugural SIM Multi-Stakeholder Symposium (MSS), which convened more than 80 representatives from SIM payers, practices and practice transformation organizations. Dr. Lynne also met with SIM payers to discuss key payment reform efforts and gain a better understanding of the Multi-Payer Collaborative (MPC). In 2018, Dr. Lynne met with the SIM advisory board and participated in another MSS (discussed below) as well as an All-Stakeholder Convening to re-energize SIM stakeholders and encourage more collaboration across workgroups.

Polis Administration:

On January 8, 2019 Jared Polis became Colorado's 43rd governor. As illustrated by Executive Order B 2019-003, which created the Office of Saving People Money on Health Care, Governor Polis is committed to lowering health care costs while ensuring Coloradans have access to affordable, quality care. On April 4, 2019, Governor Polis unveiled his Roadmap to Saving Coloradans Money on Health Care. He later met with a SIM practice to learn more about the team's work to improve patient health and reduce or avoid unnecessary costs. He has talked about the visit and the care team's work during several public appearances.

Office of the Lieutenant Governor:

Dianne Primavera: Sworn in as the 50th Lieutenant Governor of Colorado on January 8th, 2019, Dianne Primavera is a leading patient advocate and also served four terms in the Colorado State legislature. Throughout her service, Ms. Primavera was highly regarded for her success working across the aisle to lower prescription drug costs and expand access to affordable health care. She has taken an active interest in SIM and TCPi practices, and visited three SIM practices and one TCPi practice in the first six months of taking office. She has also presented to the SIM Collaborative Learning Session (March 2019), thanked SIM stakeholders during the SIM celebration in May, and spoke during the last MSS in June. Ms. Primavera and her team also met with representatives from CMMI during their last site visit in May.

Governor's Office role in sustainability:

Members of the SIM team met with the Polis administration on a regular basis to ensure that the Governor's Office uses lessons learned during SIM and TCPi to inform other initiatives and maintain momentum toward integrating care and supporting value-based payment models. The SIM Office provided salary support for the State Two-Generation Program Coordinator during the last year in order to leverage synergies between the two programs and share SIM-funded resources with a wider audience. This position will assist with dissemination, implementation and sustainability of the SIM-funded Call to Action Report beyond the conclusion of SIM. See the **Population Health chapter** for more details.

HCPF's engagement

HCPF served as the fiscal agent for the SIM Office and provided office space to the SIM director as well as many SIM staff members. The SIM director was part of the HCPF Senior Executive Team, ensuring leadership alignment and support throughout the initiative. Additionally, HCPF's human resources department was responsible for hiring, oversight and support of SIM staff members. HCPF communication officers, grant managers and legal counsel also provided support to the initiative. As described below, HCPF's Executive Director served on the SIM advisory board.

CDPHE's engagement

CDPHE served as a valuable partner in administering the initiative. CDPHE provided office space for several key SIM staff members, meeting space for advisory board meetings and many of the workgroups listed in the **Stakeholder Engagement chapter** of this report. As described below, CDPHE's Executive Director served on the SIM Advisory Board. Additionally, the Chief Medical Officer for CDPHE co-chaired the population health workgroup.

SIM Advisory Board

In addition to establishing the SIM Office, Executive Order B 2015-001 called for the creation of a SIM advisory board to provide "advice, oversight, and guidance over the operation of the SIM Office and the management of grant funds… [and] recommendations about how to better integrate behavioral and physical health in Colorado." As visualized below, this board was initially made up of nine positions, four of which were reserved for members of the Governor's Cabinet. The SIM Office held an open and competitive application process to fill the remaining five seats. In November 2015, the SIM Office worked with the Governor's Office Department of Boards and Commission to add four additional seats to the Board. In November 2018, the SIM Office added a new honorary patient representative role.

Selection Process	Creation Date	Position Title
Cabinet Positions	Established via original executive order	The director of the SIM Office
		The executive director of HCPF, or his or her designee
		The executive director of the Colorado Department of Human Services (CDHS), or his or her designee
		The executive director of CDPHE or his or her designee
		The Commissioner of Insurance, or his or her designee
Selected through an open and competitive process		A representative with experience or knowledge of behavioral health
		A representative with experience or knowledge of primary health care
		A representative with experience or knowledge of health care delivery
		A representative with experience or knowledge of Health Information Technology (HIT)
		A representative of a statewide health insurance carrier
	Added in November 2015	A representative of the statewide association of hospitals
		A representative of consumer interests
		A representative of consumer interests
Honorary Representative (non-voting)	Added in November 2018	Honorary patient representative

The SIM advisory board was critical to SIM's success. The formalized structure leant the board credibility, and the flexibility to add positions as the initiative progressed proved crucial to engaging the expertise needed to guide the initiative in an evolving landscape.

SIM Steering Committee

The SIM Office convened a steering committee, made up of the co-chairs of each Workgroup (discussed below), which was charged with:

- Reconciling issues and timeline dependencies brought forth by the SIM Office or workgroups;
- Establishing quality metrics for the SIM Initiative;
- Developing mitigation strategies for identified risks; and
- Ensuring information is communicated across workgroups.

The SIM Office made a conscious decision to create separate workgroups for each of the model's key components so each group could focus on its particular area of expertise. However, the SIM Office also recognized the risk that each group could become isolated, raising the potential for duplication of efforts and miscommunication. The steering committee identified key dependencies between workgroups, and helped ensure the groups moved forward in a coordinated and complementary fashion.

SIM Workgroups

The Colorado SIM Office initially created eight workgroups to advise on each of the core areas of SIM:

- Practice Transformation;
- Payment Reform;
- Population Health;
- HIT;
- Policy;
- Consumer Engagement;
- Evaluation; and
- Workforce Development.

Workgroup members were selected by the SIM Office through a competitive application process, based on their subject-matter expertise. The SIM Office also sought to include representatives from a range of agencies and organizations – including educational institutions, consumer interest groups, philanthropic organizations, and the state legislature – which were not specifically focused on health, but addressed topics and issues that supported the overall objectives of Colorado SIM. Each workgroup engaged approximately 17 individuals, including two co-chairs, and were supported by a program manager at the SIM Office. Workgroup members were tasked with identifying specific activities and/or action items and making recommendations to the SIM Office, which shared the information with the steering committee and updated the advisory board. SIM retained most of its workgroup members throughout the initiative.

As SIM evolved, the number and focus of workgroups evolved as well. Moving into the final stages of the initiative, the SIM team asked members of the policy and payment reform workgroups to join the other six workgroups to ensure cross-pollination of ideas and subject matter expertise.

The objectives of each workgroup are published on the workgroups page of the SIM website.

Major Accomplishment

The SIM Office engaged at least 150 diverse stakeholders ranging from consumer advocates, policy experts, state leadership, vendor partners and other subject-matter experts, who guided the initiative. The SIM Office held 343 public meetings. The wide range of stakeholder input and expertise was crucial to achieving SIM goals.

Coordination between Governance Structures:

The SIM Office hired a stakeholder engagement program assistant, who tracked progress and key dependencies across workgroups. This position provided day-to-day support for all workgroups and stakeholder engagement events, as well as the steering committee and advisory board. With a unique vantage point to monitor work across the diverse workgroups, the program assistant documented and monitored work plans across all groups to identify areas of overlap and potential synergy.

Recommendation

The SIM Office recommends that initiatives committed to engaging a large number of external stakeholders employ at least one person who is dedicated to stakeholder engagement. SIM realized the necessity of this coordinator early in the initiative and the position has been essential to coordinating meaningful stakeholder engagement.

Governance – Looking Ahead:

While the SIM Office will not be sustained beyond the end of the initiative, many of its key structures and workgroup members will continue to guide health care innovation in the state. The following table represents the vision for each governing body moving forward.

Structure	Future Vision
SIM Office	Although the SIM Office will not be sustained, key positions and functions will be continued by various stakeholders. CDPHE is absorbing two SIM-funded positions to continue population-based behavioral health work. Resources will continue to be housed on the SIM website for at least one year and the site will be maintained by HCPF. Additional documents will be housed in a SharePoint drive maintained by HCPF. Some resources, including e-learning modules, will be available on the Office of Behavioral Health website and the University of Colorado Department of Family Medicine website.
SIM advisory board	This group will not be sustained. However, the Governor's health cabinet members will continue to guide health care transformation efforts in the state.
SIM steering committee	The SIM steering committee will not be sustained. However, members of the committee work at organizations that are driving innovation across Colorado. These members will draw on SIM lessons learned to drive progress via their engagement in other agencies.
SIM workgroups	While SIM workgroups will not continue to meet, multiple workgroups have been invited to join ongoing stakeholder groups in order to continue momentum. • Members of the Practice Transformation workgroup have been invited to join the Colorado Health Extension Service (see the **Practice Transformation chapter** for more details). • Members of the Population Health workgroup have been invited to join the CDPHE Suicide Prevention Steering Committee to provide guidance and expertise (see the **Population Health chapter** for more details). • Members of the HIT workgroup have been invited to join a group convened by the Office of eHealth Innovation (see the **HIT chapter** for more details) • Members of the Evaluation Workgroup have been invited to join Colorado Health Evaluation Committee (see the **Data and Evaluation chapter** for more details).

Stakeholder Engagement

Overview

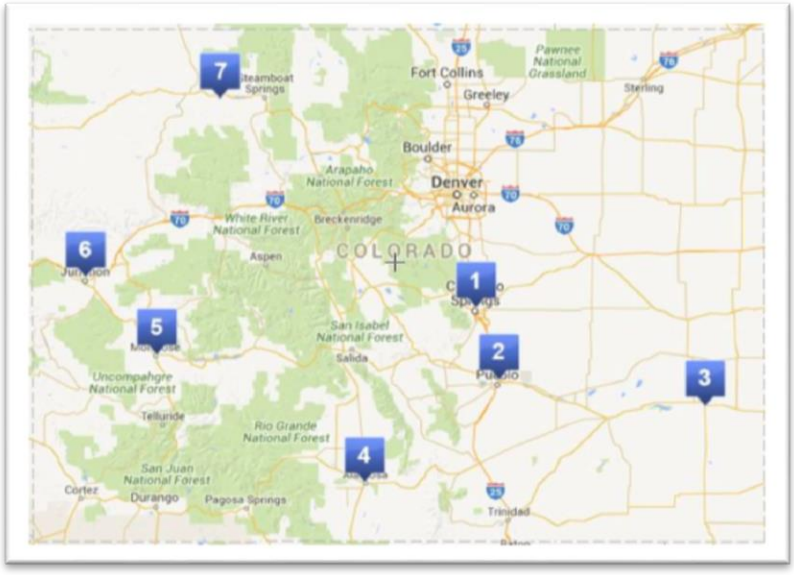
The SIM governance structure reflects SIM's commitment to engaging a diverse array of stakeholders. All meetings of the advisory board, steering committee, and workgroups were open to the public and recordings of each meeting were posted to the SIM website. In addition to this formal meeting structure, the SIM Office engaged key stakeholders in person and online beyond regular meetings. These interactions proved to be a valuable means of gathering feedback and were critical in guiding improvements to the initiative over time.

In-Person Engagement

In-person convenings and outreach were a key component of SIM's stakeholder strategy. Some, but not all, of the stakeholder engagement activities led by the SIM Office follow below.

Initial SIM Outreach Tour:

From November 9 – 13, 2016, the SIM Office conducted a statewide tour to engage urban, non-Denver/metro, rural, mountain and frontier communities around the state. SIM staff and key community-based stakeholders gave presentations in the following communities:



1. Colorado Springs (Urban);
2. Pueblo (Urban);
3. Lamar (Frontier);
4. Alamosa (Rural);
5. Montrose (Rural);
6. Grand Junction (Urban); and
7. Hayden (Rural).

More than 100 stakeholders attended presentations. Community members were asked to provide feedback on how SIM could best engage with their communities. SIM program managers used this feedback to help set priorities for workgroups and to plan future activities.

Recommendation

The SIM Office recommends that future statewide initiatives create a robust, in-person stakeholder engagement process that includes rural and frontier communities. Conducting an outreach tour early in the initiative allowed SIM to promote buy-in and garner feedback at a time when it could influence the direction of SIM goals and strategies.

All-Stakeholder Convening:

While the initial SIM proposal indicated that a conference would be convened every six months, feedback from the initial outreach tour indicated that regional meetings to address local needs would be more effective than centralized conferences. Additionally, as SIM launched a workforce of Regional Health Connectors, these individuals were able to spearhead community engagement efforts (see the **Population Health chapter** for more information).

In order to ensure cross-pollination of ideas and share collective progress on work to help health care providers integrate behavioral and physical health and to succeed with value-based payment models, the SIM Office held an All-stakeholder Convening in February 2018 in Denver. The convening was planned by SIM workgroup co-chairs during steering committee meetings. This process created an active dialogue and promoted information sharing between all SIM workgroup members, the advisory board, and several vendor partners.

"We can now say to CMS [the Centers for Medicare and Medicaid Innovation] and to later adopters, 'Your patients are going to have better outcomes because of this work.'

- Lieutenant Governor Donna Lynne, SIM All-Stakeholder Convening, February 2018

More than 100 SIM stakeholders attended the convening, which featured a story recounted by a patient of a SIM primary care practice, working sessions that allowed workgroup members to talk with members from other SIM workgroups, and workgroup-specific discussions about sustainability. The six-hour meeting also featured a keynote address from Lieutenant Governor Donna Lynne. The day was largely centered around continued work in the last months of SIM, and included thoughts on sustainability from the SIM steering committee. Many of these discussions helped inform the two Sustainability Plans as well as activities noted in this report.

Multi-Stakeholder Symposiums:

While payment reform workgroup members were added to other groups to voice a payer perspective, the SIM team recognized a need to open dialogue between SIM providers, practice transformation organizations, and health plan representatives. In response, SIM hosted Multi-Stakeholder Symposiums (MSS) to provide a forum for focused discussions and foster stronger partnerships Symposiums were held in:

"I think these meetings are so valuable. I drove seven and a half hours to be here."

- Practice Representative, Multi-Stakeholder Symposium, January 2019

- January 2017 in Denver;
- May 2017 in Denver;
- September 2017 in Denver;
- January 2018 in Denver;
- April 2018 in Grand Junction;
- September 2018 in Denver;
- January 2019 in Denver; and
- June 2019 in Denver.

During each symposium, participants reflected on progress made to date with practice transformation activities and received updates on SIM. For more information on the symposiums, see the **Payment Reform chapter** of this report.

Medical home community forum:

This group, convened by the Colorado Department of Public Health and Environment (CDPHE) and SIM, met quarterly to engage Colorado agencies, families, medical facilities, organizations and policymakers as they implement the patient-centered medical home (PCMH) model. To promote alignment between PCMH initiatives and SIM integration efforts, the SIM Office presented at most community forum meetings during the initiative. CDPHE will continue to convene these meetings after SIM ends.

Celebration of SIM Successes:

The SIM Office hosted a celebration during the final site visit with representatives from CMMI and the Office of the National Coordinator on May 1-2, 2019. A series of presentations showcased successes across the four pillars of practice transformation, population health, health information technology, and payment reform. The group also visited Mayfair Internal Medicine, a SIM cohort-2 practice in Denver. During the visit, the SIM Office held a celebration with stakeholders that featured a panel of board chairs from the steering committee and the honorary patient advocate on the SIM advisory board.

"We have been really impressed and have learned so much from the work in Colorado," said Dawn Alley, PhD, who directs the State and Population Health portfolio at the Centers for Medicare and Medicaid Innovation "It's exactly what we wanted from the SIM program."

SIM steering committee members shared progress made across all pillars of the initiative and their intent to continue their work to integrate care and prepare providers for ongoing success with alternative payment models.

"The work that SIM has been doing has laid the groundwork to improve quality and reduce costs by providing whole-person care," said one health plan representative. "We see how practices perform and look at data over time. The Multi-Stakeholder Symposium has given us that lens, and I've taken this information to my leadership to see how we can spread these lessons learned."

The SIM Office produced a video and a series of articles about how the convenings have influenced health care reform across the state.

SIM in the Media

The SIM team included a Communications Director and Communications Coordinator. SIM staff, with support from communications teams at the Governor's Office and the Department of Health Care Policy and Financing (HCPF), issued press releases regarding major SIM activities and successes. The office distributed the press releases to practices and encouraged them to reach out to local media and to share the information through their own channels. As a result, SIM-supported initiatives have garnered media attention throughout the state and nation. The SIM Office created a webpage, the SIM Newsroom, to highlight media coverage.

Online Engagement

In order to achieve the broadest reach, the SIM Office engaged in a robust online communications strategy, which included:

- A dynamic SIM website with resources, news stories, public comment forms, a calendar of public meetings, and up-to-date data on the initiative;
- Two newsletters – one for providers and one for the public;
- SIM podcasts that featured stories from the field;
- A blog;
- Press releases--sent to the media and to practices to customize and send to their media outlets and use on their websites;
- A series of articles -- published on the website and through industry publications;
- SIM videos; and
- A significant social media presence via active Twitter, Facebook, and LinkedIn accounts.

The diverse array of strategies used to engage stakeholders ensured meaningful two-way communication between the SIM Office and stakeholders.

Major Accomplishment

The SIM Office used innovative online strategies to communicate practice successes and garner feedback from stakeholders across a geographically diverse state.

- Total views of SIM YouTube videos: 4,633
- Total Tweet Impressions: 324,291
- Total # of podcasts published: 32
- Total number of listens to podcasts: 2,822
- Total unique pageviews on website: 189,354

Collaboration with Other Stakeholder Groups

Rather than relying entirely on SIM workgroups and events, the SIM Office also collaborated with existing forums for stakeholder engagement, many of which will continue beyond the end of the SIM initiative. This strategy helped to lower the risk of duplicating efforts while also ensuring that SIM strategies and lessons learned were woven into longer-term efforts.

The following represents a non-exhaustive list of groups in which SIM staff members regularly participated:

- Access to Specialty Care Work Group for Pediatric patients;
- Colorado Commission on Indian Affairs;
- Colorado Health Care Evaluation Collaborative (convened by HCPF);
- Colorado Health Extension System (convened by University of Colorado Department of Family Medicine);
- Colorado Quality Payment Program Coalition;
- Colorado School Based Health Affinity Group;
- Colorado Telehealth Alliance;
- Communication meetings for all state agencies;
- Community medical home forum (Convened by CDPHE);
- Community Norms Workgroup (Convened by CDPHE);
- Department of Health Care Policy & Financing weekly meetings about the Alternative Payment Model;
- eHealth Commission meetings (convened by the Office of eHealth Innovation).
- Health cabinet meetings (convened by the Governor's Office);
- Member Experience Advisory Council (convened by HCPF);
- Multi-Payer Collaborative meetings (in conjunction with Comprehensive Primary Care+);
- Partners for Children's Mental Health;
- School Based Health Services Affinity All-states Group;
- SIM Pediatric Stakeholder Group (convened by CDPHE);

- State-designated entity action committee (state Health Information Technology steering committee);
- Workforce cabinet meetings (convened by the Governor's Office); and
- Workforce & Education Workgroup (convened by the Colorado Department of Labor and Employment).

Consumer Engagement

As described in the original proposal, the SIM Office was committed to gauging consumer needs, wants, and preferences, and ensuring that they informed all aspects of its work.

Consumer Engagement Workgroup

The Consumer Engagement workgroup made recommendations on how the SIM initiative could best understand and advance consumer interests. Specific objectives were to:

- Consult and advise other workgroups, the SIM advisory board and the SIM Office on consumer engagement-related issues;
- Tackle *ad hoc* assignments related to consumer engagement, as assigned by the SIM Office;
- Make recommendations about how integration of physical and behavioral health could improve the consumer experience; and
- Ensure consumers were part of the SIM process and that their interests and needs are met.

Lesson Learned

While the Consumer Engagement workgroup played a valuable role throughout the initiative, members expressed concern that confining the consumer perspective to one workgroup reinforced silos. In the future, the SIM Office recommends initiatives incorporate consumer representatives in all stakeholder groups.

Identification of Consumer Engagement Priorities:

In 2016, the SIM Consumer Engagement workgroup convened to identify priority areas related to consumer engagement. The group used a literature review of other consumer priority surveys, a memo on methods of measuring consumer engagement prepared for the SIM Office by The Center for Health Care Strategies and the expertise of workgroup members to inform the discussion. The group identified priority areas, summarized in the table below, that helped inform Colorado efforts.

SIM Consumer Engagement Priorities			
Access to Care	Effectiveness of Care	Respectfulness of Care	Privacy/ Confidentiality
• Ability to access care without first having a psychiatric diagnosis • Availability of services for Limited English Proficiency (LEP) patients • Affordability of care • Reduction of payer fragmentation • Reduction of stigma as a barrier to access	• Continuity of care • Client feels informed about his/her care • Safety • Family involvement • Care is person-centered • Patient activation/ empowerment	• Use of respectful, person-first language by providers and staff	• Client has ability to access personal health information and can choose to share it with family and caregivers • Client's information is not shared with unwanted parties

Representation on SIM Advisory Board:

At the first SIM advisory board meeting in June 2015, members of the public were asked to weigh in on whether the advisory board needed to include greater representation of a specific group or interest. The SIM Office collected responses and identified common themes, which included the need for consumer representatives on the board.

As a result, the SIM executive order was amended to add four positions, two of which were reserved for individuals who represented consumer interests. The Governor's Office of Boards and Commissions ran a competitive application process and selected the following representatives to fill these slots:

- Consumer Representative: Carol Meredith, executive director, The Arc of Arapahoe & Douglas County; and
- Consumer Representative: Carol Pace, FACMPE, volunteer advocate for the Association for the Advancement of Retired People and the Colorado Consumer Health Initiative

In November 2018, Griselda Peña-Jackson, BSBA, executive director of 2040 Partners for Health, replaced Carol Meredith as a voting member on the advisory board. The SIM Office added an honorary patient representative role filled by Laura Carroll, who

has been engaged in Health First Colorado's Medicare Experience Advisory Council, and was asked to participate in a National Association of Medicaid Directors conference session that focused on barriers to widespread integration of physical and behavioral health services.

Significant consumer representation on the advisory board helped ensure that consumer perspectives were considered at all levels of SIM.

Consumer Outreach:

Recognizing the need to incorporate a wider perspective from consumers and particularly clients of Colorado Medicaid, SIM contracted with Arrow Performance Group to build a base of community leaders to bring a health equity lens to conversations about transforming health care delivery systems assess access to integrated care, and identify barriers to access and solutions.

Consumer Survey:

Between April 25 and June 21, 2018, Arrow Performance Group conducted a consumer engagement survey in English and Spanish targeted at Health First Colorado (Medicaid) members in two medically underserved regions (parts of Adams, Arapahoe and Denver counties) and a rural Southeast area (including Pueblo, Otero, Crowley and Prowers counties). The survey included questions about their care experience as well as barriers to healthcare. The Consumer Engagement workgroup played a key role in defining the scope of work for Arrow Performance Group and provided technical expertise for the survey design.

Of the total 1,175 survey respondents, approximately one third expressed an interest in becoming involved in future health care discussions. The SIM Office connected more than 100 respondents to patient advisory councils to inform policy decisions.

The key findings from the survey include:

- A significant opportunity exists to educate consumers about the value of integrated care and to elevate awareness of it. Almost 20% of respondents did not know if they had access to integrated care (respondents were given a detailed definition of integrated care with examples).
- Respondents who said that they had access to integrated care were more likely to report satisfaction with their health care experiences and time to appointment. and
- In both regions, cost was cited as the biggest barrier to accessing health care services.

Development of Patient-Facing Materials:

The SIM Office developed patient-facing materials for SIM practices in 2018 and 2019 to explain the work required to provide integrated care. The SIM Office provided a template with a drop-down list so practice teams could customize it with examples of

work they had done to provide whole-person care. A second piece encouraged practices to continue to educate patients above the value of integrated care and highlight the work required to provide that type of care.

Supporting Legislation:

SIM's stakeholder engagement efforts helped promote a legislative landscape that supported whole-person integrated care. The following provides an overview of the legislative landscape as it relates to health care in 2019.

HB1004: Public Insurance Option

- Directs the Colorado Department of Insurance (DOI) and the Department of Health Care Policy and Financing (HCPF) to explore costs, benefits, implementation, and design options of a possible state-run public option insurance plan. The plan will then be sent to the federal government for approval.

SB5: Importing Drugs from Canada

- Directs HCPF to seek federal approval to contract with a Canadian vender. The vender would then be able to import wholesale drugs for distribution to Colorado pharmacies.

HB1168: Reinsurance

- Establishes a two-year reinsurance program through DOI. The program will need federal approval, but if approved will help cover high cost claims though a combination of funding from a hospital fee, existing taxes and dollars from the general fund.

HB1216: Limiting Insulin Prices

- Prohibits insurance companies from charging the consumer any dollar amount over $100 (copay or coinsurance) for a 30-day supply of insulin.

SB4: Health Care Cooperatives

- Permits Coloradans in a region to negotiate rates with providers and set certain plan coverage minimums through the creation of cooperatives. Summit County will set up the first co-op in 2020 as a pilot.

HB1010: New Licenses Requirements for Freestanding Emergency Departments

- Charges the Colorado Department of Public Health and Environment (CDPHE) to create a license that all freestanding emergency departments will be required to have beginning in 2022. Rural and report communities are exempt. The license will prohibit the asking about insurance or payment options before treatment.

HB1001: Hospital Transparency

- Requires HCPF to gather financial data from hospitals and provide an annual report on hospital spending, operating expenses, staffing, and uncompensated costs.

HB1174: Out-of-Network Disclosure Requirements

- Requires payers and health care facilities to provide disclosures about possible out-of-network billing situations. The bill also caps out-of-network costs for providers who are working at in network facilities and emergency departments.

HB1320: Nonprofit Hospital Community Benefit

- Requires nonprofit hospitals to engage with local community representatives on implementation plans regarding their community needs assessment. The bill also requires the hospitals to report data on their community benefit activities to the state, as well as the Internal Revenue Service.

HB1269: Mental Health Parity

- Requires Colorado Medicaid and private payers to provide coverage for mental health and substance use disorder at the same level for physical care. Payers will file annual reports to demonstrate they are complying with this bill.

SB1: Medication-Assisted Treatment (MAT)

- Extends a pilot that was created in 2017 to expand access to MAT from two counties to up to a total of five, including Pueblo, Routt, and the San Luis Valley.

HB1120: Youth Mental Health Education

- Lowers the age of the parental notification requirement from 15 to 12 years for children speaking with mental health professionals, as well as directs the Department of Education (DOE) to create and maintain a public mental health resource bank.

SB227: Reducing Hard from SUD

- Allows Colorado Hospitals to serve as needle exchange sites, expands the states prescription drug takeback program, and equips some public buildings with overdose reversal medication.

HB1287: Opioid and SUD Treatment

- Requires the Department of Human Services (DHS) to expand access to behavioral health facilities and MAT through grants, care navigation, and an online treatment tracker.

SB228: Substance Use Disorder (SUD) Prevention

- Requires providers to undergo SUD training before they can renew their licenses, funds four million dollars' worth of SUD prevention and treatment programs, requires warning labels on all opioid prescriptions, and prevents providers from accepting benefits from prescribing specific medications.

SB211: Criminal Diversion Program

- Expands on an existing pilot, created in 2018, which takes low-level criminal offenders with mental health needs out of the justice system and places them in community mental health treatment.

HB1177: Red Flag Law

- Allows law enforcement to confiscate an individual's firearms if it is believed that the individual poses a threat to themselves or others.

HB1176: Health Care Cost Savings

- Creates a task force of legislators, appointees, and department heads to create a report examining the financial viability of single payer and multi payer universal health care systems. The report will be published not later than September 2021.

SB79: Electronic Prescribing

- Makes electronic prescribing of most controlled substances mandatory, instead of optional.

HB1233: Investments in Primary Care

- Requires DOI to set affordability targets and standards for premiums, including adding targets for payer investment in primary care. The Bill also establishes a payment reform collaborative within DOI.

SB73: Advance Medical Directives

- Requires CDPHE to create and maintain a statewide advance medical directives (AMDs) database, where patients can upload, access, and edit their AMDs if they wish. The bill also creates legal protections for providers who follow the patient's instructions via the new database.

HB1077: Emergency Prescriptions

- Allows patients with chronic conditions to obtain emergency medications from pharmacies without a prescription.

HB1211: Prior Authorization

- Requires payers to approve or deny prior authorizations within five days of the request, as well as post publicly a list of previous approvals and denial along with the rational for each decision.

HB1009: SUD Recovery

- HB1009 expands housing voucher program to cover individuals with SUD issues, creates new standards for recovery facilities receiving referrals, and creates both the opioid crisis recovery funds advisory committee and the recovery residence grant program.

HB1160: Mental Health Facility Pilot

- Creates a three-year mental health facility pilot program to provide residential care, treatment, and services to people with either a mental or physical health diagnosis. One or two applicants will be selected for the pilot by CDPHE

HB1193: Behavior Health Support for High Risk Families

- Creates or amends a number of programs pertaining to behavioral health support for mothers and children. $500,000 will be appropriated annually for these measures for the three years of the pilot programs.

HB1237: Behavioral Health Licensure

- This bill combines the various licenses that behavioral health organizations must obtain through CDPHE and DHS into a single a single behavioral health entity (BHE) license.

SB195: Youth Behavioral Health Enhancements

- Creates the Office of Children and Youth Behavioral Health Policy Coordination within the Office of the Governor. The office will help coordinate and streamline statewide efforts around youth behavioral health programs.

SB222: Medicaid expansion for those at risk for institutionalization

- Requires HCPF to develop incentives for managed care entities to accept Medicaid recipients with severe behavioral health disorders. The bill also requires DHS along with HCPF to create a behavioral health safety net system that increases treatment programs, to develop funding models, and to define high intensity behavioral health treatment programs.

HB1131: Prescription Education

- Requires drug manufactures to provide, in writing, wholesale acquisition cost to the prescriber.

Stakeholder Engagement – Looking Ahead

The Farley Center produced a report entitled *Readiness for Cross-Sector Partners to Sustain and Advance Integrated Behavioral and Physical Health in Colorado* (Appendix B1). The report focuses on understanding stakeholders' readiness to continue cross-sector partnerships, and understanding what is needed to support them. This report can be used to inform stakeholder engagement efforts for future initiatives.

While the SIM Office will no longer serve as a stakeholder convener, many resources will be available to inform how integrated care is planned for, promoted, and delivered in the future.

Stakeholder Activity	Future Vision
In Person Engagement	The Multi-Payer Collaborative will continue to host MSS twice a year (see the **Payment Reform chapter** for more details). The Community Medical Home forum, convened by CDPHE, will continue beyond the term of the SIM initiative.
Online Engagement	New online engagement stopped in July 2019, with a message to stakeholders encouraging them to continue seeking and providing integrated care. The SIM website will be available through July 2020 so that stakeholders can continue to access information and resources.
Collaboration with other Stakeholder Groups	Workgroup members have been encouraged to join other meetings that will continue discussions about health care reform, and the two groups listed above will continue to meet.
Consumer Engagement	SIM connected more than 100 consumers with agencies and groups to inform health reform efforts beyond the term of SIM.

1 Payment Reform

SIM coordinated efforts among public and private payers to support practices with value-based payments, to align metrics and to aggregate data.

SIM Payment Reform Strategies

Value-based payments to practices

Alignment of metrics across payers

Data aggregation

Key SIM Activities

- Convened a Multi-Payer Collaborative (MPC) of 6 public and private payers
- Held Multi-Stakeholder Symposiums that built trust between payers and providers
- Selected a set of 13 aligned quality metrics
- Funded the Stratus™ data aggregation tool
- Supported over 400 SIM & CPC+ practices

Major Accomplishments

1. **SIGNED PAYER MEMORANDUM OF UNDERSTANDING (MOU)**: Public and private payers signed a MOU with the state of Colorado. The MOU reflects payer commitment to supporting practices with value-based payments, sharing data, aligning metrics and taking a collaborative approach toward integration.
2. **USE OF ALTERNATIVE PAYMENT MODELS (APMS) TO SUPPORT PRACTICES:** Ninety-six percent of practices that participated in SIM practice transformation cohorts received SIM payer support through an Alternative Payment Model, with over 80 percent of practices receiving support from two or more SIM payers.
3. **DEPLOYMENT OF A DATA AGGREGATION TOOL:** The MPC and the SIM office invested in Stratus™, a multi-payer data aggregation tool that helps practices assess cost and utilization data and risk stratify patients in ways that improve delivery of care and reduce or avoid costs.
4. **EXPLORATION OF AN ALL-PAYER MODEL:** SIM convened innovative Multi Stakeholder Symposium events, providing a unique opportunity for payers and providers to sit down at the same table and strategize around implementing APMs. The MPC will continue to convene biannual MSS events beyond the end of the initiative.

Future Considerations

1. **CONTINUING THE MPC:** The SIM office recommends that the MPC continue to meet as a voluntary, statewide collaborative of public and private payers facilitated by OHSU's Center for Evidence-based Policy. SIM recommends the recruitment of payers that are not currently at the table.
2. **SUSTAINING DATA AGGREGATION EFFORTS:** The provision of aggregated clinical and claims data across multiple payers has proven vital to practice transformation and payment reform efforts. The SIM office recommends the continued investment in a data aggregation tool.
3. **PROMOTING COLLABORATION BETWEEN PAYERS AND PROVIDERS:** The SIM office recommends that a symposium continue at least bi-annually to discuss value-based payment models and to improve collaboration between payers and providers.

Payment Reform

Overview

Since the time of the original proposal, the SIM Office recognized shifting payment models away from fee-for-service to those that reward value was critical to sustaining patient access to integrated, whole-person health care. At the beginning of the initiative, the insurance markets in Colorado were highly fragmented. Despite changes in the payer landscape during the past six years, which included acquisitions of domestic plans by national payers and reductions in plan offerings on the insurance exchange, Colorado remains a highly competitive market. While this competition is considered one of Colorado's strengths, and ensures consumers have a broad selection of insurance options available, it also poses a barrier to structural change. Coordinating efforts across payers of various sizes and models remains challenging.

Despite these challenges, SIM made significant strides forward. The initiative actively engaged seven payers through a Multi-Payer Collaborative (MPC), which will remain a primary forum for payment reform efforts after SIM ends. Reflecting a shared commitment to reward the value (not volume) of care, payers supported more than 300 primary care practices participating in SIM with alternative payment models (APMs) aligned with the Health Care Payment Learning and Action Network (HCPLAN) framework. Of note, Health First Colorado (Medicaid) worked with the SIM Office to create a glide path for SIM and Comprehensive Primary Care Plus (CPC+) practices to participate in the Medicaid APM described later in this section. The planning and operationalization of this APM prioritized measure alignment across initiatives.

Payers worked in concert to align expectations and respond in a cohesive manner to changes in the health care landscape. Payers also selected and approved a common set of practice transformation milestones, reflecting a shared commitment to supporting the integration of physical and behavioral health care.[1] By voluntarily selecting a measure set that aligned with expectations for the Quality Payment Program (QPP), the Transforming Clinical Practice Initiative (TCPi), CPC+, and the Medicaid APM, health plans sought to reduce the reporting burden on providers. Furthermore, payers supported practice connections to Stratus™, a multi-payer data aggregation tool designed to build provider capacity to make informed decisions, assess cost and utilization data, and risk stratify patients in ways that improve care outcomes and reduce costs.

[1] As stated in the Memorandum of Understanding (MOU), payers agreed to use a common definition for "behavioral health integration": *The social and emotional behaviors that interact in a reciprocal relationship to promote physical health and well-being, and to prevent or reduce chronic illness.*

While lack of a unified "SIM-specific" payment model initially proved challenging, as each SIM practice received a different mix of payment models depending on which payers supported them, SIM helped build practice skills for ongoing success with all APMs. As the SIM initiative progressed, feedback from providers indicated that knowledge around sound business operations were critical to sustainability, yet were often lacking within practices. Based on this evidence of need, SIM expanded business consultation supports as a means to enhance the skills of SIM practices to develop their own individual value propositions to assist in APM negotiations with their specific payers. For more information related to the business consultation supports offered to SIM practices, refer to the **Practice Transformation section** of this report. This support was bolstered through participation in SIM-funded Multi-Stakeholder Symposiums (MSS), which allowed practice representatives to talk directly with payer representatives. The MSS built and enhanced trust, and have set the stage for future progress. The SIM Office believes the skills and relationships fostered by the initiative will prove to be of long-term benefit to practices, which must be able to adapt to a continuously evolving landscape, and that this unique approach will be more valuable than a short-term, SIM-specific APM.

As the MPC looks to the future, the progress made by the SIM initiative will buoy continued success while lessons learned from the test model will help the group navigate future challenges. In particular, the SIM Office undertook efforts to develop state-led model proposals for multi-payer aligned payment and delivery system reform with support from the SIM steering committee and a rural health transformation workgroup. Given changes in direction at both the state and federal level, a specific state-led model will not be proposed, but the work has ensured that Colorado will be ready to respond to any future models that the Centers for Medicare and Medicaid Innovation (CMMI) develops.

This section begins with an overview of how payers were engaged in SIM. It then addresses efforts to align metrics, and the successes and challenges related to data aggregation. The section concludes with a discussion of how payers have moved toward value-based payment models, and addresses the potential for an all-payer model in Colorado.

Engaging Payers

Colorado is unique in its level of collaboration between public and private payers. SIM built upon existing commitments and payment reform efforts including the Comprehensive Primary Care (CPC), CPC+, Colorado Medicaid Accountable Care Collaborative, QPP, and independent projects initiated by commercial insurers. This alignment helped capitalize on payers' investments of time, infrastructure development, and philosophical alignment. By harnessing previous momentum, SIM engaged payers in a meaningful and sustainable way.

Multi-Payer Collaborative

In 2012, public and private payers participating in CPC formed a self-funded, self-governing body committed to supporting payment reform and practice transformation efforts in Colorado. Recognizing the ways in which SIM could build upon the successes of CPC, the following seven members of the MPC decided to support SIM:

- Anthem Blue Cross Blue Shield;
- Cigna;
- Colorado Choice Health Plans;
- Kaiser Permanente;
- Rocky Mountain Health Plans;
- UnitedHealthcare; and
- Health First Colorado (Medicaid).

In June 2015, these payers issued a joint press release and publicly pledged their continued support of payment reform efforts in Colorado, including SIM's efforts to integrate physical and behavioral health care. The press release was followed by a payer reception at the Governor's Mansion, hosted by the SIM Office, where Governor John Hickenlooper met with payers to discuss their initial commitments. Throughout the initiative, payers have continued to share a commitment to supporting and expanding accountable, whole-person, patient-centered care transformation.

Payer Memorandum of Understanding:

Payers signed a Memorandum of Understanding (MOU) with the SIM Office in which they committed to transforming the way physical and behavioral healthcare is delivered and financially supported in practices within their networks selected for participation in SIM. Payers committed to:

1. Focusing on primary care practices and behavioral health settings seeking to integrate care;

2. Supporting providers who deliver and coordinate integrated care that improves population health, and increases quality while reducing costs;

3. Increasing providers' abilities to manage whole-person care;

4. Developing necessary infrastructure to support care integration and delivery of whole-person care; and

5. Encouraging practices to continually evolve towards higher levels of integration via transformation of care delivery support through APMs.

The MPC also adopted the following shared vision of success:

> "A shared commitment to increased quality, improved efficiency, higher value, and continuous improvement and diffusion of innovative and successful

strategies through increased system accountability, improved health outcomes and experiences for patients and providers, and decreased total cost of care."

MPC Accomplishments:

The MPC met regularly throughout the initiative, and was facilitated and supported by staff from the Center for Evidence-Based Policy, housed within Oregon Health Sciences University (OHSU). As discussed in more detail below, the MPC over the course of SIM:

- Formed a statewide and voluntary convening of public and private payers, which has served as a national model of payer collaboration;
- Coordinated with the SIM Office, practices, and other stakeholders to ensure SIM practice requirements were aligned with CPC+ but not duplicative in order to reduce provider reporting burden;
- Successfully planned and procured a data aggregation vendor and tool that allows access at the point of care across multiple public and private plans;
- Secured Medicare participation and data to support primary care practice transformation;
- Developed a shared framework that defines and measures transformation toward integrated whole-person care;
- Adopted HCPLAN framework to help drive transformation from volume to value of care delivered;
- Supported the transformation of more than 400 primary care practices (including SIM and CPC+ participants);
- Agreed on a set of 13 aligned quality metrics to measure adult primary care, and are projected to have a second set of metrics focused on pediatrics;
- Served as a single point of access for organizations/individuals seeking the payer perspective;
- Deepened relationships with primary care providers/practices through improved communication and collaboration during MSS events; and
- Spoke with one consistent "voice" through the use of shared talking points, press releases, and messaging.

SIM also retained a high number of payers throughout the initiative. While Colorado Choice eventually disbanded and withdrew from both SIM and CPC+ due to overall changes in business strategy, six of the original seven payers remain committed to SIM four years after signing the original MOU. Despite significant changes in the payer landscape, including shifts in leadership, a transition to a more national-facing group of plans, as well as leadership changes at the state level, the MPC's accomplishments point to the significant progress made in advancing payment reform in Colorado.

Major Accomplishment

The engagement of commercial and public payers through the Multi-Payer Collaborative in Colorado is highly valuable. This voluntary convening supported SIM practices with value-based payments and will remain Colorado's primary forum for sustaining efforts related to payment reform moving forward.

MPC Sustainability:

The MPC will continue to act as the main forum for payers to discuss health care transformation in the state after SIM ends. As the MPC moves forward, health plans will work together to review the MPC purpose, including a right-sizing effort to adapt and react to a changing federal and state environment. OHSU will continue to act as the convener of this group, and health plans will directly provide the support necessary to sustain the MPC. The MPC will also support other initiatives such as CPC+, which ends in 2022. This continuation will help ensure health plans continue to make progress - particularly around data aggregation, measure alignment, and supporting integration with value-based payments. As new opportunities and initiatives related to health care transformation and payment reform arise, health plans intend for the MPC to act as the primary forum for those conversations. In particular, the MPC will focus on:

- Improving the health of all Coloradans;
- Reviewing aggregate and practice-specific data;
- Recruiting additional health plans;
- Developing shared strategies to further advance market transformation;
- Aggregating support for smaller practices;
- Continuing to offer payer-practice communication and supports, including twice-yearly MSS (details below);
- Serving as a proactive and innovative thought-leader on transformation support;
- Serving as the primary table for payers in Colorado to discuss support of new initiatives, as was done for CPCI, CPC+, and SIM;
- Sharing best practices and initiative information;
- Identifying opportunities to innovate further transformation; and
- Serving as a "one-stop-shop" for the activities listed above.

Payment Reform Workgroup:

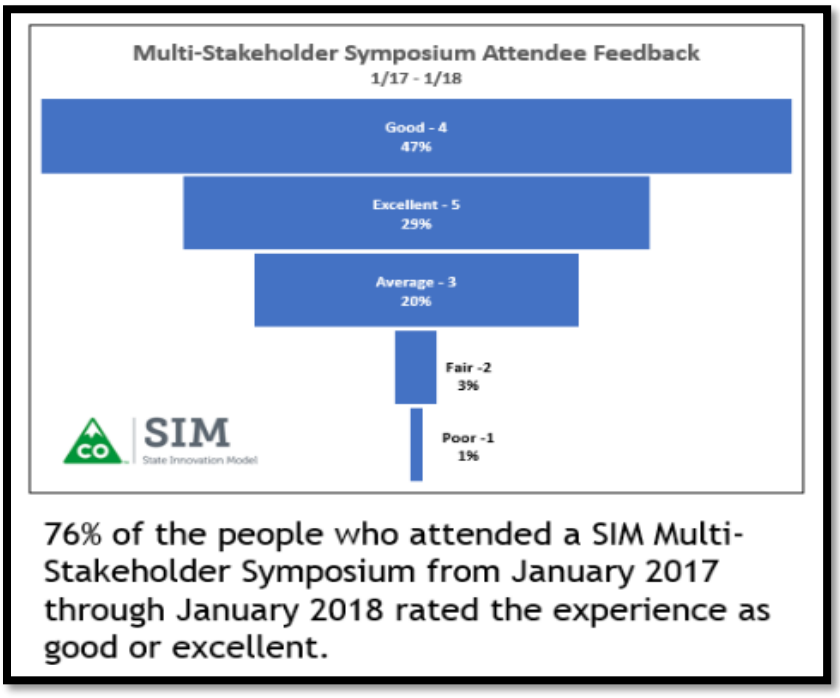
The Payment Reform workgroup was formed to complement the ongoing efforts of the MPC, and engaged a wide range of stakeholders, including consumer representatives, philanthropic organizations, state agencies, representatives from multiple public and private payers, purchasers, and community stakeholders. The Payment Reform

workgroup provided recommendations on designing APMs to support the integration of behavioral health and clinical care early in the initiative. However, as SIM progressed and needs became clearer, the SIM Office repurposed the workgroup. The addition of quarterly, SIM-funded MSS (discussed below) that convened payers and practices to discuss the initiative's stakeholder engagement process, combined with ongoing bimonthly meetings of the MPC, created significant opportunities to discuss payment reform strategies and issues. To reduce duplication of efforts, minimize stakeholder burnout, and direct energies on payer-provider communications, the SIM Office dissolved the workgroup and asked members to participate in the MSS and participate on other workgroups to infuse a payment perspective throughout the initiative's work.

Multi Stakeholder Symposiums:

The SIM team recognized the need to improve dialogue between SIM providers, practice transformation organizations, and insurance companies. As a result, the SIM team began to hold MSS to encourage open communication and build trust between these groups. The inaugural MSS took place in January 2017 and was dedicated to focused discussions among attendees, who were seated at tables of eight. Participants were asked to write down ideas — including concerns and hopes — for improvements in specific content areas. The SIM Office compiled this feedback and used it to guide the agenda for future MSS events, which were subsequently held three times a year. Future events highlighted tools to help practices collect, report and use data to negotiate mutually beneficial, value-based contracts.

Feedback from MSS attendees was largely positive, with 76% of attendees from January 2017-2018 stating they had a good or excellent experience at the events. As expressed by a cohort-1 practice representative following a MSS, "This exercise made me appreciate initiatives like SIM that give us the opportunity to be at the same table and get on the same page of what's going on in each individual realm. At the core of good healthcare is relationships."



The SIM Office ran a series of articles documenting the progress made at each event.

MSS Sustainability:

Payers have committed to convening MSS twice a year beyond the end of SIM, and OHSU will continue to facilitate the events. During the March MPC meeting, payers discussed the value of the MSS forum, citing the following benefits that warrant continuation:

1. A unique opportunity for payers and practices to sit down at the same table and discuss strategies for partnership, to help overcome challenges to transformation;
2. Payers have been able to showcase the work they are doing to support practices via the MSS;
3. MSS events create a forum where payers can provide quick, on-the-spot solutions to practices;
4. Some plans have been able to enroll additional practices into their incentive programs as a result of the MSS;
5. An invaluable avenue for practices to inform payer strategies as they develop new incentive programs; and
6. In general, the MSS provides an opportunity for payers to gain important insights from practices about the realities that affect their work, the struggles they face and the ways in which payers can best support their success.

The fact that payers have agreed to continue supporting MSS reflects the value as well as the contribution SIM has made in establishing an ongoing forum to promote payer-practice dialogue. The MSS will continue to provide value as the payment reform landscape evolves.

Major Accomplishment	
	The creation of the MSS helped connect the dots between practice transformation efforts and the ways in which value-based payments support that work. The events, which are a powerful mechanism to facilitate a closer relationship between payers and providers, generated conversation about how to succeed with value-based payment models as well as how to use data to show the value of practice transformation.

Rural Innovation Workgroup:

In the first quarter of Award Year 4, the SIM Office convened a new workgroup tasked with developing recommendations for a global budget approach to health care payment in some rural areas of Colorado. The workgroup included representatives from commercial and public payers, the Governor's Office, the Division of Insurance, hospitals, the business community, and other key stakeholders. As described in more detail below, the workgroup produced detailed recommendations regarding the

development of hospital global budgets in rural Colorado. SIM also continued to partner with the Colorado Department of Health Care Policy and Financing (HCPF) and the Colorado Hospital Association to model fixed budgets for struggling rural hospitals. This work will help prepare partners for success in any future models focused on rural transformation.

Medicare:

In August 2016, the MPC submitted a request to CMS asking for the active and ongoing participation of Medicare in the MPC, and in SIM's proposed care delivery and payment reform approach. At that time, the SIM Office and CMMI began conversations about ways the state could develop unique state-led alternative model proposals to engage Medicare as a participating payer in Colorado. The CMMI All Payer Group, State Innovations Group, and Colorado SIM Office maintained consistent dialogue about opportunities to engage federal and state partners with commercial payers in Colorado to support continued movement towards value-based payment. During this time, regional CMS representatives continued to participate actively in the MPC. Additionally, the SIM Office worked with the Center for Improving Value in Health Care (CIVHC), the administrator of the Colorado All Payer Claims Database (APCD), to secure qualified entity status so that Medicare claims data could be included in the Stratus™ data aggregation tool for SIM practices.

Veterans Administration and TRICARE

Outside of the MPC, Colorado SIM committed to exploring opportunities to support behavioral health integration with the Veterans Administration (VA) and TRICARE. After discussions, the SIM Office determined that a new population-based veteran health connector could play a key role in advancing this work. As described in the **Population Health chapter**, this position was filled in fall 2018, started an ongoing dialogue with these agencies.

Self-Funded Payers and Employer Purchasers

Throughout the initiative, the SIM Office reached out to self-insured employers and purchasers to explore how whole-person care can improve outcomes and reduce costs for businesses. The Colorado Business Group on Health (CBGH) proved to be a crucial partner in this arena. Formed in 1996, CBGH is a purchaser-led, multi-stakeholder non-profit coalition committed to collaboratively improving the health care value-proposition for all Coloradans and their communities. The organization helps Colorado employers get more value for their healthcare dollars by providing tools, programs, reports, and other assistance to facilitate the development of market-based approaches to lowering healthcare costs while improving quality.

The SIM Office met with CBGH leadership early in the initiative, and gave several presentations to members. The group identified the need to help self-insured "buy better health care" instead of more health care. After attending monthly meetings, the SIM Office realized the need to use data to demonstrate how integrated care

improves health, reduces or avoids health care costs, improves presenteeism, and otherwise benefits employees in ways that appeal to self-insured employers. Thanks to a partnership between CBHG and CIVHC, more than 20% of the lives covered by self-insured employers and administrative service organizations in the state are now in the APCD.

The SIM team has also taken strides to highlight a list of integrated health care practices in the state (including SIM practices) that will continue to be available after the SIM team completes its work in July 2019. This list was provided to CBGH members interested in supporting integrated care for their employees. Additionally, the SIM Office met regularly with the Colorado Department of Personnel and Administration (DPA) to support the strategic planning and development of an Invitation to Negotiate (ITN) for the next open competitive bid process to provide health plan services for the state employees of Colorado. During this time, DPA became a member of CBGH, committing to the goals of driving towards effective and efficient health care coverage for state employees.

Working with purchasers and self-insured plans is a key area of continued opportunity in Colorado, given the abundance of lives covered by self-insured entities. The SIM Office initially struggled to make these connections, as work to connect purchasers with practices offering integrated care did not always make sense. Taking a step back, and helping to inform benefit design and quality parameters that can help purchasers negotiate effectively, has been a more effective domain for the SIM Office to influence the conversation in support of integrated care models.

Status of Payer Engagement Key Activities

The table on the following page describes the final status of key activities related to payer engagement listed in the Award Year 4 terms and conditions.

PAYER ENGAGEMENT KEY ACTIVITIES	STATUS	LOOKING AHEAD
 Coordinate and align private insurer and Medicaid approaches to payment reform	The MPC continues to meet, ensuring that six payers are coordinating their approaches to payment reform. MPC payers are actively supporting SIM practices, with support tied to a common set of Building Blocks.	The MPC will continue to meet beyond the term of SIM, with individual payers contributing to sustain the collaborative. OHSU will continue as the convener of the group, which will be Colorado's primary forum for payment reform efforts. Additionally, the MPC will continue to engage new payers to join the collaborative.
 Continue efforts to secure commitments from Medicare, self-insured employers, VA and TRICARE to participate in SIM	The SIM Office helped to support a Veteran Health Connector (see the **population health chapter** for more information). However, efforts to secure VA and TRICARE support in payment reform were unsuccessful. Colorado SIM worked with Medicare to integrate Medicare data for SIM practices into the Stratus™ solution.	The Together with Veterans program will continue supporting outreach to veterans after the end of the SIM initiative. Medicare data will continue to be available in the Stratus™ solution beyond the end of SIM for practices participating in CPC+.
 Leverage State Employee Health Plan to expand state adoption of alternative payment models and drive employer demand for value-based payments	The SIM Office provided strategic input to the state employee health plan for the 2020 Invitation to Negotiate proposal for health coverage for state employees. Additionally, the SIM Office presented to state and national leaders regarding how self-insured plans could incorporate integrated care models into their benefits design.	DPA joined CBGH as a purchaser, and has engaged with other purchasers during quarterly meetings. The State is also engaging in a purchaser alliance pilot in Summit county with plans to expand to a statewide purchasing alliance. DPA will continue to explore APMs such as bundled payments and episode of care payments.

Aligning Metrics

Data Aggregation:

Throughout the initiative, the SIM Office steadily progressed toward its goal of integrating clinical and claims data and deploying tools to help practices use aggregated data in actionable ways. The SIM Office partnered with the MPC to provide SIM practices access to Stratus™, a data aggregation tool designed to provide physicians, care teams, and administrators with patient-centered, population health insights. Stratus™ gives providers the capacity to make informed decisions, and helps assess cost and utilization data and risk stratify patients in ways that improve care delivery and reduce or avoid costs.

SIM recognized the value of this tool, which provides powerful insights into complex data sources in one location. Providers receive multiple reports from each payer, which necessitates logins to different websites to access patient data, and makes it cumbersome and inefficient to coordinate a patient's care. Gleaning relevant information from data is a complicated process, and practices often have slim resources to invest in integrating, analyzing, and interpreting data. By providing a single source of claims data for patient-level information, providers are able to save time and resources while getting the data needed to make informed decisions.

By the end of the SIM initiative, 198 SIM practices and practice transformation organizations (PTOs) had taken advantage of the opportunity to activate their Stratus™ licenses and utilize the tool. Recognizing the value of allowing practices more time to use the tool, the SIM Office extended cohort-1 Stratus™ licenses until the end of June 2019. These licenses were previously scheduled to terminate at the end of 2018. Payers have committed to supporting practices in CPC+ with Stratus™ licenses until the end of that initiative in 2022.

Stratus™ Training:

One of the main challenges of data aggregation involved training practices to effectively use the Stratus™ tool after license activation. Stratus™ has a wide range of capabilities, and many providers indicated that without sufficient time to learn the tool, Stratus™ was difficult to navigate. In response, the SIM Office convened a practice engagement workgroup to elicit suggestions regarding practical use cases, ways to improve training opportunities, and other strategies to increase Stratus™ utilization. A representative from Teladoc, the company that owns Stratus™, attended multiple MSS events, every Collaborative Learning Session, and hosted monthly training webinars to ensure practices in cohorts 1, 2 and 3 were using the data within Stratus™ in actionable ways. Practice facilitators were trained on how to support practices with this tool and use it to guide changes in clinical practice. The SIM Office hired a data management specialist with the primary focus of increasing practice utilization of Stratus™. This position acted as a Stratus™ super-user and a resource for SIM practices and PTOs. Collectively, these efforts increased enthusiasm for the tool.

Data Quality:

Data quality issues also proved to be a substantial challenge to data aggregation. Given more immediate concerns within payer organizations, many stemming from large internal system changes, the submission of timely and complete data to Stratus™ became an increased struggle for many payers. As a result, quarterly refreshes fell short of expectations, due to a variety of factors including last-minute changes in the structure of data files, issues with incomplete data, and the inability to provide data in a timely and consistent format, which resulted in increased human intervention. Further gaps in data quality with Stratus™ stemmed from legal obstacles to integrating Medicare data in the tool. CIVHC attained Qualified Entity status in June 2018, but could not send data to Stratus™ until Best Doctors was able to prove a clinical relationship existed between providers and patients, which required establishing BAAs with provider groups. This process took time, and as a result, Medicare data for non-CPC+ practices was not included in Stratus™ until relatively late in the initiative (see the **Data and Evaluation chapter** for more information). Medicare data was available in Stratus™ for CPC+ practices.

As a result of these challenges, the SIM Office worked with CIVHC and payer organizations to create streamlined processes, timelines, and communication strategies to improve the timeliness and quality of data sent to Stratus™. After CIVHC acquired Qualified Entity status, the SIM Office helped implement processes to get Medicare data in the tool. This work included developing a shared work plan to track processes, and participating in weekly calls to facilitate discussions around timelines and status updates to address issues quickly, which helped to ensure the timely integration of Medicare data into the Stratus™ tool.

Lesson Learned

Aggregating data across payers was an ongoing challenge for SIM, exacerbated by large-scale system and attribution changes at payer organizations, gaps in communication, decreased commitment and prioritization from health plans, lack of standardized processes, and the need for increased training opportunities. For future data aggregation efforts, simpler solutions should be considered first with allowance for more complex systems in the future.

Aligned CQMs:

SIM and the MPC recognized the need for quality measure alignment among public and private payers to support new, patient-centered payment and delivery system reforms. By aligning measures, payers can lessen the burden of practice reporting and set a consistent standard statewide for reporting progress in the quality and value of patient care. Measure alignment is also a crucial component in the success of future multi-payer models. To this end, the MPC developed a set of 13 core quality measures

for adult primary care that are consistent with the core measure set announced by America's Health Insurance Plans (AHIP) and CMS for adult primary care. The work included coordination with the MPC and ultimately aligned SIM-required CQMs with quality measures used in CPC+, TCPi, QPP, and the Medicaid APM.

It is important to note that this core set does not mean health plans asked practices to report on all 13 measures, nor does it mean they did not require additional measures outside of this set. However, MPC members agreed to use the same metric for measures in this set. By identifying shared quality metrics, the MPC established a shared set of core measures that reduce complexity in reporting for providers. As part of a similar effort, a set of aligned core measures for pediatric primary care is expected in October 2019.

Lesson Learned
 Health plan needs for flexibility and differentiation made compromise on a consistent measure set difficult. While payers are dedicated to measure alignment and reducing provider burden associated with reporting quality measures, local representatives of large national health plans have difficulty obtaining approval on an exclusive, aligned set of measures for the Colorado market as this work is decided at the national level. Organizations that engage with payers in the future should endeavor to have a realistic dialogue with payers upfront to ascertain what commitments may be possible along a realistic time frame.

Status of Metrics Alignment Key Activities

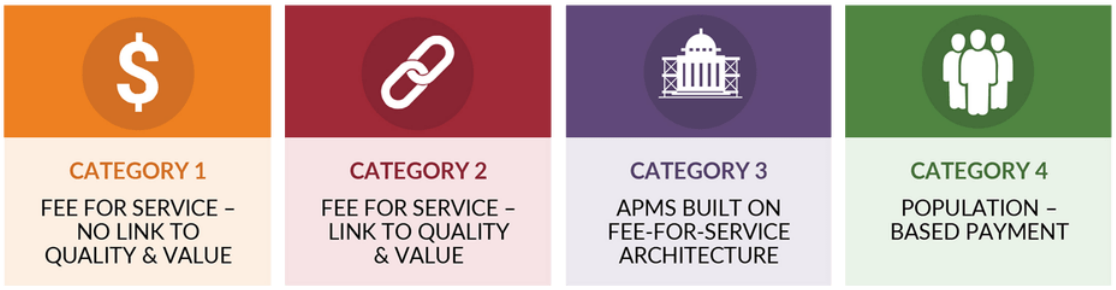
The following table describes the final status of the key activity related to metrics alignment in the SIM Award Year 4 terms and conditions.

METRICS ALIGNMENT KEY ACTIVITY	STATUS	LOOKING AHEAD
 All participating payers have access to a common set of CQMs and cost & utilization measures	Members of the Multi-Payer Collaborative have identified a core set of 13 CQMs aligned with AHIP and CMS for adult primary care.	The MPC will continue to focus on measure alignment after SIM ends. Members plan to consider pediatric measures and hospital measures moving forward. However, discussion of hospital measures is currently on hold given the lack of alignment across public and private payers. Payers are also interested in reviewing the measures agreed upon in the Medicaid Hospital Transformation Program before proceeding with further discussions.

Moving Toward Value-Based Payment Models

Commercial Payer Support for SIM Practices:

As part of their commitment to supporting providers who deliver and coordinate integrated care that improves population health and increases quality while reducing costs, the MPC agreed to support SIM practices with new or existing APMs to support transformation goals. The SIM initiative allowed payers a significant amount of flexibility in how they designed and adapted their payment models, and adjusted their support in response to the evolving landscape. Rather than adopting a uniform "SIM specific" payment model, payers supported practices with a variety of models, unique to their organizations, aligned with the HCPLAN APM framework (see figure below).[2] The MOU was amended to include high-level information regarding the type of support each payer offered SIM practices, and each payer committed to make a good faith effort to move up at least one level in the HCPLAN framework for their payment models.



Health First Colorado (Medicaid) Support for SIM Practices:

Health First Colorado is dedicated to pursuing innovation to improve access, health care quality and the health of the clients and communities they serve. The Accountable Care Collaborative, the delivery mechanism for the state's Medicaid program, is designed to deliver care for clients in a seamless way, providing a framework in which health care initiatives, including payment reform, can thrive. Since the SIM proposal, HCPF, in collaboration with community stakeholders, developed an APM for primary care, with the following goals:

- Provide long-term, sustainable investments into primary care;
- Reward performance and introduce accountability for outcomes and access to care while granting flexibility of choice to primary care medical providers; and
- Align with other payment reforms across the delivery system.

[2] This figure was taken from https://hcp-lan.org/. For more detailed information about the HCPLAN Framework, please see the *Alternative Payment Model (APM) Framework Refresh* (July 11, 2017), available at https://hcp-lan.org/apm-refresh-white-paper/#1466615468036-18abb176-bf37.

"SIM was a catalyst for us to think about payment reform in Colorado...I think participation in these models has really teed everyone up for success. Those who are participating in SIM and in CPC+ are doing what it takes to really advance the delivery system and we've acknowledged that by giving the providers credit in our payment models the first performance year.

- Director of Rates and Payment Reform, Health First Colorado

The APM introduced by Health First Colorado (Medicaid) provides a prime example of how SIM has prepared providers for success with reimbursement models that reward the value of health care delivered. Health First Colorado worked closely with SIM, along with other national programs, in an effort to ensure Medicaid alignment with other value-based payment efforts to reduce or avoid as much administrative burden on providers as possible. As part of this effort, the final performance and structural measures for Medicaid's APM were developed in alignment with the required elements for the SIM initiative. SIM and CPC+ practices were automatically eligible to participate in the Medicaid APM (if they met a $30,000 annual Medicaid claims threshold) and were not required to select measures for the 2019 performance year, demonstrating a commitment to programmatic alignment between the initiatives.

Additionally, Health First Colorado began exploring potentially avoidable costs using the Prometheus tool as a foundational step towards exploring bundled payments and episode-based payments within the Medicaid program. While this work will not be implemented by the time SIM ends, Health First Colorado is committed to pursuing opportunities to align incentives across the delivery system to ensure effective and accountable care that supports provider capacity.

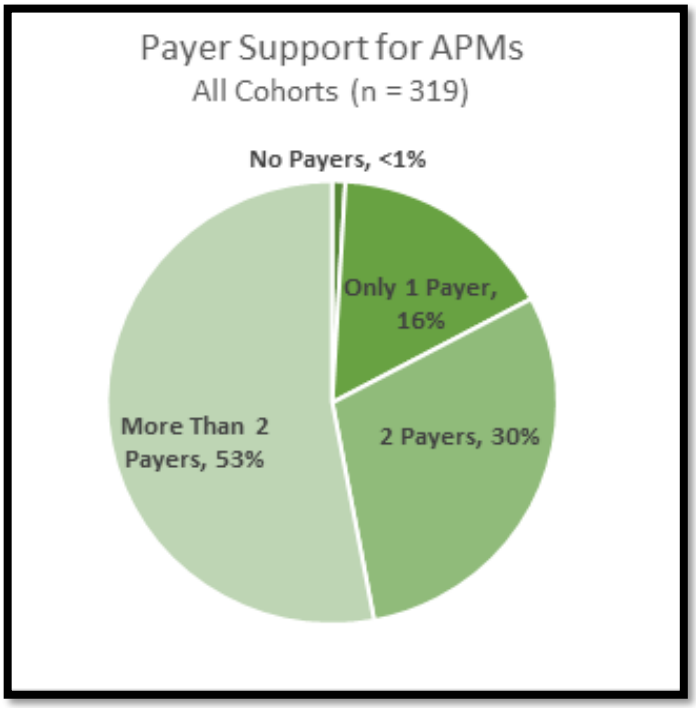
Overall Support for SIM Practices:

SIM payers were involved in selecting primary care practices to participate in Practice Transformation efforts. The chart on the following page summarizes the type of support private and public payers offered to SIM practices.

Payer	HCPLAN Framework Level	SIM Model
Anthem Blue Cross Blue Shield	3	Enhanced Personal Healthcare (EPHC) or looking at individual provider's fee schedule if EPHC is not available in their geography.
Cigna	3	PMPM with Share Savings Opportunity
Colorado Choice Health Plans	3	Per Member per Month Care Management Fee/ Shared Net Savings
Colorado Medicaid (Colorado Department of Health Care Policy and Financing)	2	Accountable Care Collaborative Behavioral Health Integration Program
Kaiser Permanente	3	Fee for Service, Fee for Service - Link to Quality & Value & Population Based Payments - MOU with Colorado Permanente Medical Group
Rocky Mountain Health Plans	3 and 4	Enhanced Fee-For-Service with shared savings/upside arrangements; Population Based Payments; Enhanced Global Payments
UnitedHealthcare of Colorado	2	Accountable Care Collaborative: Primary Care Physician Initiative/Behavioral Health Integration Program (PCPi/BHI)

While not every payer supported every practice, almost every practice received APM support from at least one payer, with 83% of SIM practices receiving support from two or more payers.

While SIM initially required practices to be supported by at least one payer to join a practice transformation cohort, with the recruitment of cohort-3 practice sites SIM sought to expand the opportunity to participate in the initiative to sites that were providing primary care services but not currently supported in a value based payment structure by a SIM-participating health plan. As identified in the figure to the right, this characterized 3 practices in cohort-3, or less than 1% of the 319 practices that completed SIM. By eliminating this requirement, SIM hoped that these practices would be successful in their practice transformation efforts, highlighting the value of integration, and, in turn,



potentially serve as a catalyst to those practices being supported in a future value-based payment. It is important to note that while these practices did not receive an APM from a payer that supported SIM, they were supported by health plans outside of the SIM initiative.

As part of the evaluation effort to assess movement toward value-based payments, SIM collaborated with public and private health plans to obtain payment support data, with the objective of being able to obtain a more comprehensive understanding of the landscape of value-based payment in Colorado. The evaluation also sought to track the progress of APM adoption statewide, as well as for SIM practices. It should be noted that the SIM Office experienced challenges collecting more granular data from private health plans related to payer support of practices, making it difficult to capture a detailed picture of how much support each practice received. Among these challenges were communication gaps among payer representatives, a lack of standardization of reportable payer data, system limitations, competing priorities, and the inability of some payers to share data around amounts they were paying to each practice. Discussions of this work with other SIM states and other entities indicate the issues identified by the SIM Office are not unique to Colorado.

Although the SIM Office struggled to collect standardized, complete, and validated data from private payers due to the aforementioned hindrances, Health First Colorado provided data in the tables below, detailing the number of beneficiaries attributed to SIM practices, differentiated by APM category, based on the timeframe that the practices were participating in SIM. In the first table, Medicaid provided the number of beneficiaries attributed to practice sites, differentiated by APM categories, at an aggregate statewide level. The second table summarizes the payment amounts tied to each APM category flowing to SIM practices

Medicaid APM Support – Statewide (Fiscal Year)					
	APM Category	2015-16	2016-17	2017-18	2018-19
Number of Attributed Beneficiaries	APM 1	280,860	269,184	262,840	95,133
	APM 2	980,885	1,018,165	1,001,779	1,143,178
	APM 3				
	APM 4		22,316	12,961	

Medicaid APM Support - SIM Practice Sites (Fiscal Year)					
	APM Category	2015-16	2016-17	2017-18	2018-19
Number of Attributed Beneficiaries	APM 1				
	APM 2	114,257	330,450	329,895	433,995
	APM 3				
	APM 4		2,208	2,208	
Total Payments Per APM	APM 1				
	APM 2		$2,575,507.20	$5,767,311.47	$5,175,447.30
	APM 3				
	APM 4		$37,094.40	$35,504.64	

While the SIM Office had difficulties obtaining standardized and complete APM data from all payers supporting practices in the initiative, key practice-level changes identified through representative survey response include:

- Over 50% (53.51%) of practice sites participating in SIM indicated the practice changed its budgeting or business practices in preparation for alternative payment models as a result of the SIM initiative;
- Ninety-eight percent of practices in cohort-2 had completed design of, or were actively working to design, a strategy to evaluate the impact of value based payment agreements within their practice. Ninety-four percent of practices in cohort-3 had completed design of, or were actively working to design, a strategy to evaluate the impact of value based payment agreements within their practice;
- Approximately 33% of practice sites participating in SIM had an increase in the percentage of practice site revenue from sources other than fee-for-service because of participation in SIM;
- Seventy-five percent of practices agreed that access to alternative payment models through participation in SIM has helped the practice achieve their practice transformation goals.

Communicating Payer Support to Practices:

Shortly after the launch of the first cohort in the spring of 2016, it became clear that there was a disconnect between providers and payers in terms of what "payment support for SIM practices" entailed. Payers participating in SIM were told that their existing value-based payment models would be acknowledged as support for SIM practices, as outlined in the SIM proposal. For this reason, practices that were part of a value-based initiative or model might not have received a new contract or increase in financial reimbursement for their participation in SIM. However, many practices expected to participate in a uniform "SIM-specific" payment model, or to see an immediate increase in reimbursement to support practice transformation efforts to integrate behavioral health. To mitigate initial frustration, the SIM Office spent considerable time and effort helping providers understand APM expectations, and encouraged more regular communication with payer representatives. The SIM team further clarified expectations around payer support in the acceptance packets sent to practices participating in cohorts 2 and 3. The SIM office also created a payer resource on the SIM website with information about payment support, including a podcast and video.

To encourage more consistent communication between payers and practices, the SIM team created an online "Resource Hub" folder for payer organizations. This folder included updated practice lists for each cohort, including lists specific to each payer, which indicated the practices a payer was supporting, along with letter templates that payers could customize and send to practices. These letters were intended to explain specific payment support to the practice, including payment model details, and to clarify whether the practice was in a new or existing payment model. The letters also contained a SIM-specific contact at the payer organization for SIM-support questions. The SIM team encouraged payers to send communication to SIM practices and others in their organizations on a regular basis. The SIM team also created a guide for PTOs that explained payer support of SIM initiative, so PTOs could help field questions from practices. The MSS events described above also provided an opportunity for dialogue between providers and payers regarding expectations.

Lesson Learned

SIM practices expressed frustration about the lack of a "SIM-specific" payment model, yet the SIM Office believes focusing on enhanced provider skills to negotiate more effectively will ultimately be more valuable long-term than receipt of a specific APM that ends with the initiative. The SIM Office recommends future payment reform efforts include strategies to clearly communicate expectations to practices from the outset, and that payers are provided with tools, such as letter templates, to ensure consistent messaging.

Selection of Building Blocks:

Payers that supported SIM played an active role in the selection of SIM Practice Transformation building blocks. Payer involvement, both in the initial selection of the building blocks and in their revision, was critical to ensuring buy-in within and among the health plans, and in establishing a consistent set of expectations among practices. Refer to the **Practice Transformation chapter** of this report for more information regarding the selection of building blocks for SIM practices.

Value-Based Payment Key Activities

The table on the following page describes the final status of key activities related to value-based payment in the SIM Award Year 4 terms and conditions.

VALUE-BASED PAYMENT KEY ACTIVITIES	STATUS	LOOKING AHEAD
 Work with HCPF to align Medicaid payment approaches with SIM	Health First Colorado developed a Medicaid APM, which SIM and CPC+ practices that met a specific threshold were automatically eligible for, reflecting Department's acknowledgment for the work done in these initiatives.	SIM practices are on a glide path for the first year of the Medicaid APM. Practices will continue participation in this APM beyond the end of SIM.
 Ensure that payers support SIM-participating practices with alternative payment methods	Ninety-nine % of primary care practices that participated in SIM were supported by payers with at least one APM.	Payers will continue to support many SIM practices in APMs after SIM ends. The SIM building block framework will help guide payer support of primary care practices.
 Engage SIM providers in dialogue with payers to inform continued implementation of alternative payment models	Payers have participated in eight Multi-Stakeholder Symposiums, which helped improve communication with practices. Payers have also used SIM resources and templates for practice communication.	The MPC has agreed to continue convening Multi-Stakeholder Symposiums twice yearly.

Exploration of an All-Payer Model:

A CMMI All-Payer Model is a demonstration model with the following characteristics:

- A fixed duration (approximately 5-6 years) that provides a framework for Medicare, Medicaid, and private payer participation;
- An agreement with the State, state agencies, and CMS, with payers and providers participating in implementation primarily through contracts that fit within the All-Payer Model framework; and
- A requirement to align with Medicare operability limitations, maintain beneficiary protections under Medicaid and Medicare, and meet budget neutrality tests as well as achieve cost growth limits.

The SIM Office recognizes that aligning payment models across Medicaid, Medicare and commercial payers to support the delivery of integrated physical and behavioral health care is critical to achieving the quadruple aim. The SIM Office led statewide efforts to develop an all-payer model that offered a framework for some communities to transform their delivery systems. Components of the potential all-payer model included a statewide, multi-payer APM for primary care, as well as global budget models for some rural hospitals, aligned with existing transformation efforts including Health First Colorado's Hospital Transformation Program. This work aligned with the original proposal to advance payment models and improve health outcomes.

Alternative Payment Models for Primary Care:

Colorado has explored the development of an advanced model of care that integrates physical and behavioral health care through regional implementation of a medical home model in SIM, CPC+, and the Accountable Care Collaborative's Regional Accountable Entities (RAEs), the single entity that promotes physical and behavioral health for Health First Colorado clients.

To build on this work, SIM staff and the SIM steering committee developed policy recommendations for a voluntary, statewide advanced primary care APM that would engage commercial and public payers. The following recommendations were outlined in a final progress report and shared with the Polis administration.

RECOMMENDATIONS FOR A PRIMARY CARE APM

Support and Advance Existing APM Efforts

- Maintain 5 key primary care functions (Access/Continuity; Care Management; Comprehensiveness/Coordination; Patient/Caregiver Engagement; and Planned Care and Population Health).
- Require the use of Certified Electronic Health Record (EHR) Technology:
- Align and simplify measures (with focus on electronic clinical quality measures, specific standardized data electronically extracted from the EHR to measure quality of care based on the National Committee for Quality Assurance) and data aggregation efforts.
- Base performance-based incentive payments on patient experience, clinical quality, and improved outcomes and utilization.
- Advance use of technology at the point of care to support a focus on outcomes.
- Continue Regional Health Connector (RHC) engagement, leveraging their success in reinforcing community linkages through local engagement and partnerships.
- Continue practice transformation technical assistance for providers (including as related to data use).

Support New Activities to Advance and Enhance the Delivery System

- Require a defined behavioral health strategy, integrated with physical health
- care, to support patient needs when there is a behavioral health need (internal or
- through a contracted partner including telemedicine) and demonstrate such resources.
- Encourage practices to dedicate a portion of care management fees to supporting
- behavioral health integration.
- Require public and private payers to broaden the definition of “complexity” to include socio-economic factors, and incorporate a comprehensive complexity measure in level of care coordination/care management fees.
- Develop policy incentives to enhance linkages across the health system, including specialty and hospital care, and that encourage appropriate settings for care.

Payment Considerations in Advanced APMs

- Provide multiple payment tiers/tracks for providers to advance to an appropriate level within the HCPLAN Framework that matches their level of transformation readiness.
- Explore development of payment model approaches that address the unique challenges of small and rural practices in Advanced APMs.
- Allow for defining financial risk to include performance-based risk.

- Allow for prospective, risk adjusted, primary care payments for face-to-face evaluation and management services with a more limited set of services eligible for fee-for-service payments.
- Pay particular attention to options that ensure smaller and rural practices achieve enough payer volume to support transformation to Advanced APMs (and away from fee-for-service models).

Multi-Payer Engagement in Advanced APMs

- Leverage commercial payer successes in Advanced APM model implementation to the extent possible including the collaborative work of the MPC.
- Encourage commercial payer adoption and/or alignment with proposed model concepts, allowing for flexibility with regard to specific payer approaches that support the goals and intent of the Advanced APM model.
- Identify and capitalize on opportunities for multi-payer alignment beyond payment model approaches.
- Advance multi-payer participation in effective and timely data aggregation and information sharing in support of a multi-payer Advanced APM approach.

Global Budgets:

In award years 3 and 4, SIM explored opportunities to develop global budgets for some rural hospitals that would help providers and payers flip traditional fee-for-service incentive structures and pay for the value versus volume of health care provided. This work aligned with the original SIM proposal's objectives of advancing payment models in Colorado and improving health outcomes.

The SIM Office convened a Rural Health Innovation workgroup tasked with assessing the feasibility of a voluntary rural global budget model in Colorado. The workgroup reviewed global budget model components and determined there is a tremendous potential for a global budget model to benefit Coloradans. The group developed an initial framework, and produced a report that identified key tensions and opportunities, outlined principles for budget development, proposed specific components of the model, and recommended next steps.

RURAL GLOBAL BUDGET MODEL COMPONENTS

- *Health delivery transformation plans and goal setting that aligns with the Hospital Transformation Program:* Each hospital should use the transformation plan developed through the Hospital Transformation Program's Community Health and Neighborhood Engagement process to guide improvements in how it delivers care and meets community needs.
- *Services included in the calculation of global budgets:* The proposal starts with an assumption that hospital inpatient and outpatient services should be included in global budget calculations, and services must be broad enough

to allow hospitals to conduct meaningful transformation planning and shift how funds are spent.

- *Reference population for whom global budgets are paid:* The reference population is a key element in calculating a hospital's budget, and typically includes patients who live in the hospital's service area. The methodology for assigning a reference population for each participating hospital should include regular adjustments to reflect changes over time in population size, payer mix, and demographic shifts.
- *Planned and unplanned adjustments:* To ensure resiliency over time, the model should have a clear methodology for making both prospective planned adjustments as well as making adjustments for unplanned cost and population shifts (e.g., severe flu season, large employer closing, etc.). Hospital global budgets should include an annual trend rate to grow the base budget calculation shaped by historical hospital and state trends, economic projections, and overall demonstration cost goals negotiated with CMS.

Next Steps:

After conversations with CMMI, the SIM Office will not propose a specific state-led payment model. However, findings from the final reports produced by both workgroups will play a key role in ensuring that Colorado is well-positioned to participate in future models developed by CMMI. Members of the workgroup represented a range of stakeholders, including consumer representatives, providers, critical access and rural hospitals, commercial and Medicaid payers, state agencies, and rural community partners. These individuals and the agencies and organizations they represent are now well informed and invested in ensuring that new payment models are successful in the state. Their expertise and enthusiasm can be leveraged to continue an ongoing and productive relationship with CMMI, and to maximize Colorado's participation in new efforts and initiative, as they arise in the future. For example, findings from both workgroups could be used to guide participation in the Maternal Opioid Misuse Model.

2 Practice Transformation

SIM helped primary care practices and community mental health centers to integrate care and succeed with value-based payment models.

Avenues for Supporting Practice Transformation

Practice facilitation & technical assistance

Access to capital

Business consultation

Key SIM Activities

- Established Bi-Directional Health Homes at four Community Mental Health Centers
- Supported 319 Primary Care Practices in three practice transformation cohorts*
- Established a small grants program
- Provided business consultation support
- Convened 14 Collaborative Learning Sessions

Major Accomplishments

1. **SUPPORT FOR 319 PRIMARY CARE PRACTICES:** SIM supported 319 primary care practices throughout Colorado with practice facilitation, technical assistance and business consultation in order to help them further integrate behavioral health services and success with value-based payments.
2. **BI-DIRECTIONAL HEALTH HOMES:** SIM supported four Community Mental Health Centers to provide patients with improved access to primary care. Bi-Directional Health Home sites saw an improvement in scores on the Integrated Practice Assessment Tool.
3. **SMALL GRANTS TO PRACTICES:** In partnership with the Colorado Health Foundation, SIM provided 107 primary care practices with small grants, ranging from $2,000 to $40,000, in order to advance integration.
4. **COLLABORATIVE LEARNING SESSIONS:** SIM supported 14 Collaborative Learning Sessions that were attended by over 3,000 individuals representing primary care practices, Community Mental Health Centers, Regional Health Connectors and other key stakeholders.

Future Considerations

1. **PRIORITIZING FLEXIBILITY:** Future practice transformation efforts should incorporate opportunities to adjust their models based on lessons learned and changes in the healthcare landscape. SIM's three-cohort structure allowed practice teams to learn from early successes and challenges and to adjust accordingly.
2. **IN-PRACTICE FACILITATION:** The SIM office acknowledges the value of in-practice coaching support, particularly for practices new to practice transformation activities. The SIM office recommends that future practice transformation initiatives include in-practice facilitation as a central element of practice transformation efforts.
3. **COMMUNICATING SUCCESS:** A key to sustaining integration efforts is building practice capacity to communicate positive results when negotiating value-based contracts. Future practice transformation efforts should provide mechanisms for practices to capture the progress they have made and communicate this value to payers.

*While SIM initially anticipated supporting 400 primary care practices, 334 practice sites ultimately participated in practice transformation cohorts, with 319 practices completing the initiative. An explanation of practice participation is provided in the narrative of this section.

Practice Transformation

Overview

Supporting practice transformation has been at the heart of SIM's bold effort to increase patient access to integrated care. The Centers for Medicare and Medicaid Services (CMS) defines practice transformation as a process that results in observable and measurable changes to practice behavior.[1] It is a continuous, long-term effort, and a cornerstone of SIM.

As envisioned in the initial SIM Proposal, Colorado's practice transformation strategy focused on:

- Providing practice transformation support to hundreds of primary care practices to integrate physical and behavioral healthcare during the four-year implementation period of the award; and
- Supporting a bi-directional integration demonstration pilot that created integrated health homes in four community mental health centers (CMHCs).

SIM supported 344 primary care practices across three practice transformation cohorts in their advancement along a pathway of integrated care – with 319 practices completing the initiative. A set of Practice Transformation Building Blocks and accompanying milestones guided practices in gaining the knowledge, skills, and tools needed to deliver evidence-based, whole-person care while demonstrating unique value to health plans. This structure encouraged providers with a wide range of prior integration experience and needs to participate in SIM.

Although Colorado initially envisioned supporting a total of 400 primary care practices, changes in the health care landscape, such as the launch of the Comprehensive Primary Care Model+ (CPC+) and initiative fatigue, resulted in lower-than anticipated participation in SIM Cohort 3. However, the SIM Office was able to align, but not duplicate, efforts with CPC+, adding additional value to practices that participated in both initiatives. Furthermore, while SIM supported fewer Colorado practices than originally envisioned, the initiative was able to provide more intensive and comprehensive resources than anticipated in the initial proposal. For example, Colorado provided some practices with unique business consultation support aimed at improving their capacity to negotiate with payers.

To support integration, primary care practices were matched with a practice facilitator (PF) and a clinical health information technology advisor (CHITA), who

[1] Centers for Medicare and Medicaid Services, *Quality Initiatives - General Information*, accessed July 28, 2019, https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment Instruments/QualityInitiativesGenInfo/index.html

were managed by practice transformation organizations (PTOs). Practices were also matched with SIM-funded regional health connectors (RHCs), who helped connect practices with resources in their communities. These resources helped practices develop and work toward implementing their unique goals within the SIM implementation framework.

This in-practice support complemented participation in a robust learning community. Over the course of the initiative, SIM supported 14 Collaborative Learning Sessions (CLS) across the state, with more than 3,000 clinicians, practice staff, behavioral health providers and other stakeholders in attendance. The CLS events provided valuable forums for primary care practices, CMHCs, RHCs, and other partners to share best practices and learn from industry experts. Furthermore, e-learning modules and a variety of supplemental resources, described in detail in this chapter, supported practices as they integrated physical and behavioral healthcare.

Thanks to this comprehensive package of practice transformation supports and resources, more than 85% of participating practices indicated that SIM had assisted the practice site in its work to improve integration of behavioral and physical health care. More than 95% of practice representatives who responded to a closeout survey would recommend participating in SIM to a colleague. Data from approximately 38,000 individual surveys and assessments also point to the success of practice transformation efforts in primary care.

In addition to supporting practice transformation in primary care practices, SIM launched an innovative Bi-directional Health Home effort in Colorado. Four CMHCs participated in the program, which was designed to integrate primary care into behavioral health care settings. This work was initially delayed, due to misperceptions about how SIM funds could be used, but once projects were re-scoped, CMHCs were provided with a PF and CHITA who helped them improve processes and workflows related to the delivery of primary care in their health homes. Each CMHC leveraged SIM support differently, to best meet their needs. Successes at CMHCs included the development and implementation of a risk stratification model, increased connections to care coordination, reductions in patient A1C levels associated with the provision of diabetes management classes, and improved billing efficiencies.

While practices and CMHCs will no longer receive direct support beyond July 2019, the SIM Office anticipates that health plans (payers) will continue to support many practices with APMs to continue their progress. Additionally, because SIM focused on using PFs and CHITAs to train practice staff who will continue their work long after the end of the initiative, SIM investments will continue to positively influence integration as leaders share learnings among their colleagues. The value demonstrated by SIM practice transformation efforts inform and drive future initiatives, propelling Colorado toward its goal of becoming the healthiest state in the nation.

This chapter first discusses practice transformation efforts related to primary care practices, followed by a discussion of the work done at CMHCs. The section devoted to primary care begins with a discussion of governance structures used to support the initiative, followed by information about practice recruitment, demographics, and the expectations on participating practices. The chapter then outlines the types of supports offered to practices, including in-person supports, resources available through the learning community, business consultation services, and access to capital provided through a small grants program. The chapter then transitions to a discussion of the CMHCs, including information on progress and anticipated next steps.

Practice Transformation in Primary Care

This section of the report draws heavily from the UCDFM Final Report to the SIM Office, available as Appendix C1.

Practice Transformation Governance - Primary Care:

Practice Transformation Design Committee:

During the SIM planning phase, the practice transformation committee met to identify key strategies and goals for practice transformation, and to map out the package of support that would be offered to practices. The committee received input from more than 40 subject-matter experts who played a critical role during the planning phase.

Practice Transformation Workgroup:

The SIM Office convened the Practice Transformation workgroup during the implementation phase of SIM, which played an active and critical role through the duration of the initiative. Key inputs included:

- Advising the SIM Office on communication strategies to recruit practices;
- Offering guidance on revisions to the practice transformation milestones;
- Vetting materials and resources included in the implementation guide; and
- Advising on strategies to reduce provider burden by aligning with other initiatives, such as CPC+.

Partnership with University of Colorado Department of Family Medicine:

On July 1, 2015, the SIM Office entered into an interagency agreement (IA) with the Practice Improvement Program at University of Colorado Department of Family Medicine (UCDFM) to lead practice transformation efforts across the state. UCDFM was selected based on its demonstrated success in implementing health care redesign, which contributed to Colorado's health care workforce, and its research to foster innovation and improvement in health and health care.

UCDFM was originally engaged to provide the following assistance:

- Managing support provided by pre-qualified PTOs that deliver customized PF and CHITA services to address practice-specific needs;
- Overseeing additional consultation provided by subject matter experts to address specific needs in adapting to value-based payment models and other specialized integration challenges;
- Establishing and maintaining "toolboxes" of practice transformation models, templates, resources, and best practices; and
- Hosting learning collaboratives to provide general information, share lessons learned, and disseminate best practices.

This multi-layered approach provided flexibility to meet individual practice needs through customized solutions, while remaining anchored in an overall process that focused on achieving common SIM objectives. UCDFM houses the Practice Innovation Program, which also provides support to the Transforming Clinical Practice Initiative (TCPi), EvidenceNOW Southwest, and ITMATTRs2 Colorado. The Practice Innovation Program team helped the SIM Office align with other practice transformation efforts in the state, reducing duplication and minimizing provider burnout.

Colorado Health Extension System:

One of the Practice Innovation Program team's fundamental roles continues to be the coordination and oversight of the Colorado Health Extension System (CHES). CHES is a private collaborative of practice transformation stakeholders – including PTOs, state agencies (Medicaid and public health), the Governor's Office, local health alliances, HIE/HIT organizations, and multiple other groups – which has been in place for more than six years. CHES offers ongoing leadership and training to PTOs, which work with practices on several health care reform initiatives, including SIM. Throughout the SIM award period, CHES hosted regular trainings for PTOs, to ask questions and share best practices, and held quarterly trainings to ensure new information related to SIM was communicated to practices. CHES will continue to seek funding to support its ongoing work, and remains committed to supporting practice transformation in Colorado.

Quality Assurance Committee:

The SIM Quality Assurance (QA) Committee was established in 2017 by the Practice Innovation Program, in conjunction with the SIM Office, to assure practices were benefitting from funding invested in practice transformation. This committee included representatives from the Multi-Payer Collaborative (MPC), PTOs, the SIM Office, a non-SIM primary care physician, a practice transformation expert, the state-led evaluator (Tri-West), and UCDFM. The committee established a quality assurance process to monitor assessments and indicators of PTO and practice performance. The committee provided an ongoing forum to monitor processes and outcomes related to practices, PTOs, and program performance, as well as a mechanism for identifying, assessing, and intervening in response to problem areas. The committee met at least quarterly during the SIM initiative to review practice and PTO performance material

prepared and aggregated by the Practice Innovation Program. Members observed that PTOs and practices improved compliance with expectations and deadlines for submitting clinical quality measures (CQMs) and assessments over the course of the SIM initiative. The committee mapped out a process for identifying and addressing primary care practice sites and PTOs that were not meeting expectations, which can serve as a model for future initiatives. The committee will not continue to meet beyond the end of SIM.

Several of the governance structures that provided guidance for SIM practice transformation efforts will continue beyond the end of the SIM initiative.

Governance Structure	End Vision
Practice Transformation Design Committee	This group met solely for planning purposes, then transitioned to the Practice Transformation workgroup.
Practice Transformation Workgroup	While this workgroup will no longer meet, members were invited to join the CHES steering committee and quarterly meetings.
UCDFM	This group will continue leading practice transformation efforts in the state using lessons learned from SIM to inform future business opportunities.
CHES	CHES will continue to provide training and technical assistance support for practice transformation. CHES has an established infrastructure for this training and outreach.
QA Committee	The function of this committee was exclusively to monitor SIM practice and PTO progress. It will not continue to meet. However, the UCDFM staff who convened the committee will use lessons learned to inform future practice transformation efforts throughout Colorado.

Practice Participation:

Cohort Model:

SIM staggered participation in practice transformation efforts across three cohorts of primary care practices. Practice transformation support was provided to Cohort 1 from February 2016 through March 2018, to Cohort 2 from September 2017 through June 2019 and to Cohort 3 practices from June 2018 through June 2019. This phased approach proved critical to the initiative's success in the following ways:

1. Provided the SIM Office and vendor partners time to "ramp up" staff and resources;
2. Created an opportunity to collect feedback from practices and make adjustments based on recommendations and needs;
3. Allowed the SIM Office to respond to changes in the health care landscape, such as the rollout of CPC+, and adjust the SIM model accordingly.

Practice Recruitment:

Practices were recruited through three open and competitive application processes. A diverse spectrum of primary care practices were encouraged to apply. The SIM Office went to great lengths to ensure the opportunity was announced in rural and underserved regions.

Practice applications for each cohort were reviewed and scored by a team of practice transformation experts. Payers then reviewed lists of recommended practices and indicated which applicants they would be willing to support with an alternate payment model. Practices were accepted by the SIM Office based on application scores and payer support.

Practice Retention:

There was a high rate of retention across all three cohorts, with 93% of accepted practices completing the initiative.

In Cohort 1, 92 of 100 practices completed the initiative. Five practices from a practice group withdrew soon after they agreed to participate in the initial cohort. The practice group was acquired by new owners who thought disruptions related to management reorganization would distract from meaningful participation. Two additional practices withdrew approximately midway through the first year of participation, and another practice withdrew at the time of completing the first year of participation. These three practices encountered a number of practice-level factors that resulted in their decision to withdraw, including a perceived imbalance between the benefits received and burden of participation. Six of the eight practices that withdrew were subsequently accepted into CPC+. As detailed below, SIM used feedback from all Cohort 1 practices to make changes to the model for future cohorts, promoting retention.

In Cohort 2, 144 of 156 practices completed the initiative. Attrition in Cohort 2 reflected a changing health care landscape, which included a number of smaller practices being acquired by larger health care systems, competing priorities, internal provider and operational transitions, and practices that closed.

In Cohort 3, 83 of 88 practices completed the initiative. Four practices owned by the same group withdrew from participation prior to submitting baseline data, due to lack of time and resources related to the quality improvement-related expectations. The

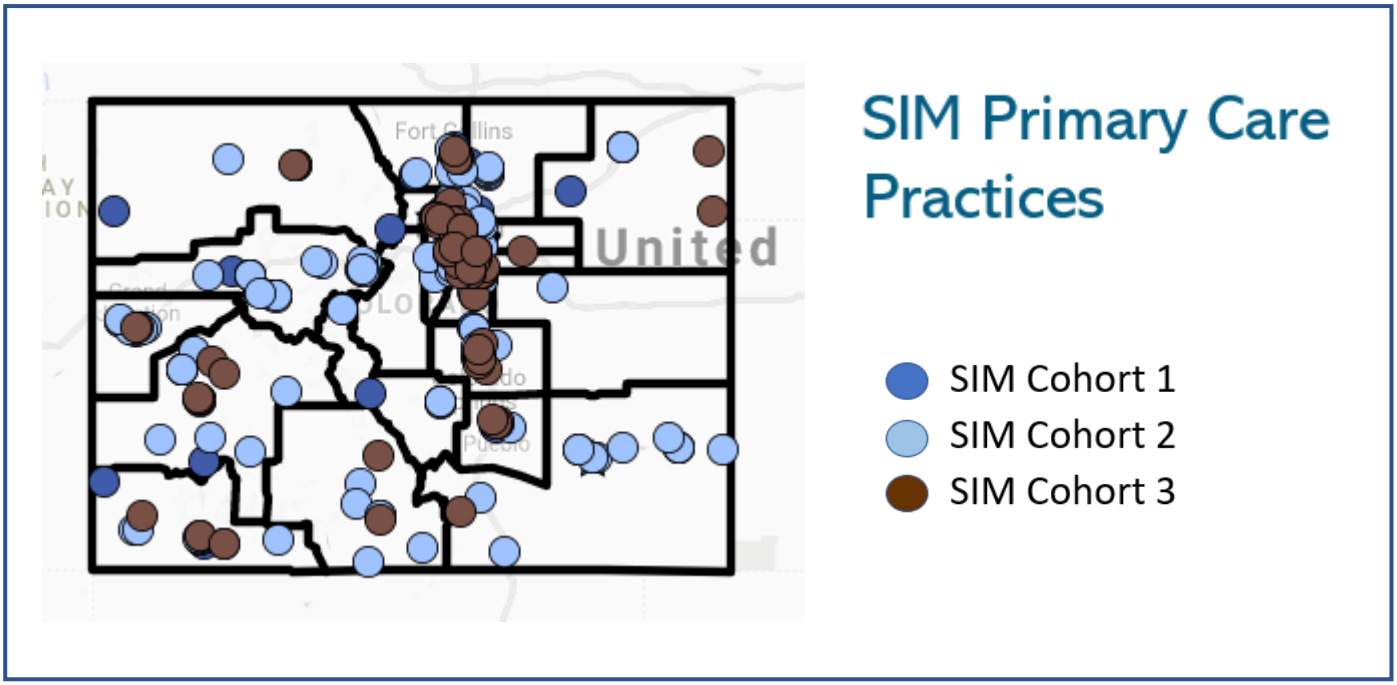
remaining practice cited internal provider and operational transitions as the reason for withdrawal.

The following table reflects the number of practices applying to, participating in and completing SIM:

	Kickoff Date	Months of Support	Number of Applicants	Number of Practices Starting SIM	Number of Practices Completing SIM
Cohort 1	Feb. 2016	24 months	168	100	92
Cohort 2	Sep. 2017	22 months	226	156	144
Cohort 3	June 2018	11 months	94	88	83

Practice Footprint and Diversity:

The 319 practices that completed SIM were affiliated with approximately 2,410 providers and had over 760,000 attributed patients. SIM primary care practices reflected a high-level of diversity. Thirty percent of practices that completed SIM were located in rural areas. In addition to geographic diversity, SIM practices reflected a diverse array of sites, including independent and system-affiliated practices. Sixty-six percent of practices that completed SIM saw both children and adults, 10% saw adults only, and 24% were pediatric only practices. The map on the following page shows where primary care practices that participated in SIM were located throughout the state. An online version is available on the SIM website.



Transformation Model:

Practice transformation support, in conjunction with value-based payments, was intended to help practices advance along a pathway of integration.

Framework and Milestones: To guide practices along the transformation pathway, SIM used a framework based on Dr. Thomas Bodenheimer's "Building Blocks of High-Performing Primary Care." Prior to the start of Cohort 1, a Practice Transformation Design committee, with input from more than 40 subject-matter experts, selected milestones that aligned with Bodenheimer's building blocks and with CPC milestones. In the first award year, the SIM framework was approved by the SIM payment reform and practice transformation workgroups and the MPC.

Cohort 1 practices received a set of activities associated with the 10 building blocks and chose milestones to work toward based on priorities identified in their practice improvement plans. While the approach provided ample flexibility, it did not provide clear guidance about the number and type of activities practices had to achieve for success. Additionally, variance in activities among practices made it difficult to evaluate the effects of the model. Finally, the SIM Office recognized the need to ensure that activities were aligned with payer priorities.

As a result, the SIM Framework and Milestones were updated for cohorts 2 and 3 to enhance the focus on integrating behavioral health and primary care and to create a clear, structured timeline for progression. These changes were made in collaboration with the MPC to ensure alignment between practice transformation work and advanced payment models.

Changes to the Cohort 1 milestones included:

- Organization to match the timeline of expectations. The initial milestones were divided into lettered (A, B, C) activities with numbered steps for each activity. The milestones now are divided by year 1 and year 2 expectations. Many year 1 milestones involve preparing and developing infrastructure to start new processes, with a corresponding year 2 milestones designed to fully implement and scale the process. While some practices accomplished year 2 milestones in year 1, the differentiation between year 1 and 2 activities provided a general guide for practice advancement;
- An increased focus on integrated behavioral health with the specific aims of SIM; and
- Adjustments to requirements to align with CPC+.

Cohort 1 practices were not required to adopt the new framework, but were encouraged to pick activities within the original framework that aligned with new milestones. The Practice Innovation Program team prepared a building blocks

crosswalk to help Cohort 1 practices and PTOs identify activities from the revised framework that map to those in the Cohort 1 framework.

Good Standing: Practice sites in Cohorts 2 and 3 were expected to maintain "good standing" with the behavioral health focus of the initiative through successful completion of identified building blocks and achievement of key milestones in the SIM framework. Practice standing was gauged by progress through priority milestones as outlined in the SIM framework and milestones.

The following definitions were used for good standing:

Cohort 2 Year 2 Definition:

- SIM-Only Practices:
  - Achieve a rating of (4) for at least 75% of activities in Year 2 Building Blocks 1, 2, 3, 4, and 7, and any two additional Year 2 building blocks (Building Blocks 5, 6, 8, 9, and 10) and a rating of (3) for the remainder of the activities.
    CPC+ Practices:
- SIM/CPC+ Practices:
  - Achieve a rating of (4) for at least 75% of activities in Year 2 Building Blocks 1, 2, 3, 4, 7, 8, 9 and 10, and a rating of (3) for the remainder of the activities.

Cohort 3 Definition:

- SIM-Only Practices:
  - Achieve a rating of (4) for at least 50% of activities in Year 1 Building Blocks 1, 2, 3, 4, and 7, and a rating of (2) or (3) for the remainder of the activities.
- SIM/CPC+ Practices:
  - Achieve a rating of (4) for at least 50% of activities in Year 1 Building Blocks 1, 2, 3, 4, 7, 8, 9 and 10, and a rating of (2) or (3) for the remainder of the activities.

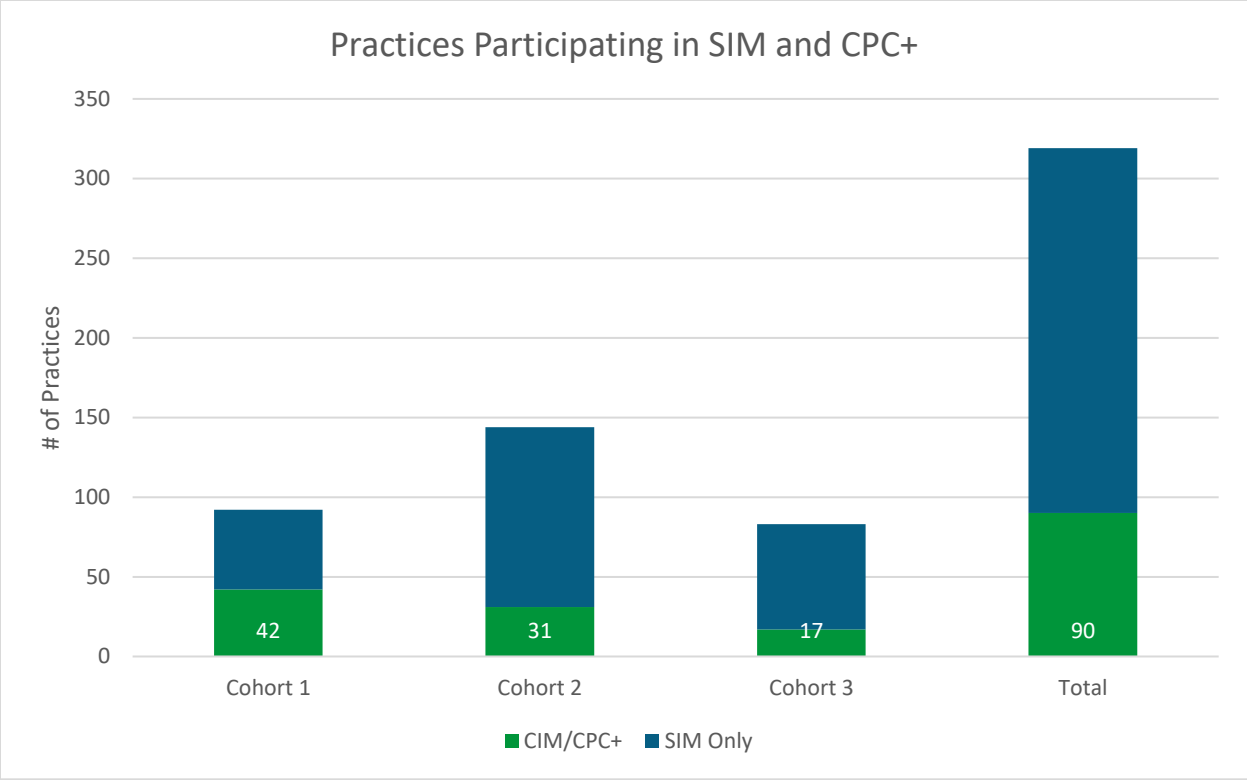
The SIM Office and UCDFM drafted a process for PFs attesting to practice standing and vetted it with members of the Multi-Payer Collaborative. In December 2018, the SIM Office submitted reports to payers regarding which SIM Cohort 2 practice sites were in "good standing." In July 2019 the SIM Office submitted the final round of "good standing" reports for Cohorts 2 and 3 (the first round of reports for Cohort 3). Each payer individually determined if practice standing affected eligibility for payments.

Good Standing Results		
85%	**92%**	**98%**
of Cohort 2 practices earned "good standing" after 1 year of SIM participation	of Cohort 2 practices earned "good standing" after 2 years of SIM participation	of Cohort 3 practices earned "good standing" after 1 year of SIM participation

Alignment between SIM and CPC+: Twenty-eight percent of primary care practices completing SIM also participated in CPC+. Recognizing the interest in both initiatives, the SIM Office increased programmatic and operational alignment between the two initiatives to minimize provider burden, with permission from CMMI. In Award Year 2, the SIM Office developed an alignment strategy and engaged in conversations with a wide range of stakeholders, including providers, payers, and practice transformation experts. Stakeholders agreed upon a strategy that would:

- Maintain the multi-payer focus of the SIM initiative;
- Ensure diversity in the type of practices engaged in SIM;
- Reduce the burden on practices that might want to participate in both initiatives; and
- Preserve SIM's unique focus on the integration of physical and behavioral health to help providers succeed with alternative payment models.

These conversations led to consensus that the interrelated goals and objectives of SIM and CPC+ created natural synergies and a true benefit for practices, providers and payers electing dual participation. This mitigated the risk of practices choosing between the two initiatives and accentuated their complementary nature.



Behavioral Health Integration:

Behavioral health integration is a key component of SIM, as reflected by building block 10 of the SIM framework: "Practice has fully integrated behavioral health care to provide whole- person care." In addition to the activities associated with building block 10, activities that promote integration are woven throughout the building blocks (for example, the goal of building block 7 states that the "practice screens at least 90% of patients for substance use disorder/other behavioral health needs. Includes behavioral health and community services as part of care management strategies.")

Each practice completed the Integrated Practice Assessment Tool (IPAT), described later in this chapter, at baseline and periodically throughout the initiative to gauge progress. Recognizing that some practices were farther along the pathway of achieving fully integrated care than others, the SIM Office aligned its support with the CPC+ Behavioral Health Integration Menu of Options to allow practices to focus on care management for mental illness or the primary care behaviorist model.

Practice Transformation Support:

SIM practices received a comprehensive package of support designed to guide progress through the practice transformation milestones, ease the burden of reporting and ensure that changes were sustainable.

One-to-One Support:

The SIM approach focused heavily on in-person practice facilitation, provided via PTOs, organizations with experience in quality improvement that have at least one person trained and experienced in practice transformation support.

PTOs employed PF, CHITAs or both. Every participating practice was matched with a PF and CHITA, whose roles are described in detail below. For many SIM practices, a single PTO provided both the PF and CHITA role. For other practices, two separate PTOs managed these roles. Many practices had participated in practice transformation initiatives prior to joining SIM and had experience working with one or more PTOs. The SIM PTO model allowed practices to leverage these existing relationships by requesting a specific PTO. This model built on the existing workforce to increase alignment across multiple groups and programs and to assist in sustaining efforts after the end of SIM funding. Twenty-one PTOs were approved to provide practice facilitation and clinical health information technology (HIT) support across the SIM cohorts.

In addition to PFs and CHITAs, practices were matched with a RHC. (See the **Population Health chapter** for more information). An overview of each role is provided below.

- Practice Facilitators (PFs) were employed by the selected PTOs to assist practices in forming and convening quality improvement (QI) teams. The practice QI teams were coached to use standard quality improvement and change management processes to implement improvements, based on the practice transformation building blocks as outlined in the SIM Framework and Milestones described above.
- Clinical Health Information Technology Advisors (CHITAs) worked in collaboration with PFs and provided tailored assistance to practices in extracting, cleaning, and reporting clinical quality measures and other necessary data from practices' electronic health records for quality improvement and population management.
- Regional Health Connectors (RHCs) are residents of the community who work full-time to improve the coordination of systems that keep people healthy. They build and strengthen networks of primary care, public health, human services and community organizations working to improve health. RHCs are selected and hired by community-based health organizations with oversight of the RHC program managed through the Colorado Health Institute (CHI). RHCs connect primary care practices with community-based behavioral health and social services, and partner with practice-based clinical quality improvement teams to help practices prepare for new models of care and reach their goals. They also recommend reliable resources to improve health outcomes.

All of these professionals worked in concert with one another. The practice transformation support and technical assistance provided by the PFs, CHITAs and RHCs has helped move primary care practices integrate behavioral and physical health.

Learning Community

An integral part of the practice transformation model was the development of supplemental educational offerings designed to support practices in building their capacity to provide more robust integrated health services. A number of educational opportunities were provided, including CLS and the use of e-Learning, which are described below.

Collaborative Learning Sessions: CLS were in-person convenings of primary practices, bi-directional health homes, major stakeholders and other key partners. CLS events were intended to help practices identify and disseminate best practices. CLS provided a venue where lessons learned and insights could be shared through presentations and panel discussions, as well as new knowledge and innovative ideas from state and national subject matter experts.

A total of 14 CLS were held during the four-year initiative. Seven were held in the metro Denver and Front Range area and seven in Grand Junction with a cumulative attendance of 3,179 individuals. CLS served to foster peer-to-peer learning communities where behavioral health integration was the primary focus with breakout sessions targeting topics like advanced alternative payment models, business support processes and other critical topics like workforce development, clinical quality improvement, considerations for pediatric practices, and social determinants of health. Attendees consistently identified these events as a valuable aspect of participating in SIM.

Major Accomplishment

The Practice Innovation Program team, in collaboration with the SIM Office, hosted 14 SIM Collaborative Learned Sessions across the state to disseminate best practices. Events attended by more than 3,000 providers, practice staff and key stakeholders.

Training & Webinars: More than 100 in-person trainings and webinars were developed and facilitated for SIM. These trainings and webinars, hosted by the Practice Innovation Program were designed to provide a "one to many" learning opportunity to complement one-to-one PF and CHITA services each practice received. Among numerous topics addressed were the Collaborative Care Model for primary care working with psychiatry, the Merit-based Incentive Payment System (MIPS) and the Quality Payment Program, training for behavioral health professionals working in primary care settings and explanation of the SIM CQMs.

e-Learning: SIM funded the development of e-Learning modules by the Office of Behavioral Health (OBH), the Colorado Department of Public Health and Environment (CDPHE) and the Practice Innovation Program. The Practice Innovation Program will continue to host the 20 e-Learning modules for at least one-year post-SIM funding from August 2019 through July 2020 at no cost. For a complete list of the modules and how they were disseminated, see the **Workforce chapter** section of this report.

SIM Implementation Guide: This guide was compiled by the Practice Innovation Program team and a group of engaged stakeholders and subject matter experts support practice transformation efforts. The guide was developed as a resource for primary care practices and CMHCs participating in SIM, along with their supporting PTOs, PFs, CHITAs, and RHCs. This guide provided a description of the SIM milestones and recommendations on how to meet objectives described in the milestones. A toolkit of additional materials and resources accompanied the Implementation Guide with links referenced throughout.

PIP Website and Resource Hub: This website provides an easily accessible platform for participants of SIM and other stakeholders to access information about SIM. The website contains the SIM resource hub, which holds a vast collection of tools and resources to support practices, as well as information about the SIM process and key documents that practices could reference as needed.

Maintenance of Certification (MOC) and Continuing Medical Education (CME): Part IV Maintenance of Certification (MOC) credit toward Board recertification requirements and Continuing Medical Education (CME) credit were available to providers based on participation in project activities and the quality improvement process. To qualify for the MOC Part IV credits, a provider was required to measure baselines, test improvements and re-measure to determine if the changes resulted in improvement and continue the process of measurement, testing, and refinement. PFs and PIP staff provided help as needed.

The availability of an easy process to obtain MOC Part IV credits was an added benefit for board-certified physicians participating in SIM. Providers could align SIM activities and their SIM-related work with the requirements of MOC Part IV, and as an added benefit obtain credits for this work. The data required for the MOC attestation was pulled from the Clinical Quality Measures (CQMs). Attestations provided an opportunity for physicians to reflect on their participation and to capitalize on efficiencies while benefiting from the streamlined process.

CME credit was also available to primary care and behavioral health providers who participated in the CLS or completed specific SIM funded e-learning provider education modules. The amount of CME hours available for each session or module

varied based on the sessions attended or modules completed. CME credit allotted was determined based on the specific content, learning objectives and length of the session or module.

Business Consultation Support

Sound business operations are essential for medical practices to become sustainable in any environment, especially as practices evolve to rely on value-based compensation models. The SIM Office identified business consultation as a need. As the initiative progressed and practices expressed a desire to build their negotiation skills, business consultation became a greater priority.

PIP contracted with Medical Group Management Association (MGMA), a national association of healthcare professionals, to provide a variety of offerings to SIM practices including monthly webinars, bi-annual in-person trainings in Denver and Grand Junction, "Office Hours" for one-on-one support, and individual breakout sessions at many CLS. Topics included budgeting, revenue management, collections, optimizing coding opportunities, contracting with payers for value-based payments, using cost and utilization data, the Quality Payment Program and practice management (e.g. recruiting, retention, and personnel management).

The SIM Office also contracted with a private consulting firm, RT Welter and Associates, to develop an online curriculum to provide education, tools and techniques relative to communicating and contracting with insurance plans. RT Welter's online curriculum was intended to be used as a "playbook" for practice teams. The curriculum includes the following chapters: Payer Relationships and Contracting, Payer Reimbursement Models, Contracting Strategies for Success, and Payer Communication Strategies, among others. RT Welter presented in-person at multiple CLS and provided supplemental webinars for interested SIM practices. This curriculum provides a basic overview of the process.

In response to practice feedback and with an eye toward promoting sustainability, SIM enhanced the business supports during the last year of the initiative. MGMA offered 'Expanded Business Support,' which included tailored consultation that helped practices develop individual value propositions to help with payer negotiations.

Activities practices engaged in as a result of the SIM-funded business consultation support included:

- Breaking down individual services and workflows and assigning them differing values;
- Identifying where health plans will perceive value;

- Conducting brainstorming sessions on the overall value the clinic team provides to patients; and
- Thinking critically about daily activities staff engage in and how it affects practices and patients.

An optional, anonymous, two question survey was administered to practices that participated in targeted business support provided by MGMA between December 2018 and May 2019. Survey respondents perceived that the additional support led to a better understanding of a practice's "value proposition," how to start dialogue with payers and demonstrated their impact, regardless of practice size.

Major Accomplishment

SIM-funded business support allowed practices to better understand their "value proposition" when negotiating with payers, regardless of practice size. After attending a business consultation session, one practice wrote to a health plan and outlined the different ways she saved money due to innovative approaches to care she learned while participating in SIM. The practice owner received a 5% reimbursement increase. The SIM Office published an article with the full story so other practices would be inspired by this success.

Sustainability of Technical Assistance: SIM-funded technical assistance will not continue beyond July 2019, but many resources funded and developed by SIM will remain available. Practices will still be able to access e-Learning modules beyond the term of the initiative. Basic webinars developed by RT Welter will be available after SIM ends.

Status of Technical Assistance Activity

The following table describes the final status of the key activity related to technical assistance for primary care practices listed in the SIM Award Year 4 terms and conditions.

TECHNICAL ASSISTANCE (PRIMARY CARE) KEY ACTIVITY	STATUS	LOOKING AHEAD
 Support 344 primary care practices in advancing integration of behavioral and physical health care	SIM provided technical assistance to 344 SIM primary care practices throughout the initiative. Additionally, numerous practices that did not participate in SIM or withdrew benefited from e-learning modules and several SIM practices reported that they shared learnings with non-SIM practices within their systems.	While direct support to practices will end, leaders in SIM practices will continue to make progress because SIM used a train-the-trainer model.

Sim Reporting & Assessment Activities

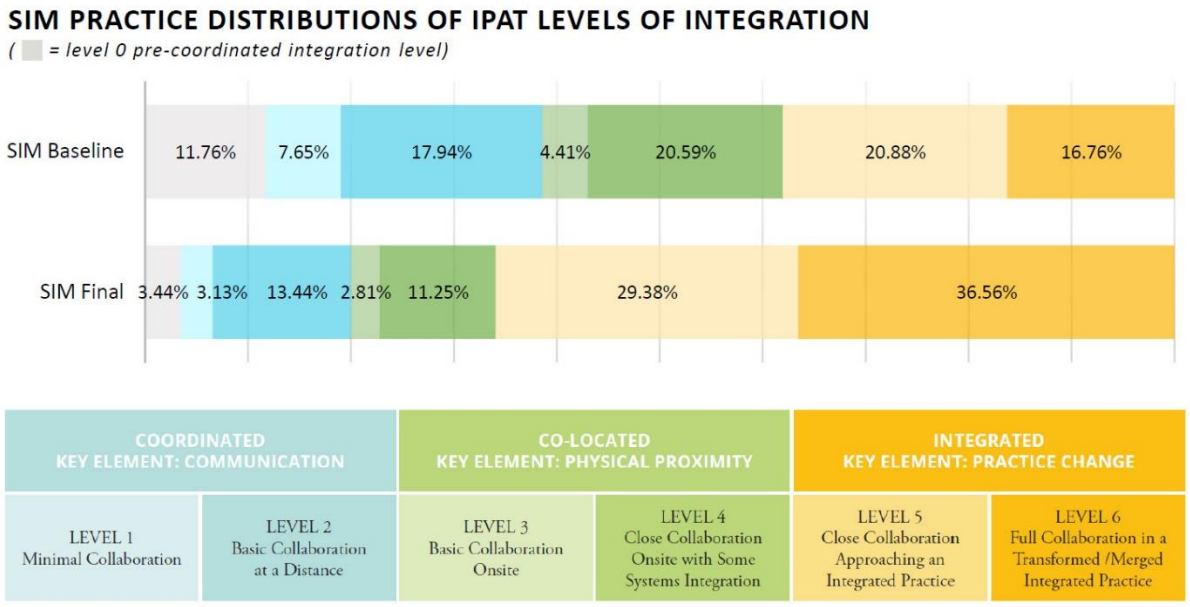
Assessments and other reporting activities were a key component in helping SIM practices measure their success, track overall initiative progress and help practices prioritize practice transformation efforts. Across all SIM cohorts, practices completed the Integrated Practice Assessment Tool (IPAT), Medical Home Practice Monitor (Monitor), and Clinician and Staff Experience Survey (CSES) and the Health Information Technology Assessment (HIT). SIM Cohorts 2 and 3 completed the Milestone Attestation checklist (MAC), while Cohort 1 completed the Milestone Activity Inventory (MAI) and the Practice Improvement Plan (PIP). Assessments were completed every six to twelve months (depending on cohort start dates and length). Important variations to note between Cohort 1 and Cohorts 2 and 3 include:

- Cohort 1 initially completed the Data Quality Assessment (DQA), which was later incorporated into the HIT Assessment and completed by all cohorts for applicable assessment timeframes;
- Cohort 1 completed the Milestone Activity Inventory (MAI), which was replaced by Milestone Attestation Checklist (MAC) for Cohorts 2 and 3. The MAC was developed to be more comprehensive in measuring milestone progress and demonstrated alignment with updates made to the SIM framework and milestones; and
- Cohorts 2 and 3 were not required to complete Practice Improvement Plans as a part of their assessments, which was a required assessment for Cohort 1. The plans were discontinued primarily due to the addition of the MAC and restructuring of the milestones practices needed to achieve.

The assessments, other reporting activities practices completed during SIM participation and quantitative tabulations of select data elements from assessments are summarized here.

Integrated Practice Assessment Tool:

This practice-level self-assessment evaluated methods of behavioral health integration (BHI) on a scale of 0 to 6 within the groupings of coordination, co-location and integration. It is important to note that the IPAT was used as a conversation starter around BHI and not a standalone measure of integration. It is also important to note that there are various ways to integrate physical and behavioral health care in primary care settings and that SIM did not intend for practices to reach a specific IPAT level. This approach allowed practices to work on the components of integration that best fit their practice population and needs while still supporting sustainable practice change.



Home Practice Monitor:

This was a practice self-assessment of the level of implementation of the core components of advanced primary care based on the building blocks framework developed by Tom Bodenheimer, and used in SIM. The Monitor provides practices with a roadmap of the core components of SIM, helps practices prioritize practice transformation activities and assess their progress on the activities over time. Scores below are based on the completion of specific activities that correspond to specific building blocks in the framework. Higher scores reflect that a higher number of the activities are complete.

Monitor Overall Scores Summary: On average, primary care practices improved across all building blocks measured through the Monitor. This shows not only the effort it takes for practices to integrate physical and behavioral healthcare, but also where they have improved. Building Block 11, Behavioral Health, showed the most improvement from the average baseline to the average final assessment period. Overall SIM practices saw an increase from an average of ~56% activities completed up to an average of 82% completed. Building Block 8, Prompt Access to Care, had the highest average percent of completed activities by the final assessment period at 91%.

MONITOR AVERAGE DOMAIN SCORE PERCENTAGES

Building Block Domain	Baseline	Final	Change
1) Engaged Leadership	74.53%	88.24%	+13.71%
2) Data Driven Improvement	65.21%	86.78%	+21.57%
3) Empanelment	70.70%	89.72%	+19.01%
4) Team Based Care	70.57%	87.99%	+17.42%
5) Patient Team Partnership	57.75%	78.53%	+20.78%
6) Population Management	64.33%	85.27%	+20.95%
7) Continuity Care	68.48%	83.98%	+15.51%
8) Prompt Access Care	82.19%	91.41%	+9.22%
9) Care Coordination	61.30%	84.56%	+23.26%
10) Compensation Reform	53.81%	74.84%	+21.03%
11) Behavioral Health	55.85%	81.53%	+25.68%

Health Information Technology Assessment:

This practice level self-assessment, completed with CHITA help, assessed the current state of practice data quality including accuracy of data elements captured, validity of CQM reports and next steps. It was intended to help CHITAs and practices identify HIT barriers or opportunities and prioritize quality improvement work to complete during their participation in SIM.

Specific to the HIT assessment and displayed below "data elements" refer to the various data components that are needed to extract a quality measure from an electronic health record (EHR). An example of data elements would be the accurate capture of patient height and weight so that an EHR could report out on a body mass

index screening for obesity. The HIT Clinical Quality Measures Average Percentages refers to the ability and trust practice have in capturing and reporting out on the SIM clinical quality measures (CQMs). Practices were not asked about clinical quality measures outside of those CQMs reported for SIM.

On average the percentage of data elements that practices trust to be captured accurately and consistently on all patients (green section above) increased from 72% of data elements to almost 84% of data elements. Similar improvement was seen when looking at the average percentage of SIM CQMS that practices report and trust (green section in the HIT Clinical Quality Measures Average Percentages section). Progress in both these areas is important as it allows practices to have better data to use in their internal improvement processes as well as to submit to health plans as part of alternative payment models.

HIT Data Elements Average Percentages

Data elements are not captured in discrete fields	Data elements are captured in discrete fields with concern for accuracy and/or consistency	Data elements are captured in discrete fields accurately and consistently on all practice patients

	Red	Yellow	Green
Baseline Average Percent	11.84%	15.96%	72.14%
Final Average Percent	6.71%	9.38%	83.92%

HIT Clinical Quality Measures Average Percentages

Do not have the report, but can get it/build it	Have the report, but do not fully trust that the data are accurate	Already have the report and we trust the data	No chance of getting report from system/vendor	Do not see patients of this age at practice or measure does not apply

	Red	Yellow	Green	Black	Blue
Baseline Average Percent	21.46%	20.04%	38.85%	6.15%	13.32%
Final Average Percent	11.51%	13.46%	54.88%	4.59%	15.55%

Clinician & Staff Experience Survey:

This individual level survey allowed providers and staff to provide valuable input about their practice(s). It assessed two subscales – Clinician & Staff Experience and Burnout. All individual responses remained confidential and aggregated summary reports were shared with practices.

CLINICIAN & STAFF BURNOUT AVERAGE PERCENTAGES

	No Burnout & Enjoy Work	Occasionally Stressed Out	Definitely Burning Out	Symptoms Not Going Away	Completely Burned Out
Baseline	21.24%	56.02%	15.82%	5.12%	1.79%
Final	21.11%	55.90%	15.82%	5.40%	1.78%

Overall the Clinician & Staff Burnout Average Percentage showed very little average change in burnout from baseline to final assessment periods. At the start of SIM there was an expectation that burnout might increase as practices were taking on new or different work to integrate physical and behavioral healthcare. This would be visualized as higher percentages on the right-hand side of the figure over time. To not see an increase in average percentage of burnout is a positive result.

CLINICIAN & STAFF EXPERIENCE SURVEY OVERALL SCORES SUMMARY

	Baseline	Final
Cohort Average Overall Score	66.54	66.54
Cohort Average Overall Score Range	48.57 - 89.67	40.46 – 93.00

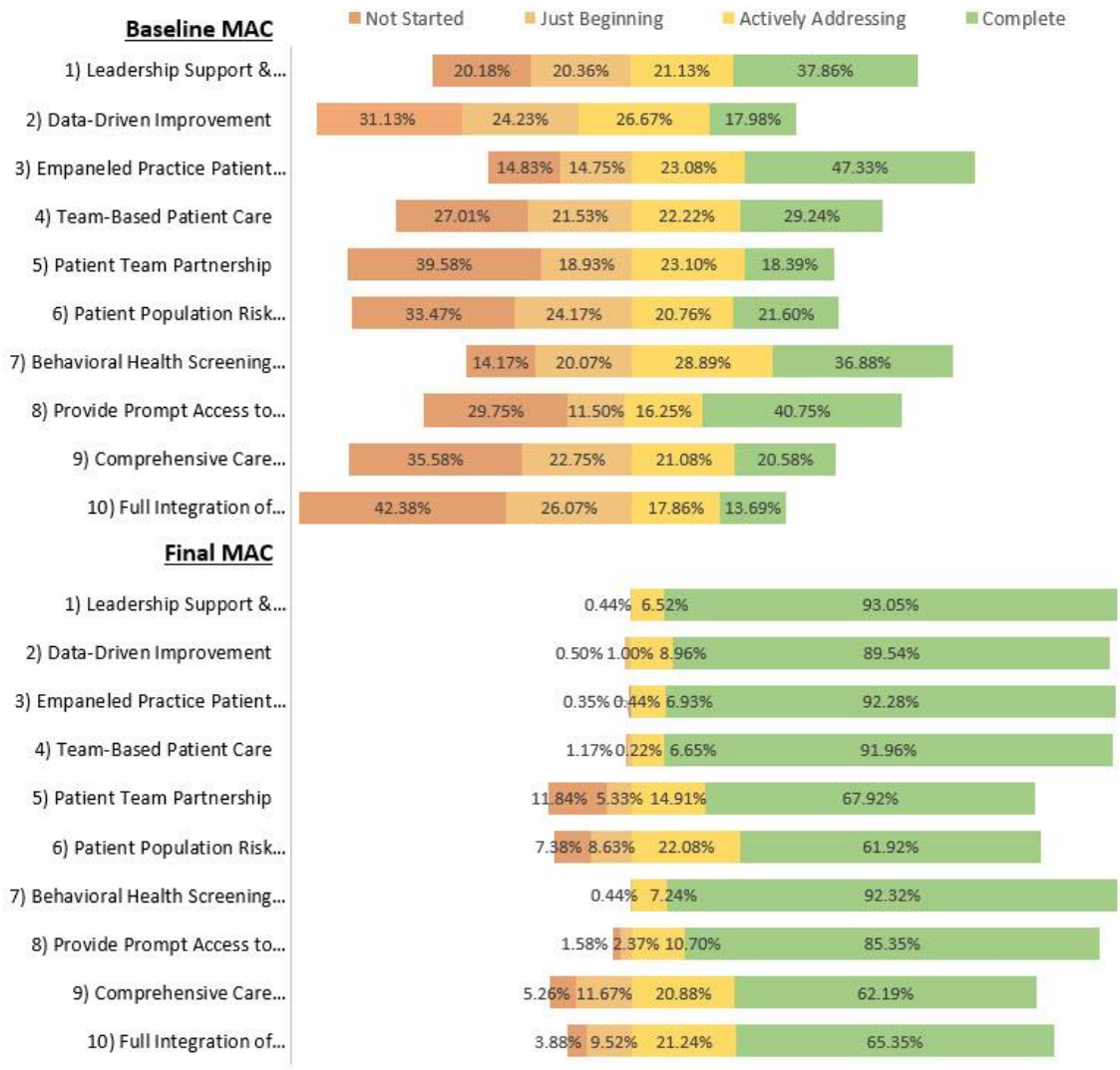
Similar to the above burnout average scores the average overall score for the Clinician & Staff Experience Survey did not change over time. Possible scores for this section of the survey range from 0 - 100. Here higher scores reflect positive experiences as documented by clinicians and staff, such as "I find my current work personally rewarding" or "Our clinicians have adequate time to spend with our patients during their office visits."

Milestone Attestation Checklist:

The MAC was a practice level self-assessment completed with the assistance of a PF that assessed the implementation of SIM milestone activities at the practice and prioritized next steps. It was developed to guide practices and their PFs in attesting to practice progress on the milestone activities for "Good Standing" designation and qualification to receive SIM achievement-based payments.

Depicted in the table on the next page is the overall progress SIM Cohorts 2 and 3 made on the 61 MAC milestone activities throughout participation (22 months for Cohort 2 and 11 months for Cohort 3. It is important to note that no milestone activities were indicated, as "Not Started" for the final MAC assessment Building Blocks 1, 2, and 7 and these data labels are not shown.

PERCENTAGE OF MAC ACTIVITIES COMPLETE BY BUILDING BLOCK AT BASELINE & FINAL TIMEFRAMES



Clinical Quality Measure Reporting:

Practices were required to report identified CQM numerators and denominators at a practice or provider level quarterly to provide real-time, actionable data for practice quality improvement processes, increase practice trust in data, and as part of the evaluation of the quality of care across SIM. Practices and CHITAs used quarterly practice-level CQM reports to identify gaps or issues, and continued to improve data quality in preparation for the annual report shared with payers. For a complete list of CQMs and reporting requirements, see the Clinical Quality Measure Specifications Guidebook.

PERCENT OF SIM PRACTICE SITES REPORTING CQMS

Percentages below reflect practice sites completing CQM reporting activity but do not reflect whether the practice reported the required number of CQMs. Depending on start dates and completion dates, cohorts were not required to report CQMs across all periods of time. Cohort 1 was required to report CQMs from Quarter 2 – 2016 to Quarter 1 – 2018, as well as a smaller group reported CQMs Quarter 4 – 2018 while participating in SIM Extended CHITA Services. Cohort 2 two began reporting CQMs in Quarter 3 – 2017 and was required to report starting Quarter 4 – 2018 through Quarter 1 – 2019. Cohort 3 began reporting CQMs in Quarter 2 – 2018 and was required to report during all quarters through Quarter 1 – 2019.

Reporting Quarter	All	C1	C2	C3
Quarter 1 - 2016	66%	66%	-	-
Quarter 2 - 2016	100%	100%		
Quarter 3 - 2016	88%	88%	-	-
Quarter 4 - 2016	100%	100%	-	-
Quarter 1 - 2017	100%	100%	-	-
Quarter 2 - 2017	100%	100%	-	-
Quarter 3 - 2017	94%	98%	92%	-
Quarter 4 - 2017	99%	99%	100%	-
Quarter 1 - 2018	99%	100%	99%	-
Quarter 2 - 2018	74%	11%	100%	94%
Quarter 3 - 2018	75%	14%	100%	99%
Quarter 4 - 2018	84%	45%	100%	100%
Quarter 1 - 2019	74%	11%	100%	100%

Practice Satisfaction Survey:

This individual level survey was completed once during participation in SIM by practice key contacts in Cohorts 2 and 3 and twice by practices in Cohort 1. It included questions about satisfaction with PF and CHITA services, RHC effectiveness,

advantages and value of SIM participation, challenges implementing the SIM framework and milestones and any reasons practices would not recommend SIM participation to other primary care practices. The statements provided reflect only Cohorts 2 and 3 responses to this survey. Of the practice respondents, who completed the Satisfaction Survey:

- More than 95% of practices and overall survey respondents, would recommend participating in SIM to a colleague and/or other practice;
- Approximately 75% agreed that access to APMs through SIM participation helped the practice achieve practice transformation goals; and
- Approximately 75% were knowledgeable of the business support services a practice received, and more than 90% agreed the services were valuable to the practice.

Practice Closeout Questions (Closeout):

This practice level survey prompted practices to reflect on their participation in SIM. It asked all practices to share the most important successes or improvements resulting from their participation and the potential impact on practice patients. Additionally, it asked practices which improvements would be sustainable after SIM practice transformation support ended. An optional free-response question asked practices to provide any other comments they had about their participation in SIM.

- Across all SIM cohorts, more than 60% of practices are confident that the current arrangements for providing behavioral health services are meeting patient needs.
- Across all SIM, cohorts more than 90% of practices indicated the practice has access to a behavioral health provider (BHP) and 77.50% have an onsite, full-time or part-time BHP, and 55.31% indicated a BHP was integrated into the practice setting (hired by the practice or contracted through another organization) during participation in SIM.
- Of the 77.50% of practice sites that specified they have an onsite full-time or part-time BHP, more than 60% of these practices stated integration of an onsite BHP and the provision of integrated care services is financially sustainable for the practice site.

Practice Integration of Behavioral Health Services

Across all cohorts, practices were asked to identify the items or work they had done to improve behavioral health services for patients. Practices were encouraged to select all applicable activities. The following table indicates the percent of practices that reported completing certain activities to improve integration:

Behavioral Health Service or Item	% of Practices Selected
Added a Care Manager at the Practice Site	20.00%
Added a Health Coach at the Practice Site	5.63%
Added Telepsychiatry Services at the Practice Site	14.69%
Hired an Integrated Behavioral Health Provider (BHP)	39.06%
Arranged for a Co-located BHP for the Practice Site	15.31%
Contracted for Integrated BHP with Another Organization	12.50%
Contracted for Integrated BHP with a Community Mental Health Center	7.19%
Developed a Collaborative Agreement with a Community Mental Health Center	26.56%
Developed a Collaborative Agreement with a Psychiatrist	15.31%
Arranged for Telephone or Online Counseling Services	15.63%
Implemented a Registry for Targeted Conditions	38.44%
Implemented more Aggressive Screening and Follow-up for Targeted Conditions	69.38%
Other Items or Work (Specify)	24.38%

BUILDING BLOCKS FOR CONTINUED PRACTICE TRANSFORMATION WORK

Across all cohorts, practices were asked to select the building blocks the practice would like to continue working on after SIM. The following table presents the percent of practices that selected the building block and a ranking (1 to 10) based on the practice percentage. Across all SIM cohorts the top building blocks chosen were – Data Driven Improvement (67.19%), Behavioral Integration (61.25%), and Comprehensive Care Coordination (62.81%).

Building Block	% of Practices Selected	Rank Based on %
1) Engaged Leadership	36.25%	9
2) Data Driven Improvement	67.19%	1
3) Empanelment	43.13%	7
4) Team Based Care	58.75%	5
5) Patient Team Partnership	37.81%	8
6) Population Management	61.25%	4
7) Behavioral Health Services & Continuity of Care	57.19%	6
8) Prompt Access Care	35.94%	10
9) Care Coordination	62.81%	3
10) Behavioral Health & Compensation Reform	64.06%	2

In addition to practice assessments and reporting activities, PFs and CHITAs were required to complete the following items documenting their work with practices:

Monthly Field Note:

PFs and CHITAs completed FNs on a monthly basis for each practice they supported. Any substantive contact with a practice site regarding practice transformation work was documented in a field note with a summary of work completed by the practice site and next steps.

Final Practice Site Progress Report:

PFs and CHITAs were required to complete a final progress report for each practice they supported. It summarized their experience working with the practice during the initiative and included narrative summaries of practice improvements, comments about sustainability of improvements, practice transformation or technical support services that contributed to improvements, significant barriers encountered, and an optional area to share any notable success stories.

Reporting Sustainability:

The SIM Office will not continue to collect data beyond the end of the initiative. However, the hope is that practices will continue to use data and feedback provided during the initiative to drive change. Practices can use assessment results to negotiate with payers, apply to future practice transformation initiatives and guide internal decisions regarding integration. Furthermore, data collected through the initiative will remain available upon request from HCPF to guide development of future initiatives.

Access to Capital:

While the SIM Office originally envisioned providing access to large low-interest loans for practices, potential recipients indicated limited interest and concerns were raised regarding repayment. As a result, the SIM Office refocused access to capital support via achievement-based payments and small grants.

Achievement Based Payments:

Practices earned non-competitive payments for reaching certain achievements. SIM Cohort 1 practices qualified for payments of up to $5,000 for completing key activities, such as CQM reporting and attending twice-yearly CLS events. Practices in Cohorts 2 and 3 could apply for non- competitive payments of up to $6,500 per year. The increase in available payments to Cohort 2 and 3 practices was the result of a shift in funding strategy detailed in the small grants section below. These payments tied directly to a cohort practice's "good standing" and successful completion of activities related to the SIM framework and milestones.

Small Grants:

The SIM Office created a practice transformation fund, which initially comprised approximately $3 million in federal funds from CMMI and approximately $3 million in funds from the Colorado Health Foundation (CHF). Cohort 1 practices could apply for competitive small grants of up to $40,000 from either funding stream (but not both).

Federal funds were available to:

- Train new and existing practice staff (including methods to better coordinate referral to specialty mental health settings);

- Upgrade existing technology to support integrated care; or
- Support methods to foster patient and family engagement in integrated care.

CHF grant funds could be used to provide:

- Seed funding to support behavioral health clinicians;
- Capital costs to support renovations that foster integrated care; or
- Technological solutions to support systematic screening for behavioral health problems.

Major Accomplishment

In its original proposal, SIM envisioned building public-private partnerships to help advance transformation. The $3 million commitment from The Colorado Health Foundation, along with support running a joint request for applications (RFA), turned this vision into a reality. Together, SIM and the Foundation helped accelerate integration in primary care practices.

After receiving feedback from small grant recipients that approval and disbursement processes for federal funds was cumbersome and that achievement-based payments could provide greater value to practices, the SIM Office made key changes to the practice transformation fund. As referenced above, the federal funding stream was reinvested in larger achievement-based payments for Cohorts 2 and 3 and the small grant funding was limited to CHF dollars and covered funding categories listed in Cohort 1.

Lesson Learned

Designing a small grant program that is flexible for medical practices proved to be a challenge. A non-state agency might be better suited to house a grants program that is meant to be agile and innovative especially for an initiative that has a short time frame.

Practice Selection:

Applications to the small grant program were reviewed and scored by an external panel of subject matter experts convened by the SIM Office in collaboration with the CHF for all three cohorts. In Cohort 1, the request for application process was spearheaded by the SIM Office and then it was redesigned for Cohorts 2 and 3 and primarily handled by HCPF. Refining and promoting the RFA for Cohorts 2 and 3 was a collaboration between the SIM Office and HCPF. HCPF supervised the formal release of the RFA and application monitoring through established state procedures. For all three cohorts, applications were checked for minimum qualifications and scored by two external reviewers and ranked as a group based on criteria such as:

- Proposed activities (e.g. clarity and appropriateness of proposed activities, advancement of practice transformation milestones, long term impact beyond selected SIM Building Blocks, etc.);
- Statement of need (e.g. high needs population served [high-need populations include low-income, rural areas, populations affected by health inequities], funded activities will address practice needs or constraints, impact of funded activities sustainable beyond the grant, etc.);
- Impact (e.g. clarity of results, timeframe proposed, evaluation results of proposal, etc.); and
- Overall quality of the application.

	RFA Date	Number of Applicants	Number Funded	Dollars Awarded
Cohort 1	April 2016	66	27 (47 including CMMI-funded practices)	$1.5 million
Cohort 2	December 2017	107	38	$1.25 million
Cohort 3	August 2018	32	22	$750,000

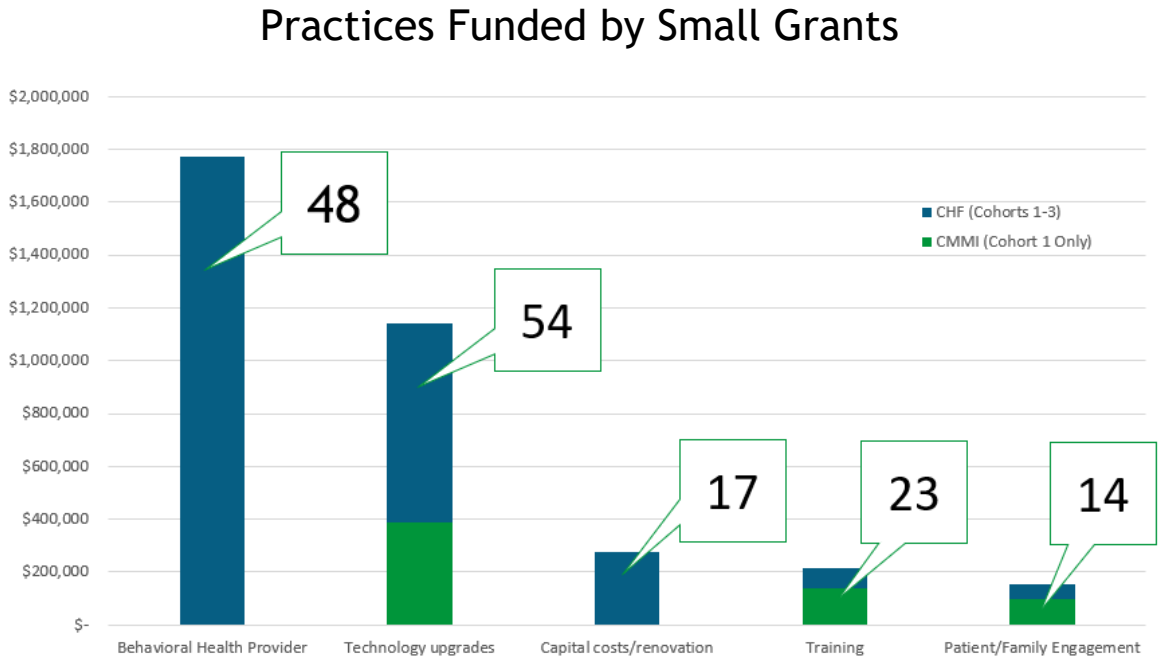
Support for Grantees:

To help practices achieve the goals set out in small grant project plans, the SIM Small Grant Program Administrator provided day-to-day technical assistance for grantees, which included support navigating the grant process, providing feedback on project progress and helping grantees address challenges. In many cases, support for the grantees came from PFs, CHITAs and RHCs. A Cohort 3 small grant practice recounts an experience that illustrates the interconnectedness of various SIM supports:

> "Applying for a grant is work, but the end result and benefit to the community is worth it. Implementing behavioral health into a small primary care practice was originally off our radar scope, but our CHITA...encouraged us to apply. Our office had two small nonfunctional rooms that could be better utilized for the benefit of our patients. After collaborating with our staff, we all agreed to propose remodeling part of the practice to make a large classroom for behavioral health classes. We asked one of our medical assistants to contact...our outreach coordinator, to recommend a behavioral health specialist. [She] recommended ViewPoints Psychotherapy and after interviewing them for the position, we felt they had a wide and useful variety of expertise to offer our patients. We now have a great ongoing working relationship with ViewPoints."

Use of Funds:

Grant funds were most commonly used to support a BHP in primary care practices, followed by support for technology upgrades.



In certain instances, practices were able to use funds to advance multiple, mutually reinforcing priorities, as demonstrated by the following:

> "Because of this grant funding we were able to bring in two BH providers. We are now able to walk a patient down the hall and do a warm handoff to our BH provider. This has been instrumental in making our patients feel comfortable thus increasing our referral follow through rate. It shows our patients that their provider really does care and is willing to assist personally in speaking to a BH provider. Patients are actually more willing to see the BH provider now that they are coming to a familiar place and seeing familiar faces, not just a building with a bunch of "strangers". We used the grant for all aspects of this integration to include office construction, IT software, and staff trainings." – Cohort 3 small grant practice

Monitoring Progress:

Grantees were asked to submit qualitative reports at two junctures in time- midway through their respective grant periods and at the end. The reports included questions related to the following:

- A summary of how the findings helped the grantee's practice implement the project goals;
- Quantitative results (including method used to track results) achieved through grant activity and any measurable results towards achieving the goals and described in the grantee's Practice Improvement Plan;
- A description of any deviations from the initially predicted results as specified in the funded grant application;
- Significant successes and challenges that the grantee's practice experienced relating to the work funded under this project;
- A description of what the organization learned based upon the results, successes and challenges;
- A brief narrative addressing any programmatic, evaluative or organizational changes that the grantee will make based upon lessons learned;
- Specific example(s) of how the funding has impacted the grantee's practice including stories and sustainability plans; and
- An up-to-date summary and receipts of how the grantee spent funds.

The SIM Office reviewed these responses and followed up as necessary to provide additional support.

Sustainability:

The SIM small grant funds to practices were designed to be one-time investments. However, many practices successfully leveraged the funds to launch integration efforts that will have lasting effects. Funding remains a challenge for long-term sustainability of integration efforts, and practices are looking at other grant opportunities as sustainability mechanisms. SIM practices have access to SIM-funded business supports to help them use data to tell their success stories to payers.

Status of Access to Capital Key Activities:

The following table describes the final status of the key activity related to access to capital for primary care practices listed in the SIM Award Year 4 terms and conditions.

ACCESS TO CAPITAL KEY ACTIVITIES	STATUS	LOOKING AHEAD
Disseminate achievement-based payments to primary care practices	All practices received some form of achievement-based payment, though not all practices achieved sufficient progress to receive the total maximum payment.	Practices will not continue to receive payments, which were used to incentivize structural, long-term changes that will continue in the future.
Disseminate competitive small grants to primary care practices	107 practices across Colorado received small grants ranging from $2,000 - $40,000	Small grants were one-time investments. However, to receive funds, each practice had to address sustainability in their applications. Practices will continue to make progress based on their capacity.
Report practice good standing to payers quarterly with annual report to include eCQMs	The SIM Office provided a list of Cohort 2 and 3 practices that were in "good standing" to payers in December 2018 and again in July of 2019.	SIM reporting is complete. However, practices can continue to use evidence of good standing during discussions with payers about value-based payments.

Individual Practice Successes - Primary Care

Primary care practices participating in SIM were given an opportunity to identify successes and challenges encountered through Practice Closeout Questions in the final set of practice assessments. The most widely reported improvements included:

Integrating Behavioral Health:

Practices and PFs reported multiple instances of successes in integrating one or more behavioral health provider, improving behavioral health referrals, increasing staff and provider engagement around behavioral health, increasing the role of BHPs in the practice, better communication between medical providers and BHPs, and improving infrastructure support for integrated behavioral health.

For example, one practice reported: "After the initial challenge of understanding and seeing the value of behavioral health integration on patients, the team has fully embraced the BHP and she is fully integrated into the clinic. The BHP for this clinic met with providers to share how she could support them and provide a much-needed service that the provider did not have time to support. The QI [quality improvement] team provider champion also stepped up and engaged with [the] new BHP and provided testimonials at staff meetings of the value of having a BHP on the team."

Another example, from a PF who reported: “BHPs have been trained and have rolled out the Collaborative Assessment and Management of Suicidality (CAMS) tool. CAMS is first and foremost a clinical philosophy of care. It is a therapeutic framework for suicide-specific assessment and treatment of a patient’s suicidal risk.”

Data, Reporting, and EHR Capabilities:

PFs and CHITAs reported that practices improved their data collection and analysis capabilities, clinical quality measure reporting, documentation of workflows, use of registries and other data tools, leveraging EHR upgrades, and sharing medical and behavioral health records.

For example, one PF reported: “They have started looking at improvement in a more formal way, using a QI team and data to drive change…. It has been a little challenging to get them to think of QI in this way, but I think they are starting to see the importance and want to be prepared to be successful in value-based payment models so I think they will continue…. Seeing improvements in their metrics made a big difference in their motivation to continue.”

Another example from a CHITA: “Initially, the practice was unable to report on any CQM data (this was in Q3 of 2017). Fast-forward to Q4 2017, and we're finally able to report on 3 CQMs, however at the time we still had quite a bit of difficulty building and validating the CQM report for Maternal Depression, based on the outlined specifications. Now Q1 2018, everyone in the practice is on the same page as it relates to reporting measures and now they've begun to work on optimization and maintenance of their 4 selected measures. I'm incredibly proud of their progress and honored to work with them.”

Patient Care Processes and Workflows:

Practice representatives as well as PFs associated with multiple practices reported improvements in standardization of workflows and protocols, wider use of screening tools and processes, better care coordination, broader implementation of team-based care, greater patient and family engagement activities, expansion of group classes, improved patient flow and warm handoffs, use of risk stratification tools to address patients at risk, and enhancement of chronic pain management programs.

For example, one practice representative stated: “Strong capable leaders are in place at [the health system] which will continue to advance and support all BHPs in the work. The greatest success for [these] practices has been a fully integrated Care Coordinator and [social worker] on-site. This has provided a comprehensive patient experience for many patients. At the beginning of every meeting the team shares a

joy in work/patient success story that highlights the successes that this integration has provided."

To provide another example, a PF shared: "The practice made a conscious decision in 2018 to prioritize care for diabetic patients. Although they reported good data for the A1c measure to SIM and CPC+ for 2017, they wanted to put a more holistic focus on the treatment of their diabetic patient population. The practice brainstormed and decided to host a diabetic health fair for their patients. The health fair would consist of an A1c check, a micro albumin check, a diabetic foot exam and an eye exam performed by a local optometrist. They also decided to launch their new virtual diabetic educator resource and spotlighted their diabetic educator on the zoom platform in the waiting room for patients to begin to understand how they may engage with her in a virtual manner! The health fair was a big success and the practice will definitely make this an annual event!"

Quality Improvement Work and Practice Functioning:

PFs as well as clinicians and staff at multiple practices reported an increased focus of their QI teamwork and activities, enhanced staff training, increased effectiveness of regular meetings, better intra-office communication, and overall improvements in practice culture.

For example, one practice representative relayed the following: "I have certainly seen an improvement in the way the practice team approaches care at this clinic. Initially, each care team was using their own approach and not communicating as much with the others. Over time, they have started to communicate better with one another. They are using their data at a staff level to have conversations about how they are all going to improve care for patients. This used to come only from the PF or administrative level, but by the end of the program was being addressed by providers and staff at their regular staff meetings."

Another example from a PF who stated: "The Behavioral Health Team has been actively engaged in numerous QI projects. A successful, on-going project is group visits focusing on Anxiety. They have also utilized their funding for Suicide Prevention Training, Motivational Interviewing Training, Transgender Training and Dialectical Behavior Therapy Training."

Patient Experience:

As described in the previous section, overall, practice improvements were often connected to tangible improvements in the patient experience, most notably in the enhanced experience around behavioral health integration. Specific areas with improved patient experiences included increased access to behavioral health visits

and support, increased and improved behavioral health referrals, better care team collaboration and continuity of care with warm handoffs, ability to address gaps in care before patient visits to the practice, and greater availability of more comprehensive care to address complex patients through improved pain management, trauma-informed care and shared decision-making.

For example, a clinician working at a family medicine practice in a suburban area and a clinician from a rural family medicine practice reported: "The SIM project has been an effective process to focus our practice and had a tremendously positive effect on our patients. The feedback from our patients is that they deeply appreciate the team-based model. This practice has had a pretty high turnover in staff and providers over the past two years. Nonetheless, patients now identify and trust their team, so if one member changes, they still work with the team that knows them. This provides a level of continuity that our patient population has not experienced in the past and they are very appreciative."

"We are a very small community and change comes slowly. People were not happy with having to answer the depression survey but I think they are starting to get over it. I feel we have been able to help a lot of our patients that maybe would not have asked for help on their own."

As a final example, a practice representative reported: "The nurse practitioner noted red flags in terms of a 12-year old female student needing mental health services due to depression. She had been grieving due to multiple deaths in her family. The nurse practitioner referred the student to the behavioral health therapist, who saw the girl two times on an informal basis. He tried to reach the family multiple times to arrange an intake, which was required to begin services. However, the therapist was unable to reach the family. He was about to close the case but instead the behavioral services patient navigator took over and made calls to the mother after hours – after the clinic was closed. The navigator learned that the mother had medical issues, had missed a lot of work, and could not miss more work. So the therapist did the intake after hours at 5 pm in order to begin providing crucially needed treatment for the student. After receiving services, the student's mental health improved and her academic performance also improved."

Practice Transformation in Community Mental Health Centers

In addition to integrating behavioral health services into the primary care setting, Colorado SIM also emphasized the importance of testing and promoting integration of primary care services into the behavioral health care system. Recognizing that this model of integration can improve patient outcomes and reduce or avoid unnecessary health care costs, Colorado included a focus on CMHCs in its original proposal. Members of populations that face co-occurring mental health or substance use disorders are often most comfortable addressing physical health care issues in the CMHCs that serve as a familiar and trusted setting for care. As a result, Colorado launched a Bidirectional Health Home Pilot and funded the Colorado Behavioral Healthcare Council (CBHC) to provide oversight. The investment supported four CMHCs that built health homes to address whole-person health to over 3,000 Coloradans and gather data that could inform APMs. Throughout the initiative, sites participated in a unique learning collaborative hosted by the Colorado Behavioral Healthcare Council (CBHC) as well as the practice-specific CLS and engaged with a robust network of stakeholders to share learnings, outcomes, and best practices. Learnings will help inform future efforts at each of the health homes and inform future integration efforts.

Practice Transformation Governance - CMHCs:

Colorado Behavioral Healthcare Council:

SIM contracted with CBHC, the statewide membership organization for Colorado's network of community behavioral health providers, to facilitate and manage the bidirectional health home investment. CBHC oversaw CMHC selection and provided management and support to the health homes via the following activities:

Weekly Calls: CBHC hosted weekly calls with representatives from the four pilot sites to discuss clinical and operational aspects of the health homes, review deliverables and share updates from the larger initiative. The calls alternated between individual check-ins with each center and group calls with representatives from all four sites.

Quarterly Site Visits: On a rotating basis, CBHC visited one CMHC per quarter to monitor implementation and refine expectations related to SIM's investment. In Award Year 3, SIM Office staff joined all quarterly site visits to strengthen relationships.

CMHC Learning Collaboratives: In partnership with HealthTeamWorks, the PTO that provided CMHCs with PF support, CBHC hosted two learning collaboratives each year at each of the four CMHCs. They focused on sharing successes, lessons learned and challenges. Examples of facilitated sessions during the learning collaboratives include:

- How Can We Increase Use of Primary Care in Behavioral Health Setting? A Facilitated Brainstorming Session;

- Turning Assessments into Action;
- Strengths, Opportunities, Aspirations & Results – A Strategic Planning Tool; and
- Medication Assisted Treatment for Opioid Misuse – A Shared Approach Between Behavioral Health and Primary Care.

SIM CLS: In addition to the CMHC Learning Collaboratives, staff from each center were invited to participate in the larger SIM CLS referenced above. These events provided valuable opportunities for the CMHCs, practice representatives and others to network and share learnings. During the CLS events, CBHC hosted sessions on how primary care sites could partner with mental health centers.

Participation in the Multi-Stakeholder Symposiums: CMHC representatives attended each Multi-Stakeholder Symposium (see payment reform section for more details).

Practice Transformation Workgroup: Throughout the initiative, representatives from the CMHCs served on the practice transformation workgroup, referenced in the section above. By engaging members from primary care and behavioral health care settings, the workgroup proved a valuable forum whereby practice transformation partners could learn from one another and advance a common goal.

CMHC Participation:

In 2015, CBHC selected four CMHCs to participate via an independently managed request for proposal (RFP) based on a vision and activities articulated in the original SIM application and concept documents. CBHC partnered with the Keystone Policy Center to ensure a fair and transparent review process. Keystone convened an independent selection panel of reviewers who were chosen based on their knowledge of integration, behavioral health and SIM as well as their ability to evaluate the feasibility and merit of proposals as they related to the proposed learning process of bi-directional integration. Proposals were due in September 2015. Of the 11 CMHCs that submitted proposals, the following four were selected:

Community Reach Center (CRC) is a private, nonprofit community mental health center in Westminster. CRC partnered with Salud Family Health Centers, a Federally Qualified Health Center (FQHC) serving communities in northeastern Colorado, and Dental Lifeline Network. CRC and Salud Family Health Centers placed a fully functional medical clinic in CRC's Commerce City Outpatient Clinic in December 2014. The clinic mainly serves adults with severe mental illness.

Jefferson Center for Mental Health (Jefferson Center) is a private, nonprofit community mental health center serving Jefferson, Gilpin and Clear Creek counties. Jefferson Center partnered with Metro Community Provider Network (MCPN), the local federally qualified health center to develop the Jefferson Plaza Family Health Home, the third in a series of shared, integrated health homes between the partners. The health home primarily serves children and families.

Mental Health Partners is a private, nonprofit community mental health center that has provided mental health care for more than 50 years to the local underserved population in Boulder and Broomfield counties. With SIM funding, Mental Health Partners (MHP) partnered with Clinica Family Health Services, the local FQHC, and Dental Aid, to create Boulder Health Integration Partners (BHIP), a multi-agency collaborative partnership. MHP primarily serves adults with serious mental illness, including many adults who are struggling with homelessness

Southeast Health Group (SHG) is a private, nonprofit community mental health center providing mental health, substance use, primary care, and wellness services to the six-county, rural and frontier regions in the southeastern corner of Colorado. Rather than partnering with an FQHC for primary care needs, SHG hired in-house primary care providers. It provides access to integrated services at four clinic locations: Lamar, La Junta, Las Animas, and Rocky Ford, which primarily serve adults with serious mental illness.

As of the second quarter of Award Year 4, each health home had served the following number of individuals:

- Community Reach Center: 361;
- Jefferson Center: 2545;
- Southeast Health: 283; and
- Mental Health Partners: 994*.

* Number of beneficiaries includes all unduplicated beneficiaries with on-site primary care encounters to date.

Transformation Model and Expectations - CMHCs:

The original RFP was based on the vision and activities articulated in the original SIM application. However, the RFP encouraged sites to undertake some activities that were ultimately determined unallowable within CMMI funding parameters (for example, provision of direct services and undergoing capital construction to create space for primary care services). Through dedicated and consistent partnership between CMMI, the SIM Office, the CMHCs and CBHC, all sites re-scoped activities to focus on capacity building, transformation and system redesign. However, the change in focus since the original RFP presented a consistent challenge throughout the initiative. In future award years, sites continued to request funds for unallowable uses and it took significant time and effort to rebuild trust between the SIM Office and partner sites.

Lesson Learned

When releasing RFPs, clearly outline the ways in which funds can and cannot be used. This information should be conveyed upfront and repeated, in writing, consistently throughout the initiative. Future award recipients should be required to identify necessary expenses that cannot be addressed with federal dollars and be asked how they intend to cover those costs to build trust and avoid confusion during implementation of complex programs.

Once activities were re-scoped, a PF worked with each of the four community mental health centers to train staff on creating effective teams and met with leadership from each organization to review the quality improvement process and expectations for participation. Furthermore, a CHITA was provided to each site.

Workflow Improvements:

PFs helped all four clinics develop and improve extensive workflows for delivering integrated care. Sites focused on ensuring they had the right team to deliver care. In addition to primary care and BHPs, sites found that care coordinators, health coaches, peers, front desk staff, nurses, medical assistants, certified coders, and billing staff were played a crucial role in the delivery of integrated call. The centers found they were most successful when they trained all staff from the front desk to the providers regarding how they fit in to the integrated care team. Especially important was the role of front desk staff, as these team members ensure a welcoming environment, and handoffs between behavioral health and primary care providers occurred in a manner that was both efficient and warm.

Investments in improving workflows helped make integrated care work by increasing efficiencies and improving outcomes. Integrating the Quality Improvement teams were key to these efforts as well as practice coaches. PFs engaged the CMHCs to work on clinical quality improvement (CQI) projects. SIM funding allowed CMHCs to review workflows and improve processes (outlined below), the benefits of which will continue well beyond SIM:

- Appointment scheduling
    - Workflows revolved around ensuring adequate appointment times for patients who need more services during each visit;
- Medical assistant/nurse/ front office roles (pre-visit, vitals, agenda setting, checking chronic and preventive care needs, ordering)
    - Workflows were established to ensure that all front office staff were trained in the methodology of integrated care to ensure consistency throughout the patient visit;

- Internal messaging (which messages go to whom, what action is required)
    - Without completely integrated electronic medical records, clinics need to create workflows for how providers will communicate with each other across the office;
- Prescription refills (chronic meds, acute meds, secure script meds);
- Risk stratification
    - Once a risk stratification model is developed, workflows need to be put in place to maintain the model and its efficiency;
- Healthy/preventive care
    - All four participating clinics have listed preventative care as a priority. This requires the clinic to develop workflows around how to engage patients in preventive health care;
- Managing chronic conditions (diabetes, hypertension, congestive heart failure)
    - Group sessions have proven to be vital in the integrated care setting. Workflows were established to identify patients who would benefit from group sessions; and
- IT
    - Documenting and analyzing data accurately required IT workflows to be established.

Data Sharing:

While workflows improved at each site, data sharing was an ongoing challenge faced by each CMHC throughout the initiative. Despite the growing dedication to integrated care in Colorado's behavioral health care system, the CMHCs found it difficult to deliver integrated care without interoperable EHR systems. All four centers were required to create new workflows for documenting and sharing records between the behavioral and physical health providers. Each worked with two separate EHRs and found that bridging the gap between them to be difficult. In many cases, front desk staff perform double data entry, which proved to be time consuming and increased the risk of data entry mistakes. Despite this challenge, all sites created workarounds that enabled them to continue providing integrated care while capturing critical data within the patient's health homes. Some of those workarounds included:

- Using spreadsheets to capture clinical quality measure data from both EHRs;
- Printing chart notes out for huddles so that both providers could access all information related to each patient; and
- Creating data warehouses to house critical patient data that could be accessed independently of EHRs by the patient's providers.

Recommendation

As health care organizations interested in delivering integrated care renew contracts with EHR vendors or consider new products, they coordinate in advance with potential partners to create interoperable systems. Sharing patient information in a secure way is key to delivering integrated care.

SIM-Supported Work at each Health Home:

Community Reach Center:

Improved Care Coordination: Community Reach Center (CRC) focused efforts on ensuring that all eligible patients could connect with the clinic's care coordinator, who completed crucial assessments with patients, which streamlined the flow of appointments through the health home. Additionally, the coordinator worked to develop specific workflows that impacted how patients were seen within the health home well as helped to ensure they received critical follow-up care after their appointments. While CRC aimed to connect all eligible patients with the Care Coordinator by the end of the SIM initiative, they were unable to do so. Because care coordination is not reimbursed by private insurance, CRC was unable to hire sufficient staff to fill this need for all patients.

Group Classes to Support Health Outcomes: CRC also developed innovative group classes within the health home. Classes often involved providers from the clinic. The following classes were attended by three to seven learners per session:

- Grief and Loss;
- Mind Body Wellness;
- Pain Wellness;
- Mental Health and Addictions;
- Creative Coping;
- Mindfulness for Depression;
- Yoga (English and Spanish women only group);
- Trauma Informed Yoga for Kids;
- Assertiveness vs. Aggression/Anger Management;
- Coping and Support Training;
- Teen Themes;
- Dialectical Behavioral Therapy (Closed group, weekly, eight-week cycle); and
- Art therapy for kids (eight-week cycle)

When surveyed, patients found participation in the groups to be valuable. Groups provided complex patients with an extra opportunity to ask questions they may not have had time to discuss during their regular appointments. Alongside its group

classes, CRC also created a Patient Advisory Council that met monthly to address any patient-centered issues with the health home.

Looking Ahead: CRC is committed to sustaining their partnership with Salud Family Medicine. They will continue to provide integrated care at their clinic site with collaboration between CRC and Salud practitioners.

Jefferson Center for Mental Health (Jefferson Center):

Behavioral Health Screening: Jefferson Center recognized that the health home was adequately screening for maternal depression but was not sufficiently screening for paternal depression. In response to this challenge, Jefferson Center developed a paternal depression screening for all new fathers at the clinic. Fathers were initially screened during newborn appointments. However, due to the fact that few fathers attended these appointments, the health home expanded screening to prenatal appointments and parenting classes. To date, 41 new fathers have been screened in a little over a year. All fathers who screened positive for depression have received interventions through the health home. Jefferson Center plans to expand this screening to cover all caregivers (grandparents, foster parents, older siblings, etc.) and to all parents of children under 18 years of age.

Health Economist: In AY3, Jefferson Center hired a health economist to develop an economic analysis for the health home. The health economist received access to the All Payer Claims Database (APCD) data and assessed which services – particularly those without a payer source – will continue beyond SIM funding in the health home. Because APCD data set acquisition was delayed, the economic team's analysis was delayed, and the final report will not be completed until Fall 2019.

Looking Ahead: Jefferson Center developed a standard operating procedures manual for the health home that will be used to deliver services beyond the initiative including assessments and screening. Moving forward, Jefferson Center will assess substance use and screen for intimate partner abuse in each parent. The health home offers psychoeducation for those who screen positively, and staff use motivational interviewing to assess readiness for change in caregivers and patients. When needed, staff link patients and caregivers to ongoing behavioral healthcare. Jefferson Center has also extended its contract with the Health Economist until December. The Health Economist will continue to share findings with CBHC, which will disseminate learnings to other CMHCs.

Throughout SIM, Jefferson Center endeavored to make new connections in the community, including with the local school systems, local public health agencies, other CMHCs and new primary care providers. These connections were crucial to expanding the patient panel and raising awareness to what services the integrated

health home offered. Looking ahead, Jefferson Center plans to leverage the connections established during SIM to continue strengthening provision of integrated care.

One important connection has been with Front Range Health Partners and Colorado Community Managed Care Network to expedite the buildout of a Virtual Data Warehouse inclusive of claims, encounters, Health Information Exchange (HIE), EHR and outcomes data that will support the focus on population health, chronic disease management and financial management in the future. Jefferson Center partnered with Signal Behavioral Health Network to implement a mobile Medication-Assisted Treatment unit that will travel to rural, high need towns to provide services both in the mobile unit and via telehealth. Jefferson Center has also partnered with Jefferson County Human Services to look at how to further provide prevention and early intervention of trauma to mitigate long-term physical, emotional and functional effects.

Jefferson Center developed a strategy to pull billing and reimbursement data from Jefferson Center and MCPN to examine the sustainability of the health home. Staff is tracking billable and non-billable clinical services that are unique to the health home to provide a snapshot of integrated clinical activities and inform future activities.

Mental Health Partners:

Improved Provider Scheduling: MHP tested a new provider schedule at the clinic. For this model but not using CMMI funds, MHP hired four providers to split one, full-time equivalent (FTE). The providers avoided burnout from working with a complex population and patients saw the provider, who fit their needs. This model also mitigated staffing issues. Instead of suspending services when a provider took vacation or left the practice, other providers fill in, which ensures continuity of care.

Diabetes Group: MHP and its clinical care team at Clinica, developed a new group for patients with diabetes and pre-diabetes. Using Clinica's group protocol for patients with diabetes, MHP altered the program to better fit into the behavioral health setting. Alterations to the model included changing the group meeting to a weekly rather than bimonthly schedule, adding a focus on self-management, welcoming diabetic and pre-diabetic patients, who could benefit from one another, scheduling a medical provider to attend and providing access to a nutritionist and health coach at the meetings. Additionally, MHP modified the course education packets so patients could engage and absorb information and ensured that meetings and classes occurred regularly.

Many of the patients identified for this group faced additional comorbidities (e.g. serious mental illness, metabolic syndrome, etc.) and benefited from the revised

model that encompassed physical and mental health needs. Eleven patients participated in the group. Of those 11, eight showed a decrease in A1c levels during the course of the group. Additionally, each patient set a personal health goal each week during the group. MHP reported that patients began meeting their goals in the new model.

Looking Ahead: MHP has found certain staffing positions will not be sustainable, but wishes to sustain the activities created and maintained throughout SIM. As a result, MHP is working to identify how it can train existing staff members to continue some activities handled by those personnel.

Lesson Learned

CMHCs learned that hiring multiple primary care providers allowed patients with complex needs to choose a provider with whom they felt most comfortable. Multiple providers allowed for consistency of care, which was critical to ensure that patients received the care they needed and felt comfortable in their health homes.

Southeast Health Group:

Risk Stratification Model: Working collaboratively with its SIM-funded PF, SHG created an innovative risk stratification model for its health home. SHG staff found they needed to better classify patients to improve management of a high-risk population and focus preventive resources on the low-risk population. The stratification scale encompassed three pillars of the integrated health home: behavioral health care, physical health care, and physical therapy and included six levels of care. Level 1 was reserved for patients who were healthy with no chronic disease or risk factors while Level 6 classified patients who had catastrophic or complex conditions in which their health may or may not be restored.

After working closely with PFs to create the model's scale, SHG began to assign patients to the model in August 2017. By The end of Award Year 3, all integrated care patients had been assigned to the model. Patients were assigned an initial level in collaboration with the integrated health home team but were consistently reevaluated and moved up or down the scale according to their current status. Stratifying patients improved patient outcomes and reduced gaps in care. This work allowed providers to find which "level" of patient they worked best with as some providers felt compelled to work solely with high-level patients while others preferred to have patients with a range of levels under their care. The model also allowed SHG to distribute high-needs patients across providers, which significantly reduced provider burnout, according to executives, and allowed the health home to better

meet patient and provider needs. A presentation related to the specifics of the model is attached as Appendix C2.

The risk stratification model provides a mechanism for providers to more closely integrate care, serves to guide the volume of services provided and is the basis for forecasting unit production and budgeting, which allows SHG to create a productivity model that is focused on quality as well as finance and marries clinical objectives with a strategy for meeting costs. Other organizations have taken an interest in the model and shared ideas to improve it. The risk stratification model has been presented at the CBHC State Conference, highlighted in an article by Jane Jerzak with WIPFLI CPA's & Consultants, presented at the SIM Symposium in March 2019, and at the National Council Conference in March 2019.

To sustain the risk stratification model, SHG has hired an employee (quarter-time) to continue development and monitor its sustainability.

Major Accomplishment

The Risk Stratification model developed by SHG has helped identify patient needs, reduce provider burnout and promote financial sustainability. SHG will continue to present the model to partners, who have expressed interest in adopting it. Feedback from partners will be used to refine the model and lessons learned will be shared with CMHCs.

Peer Supports: In addition to the risk stratification model, SHG leveraged peer support to complement and reinforce improvements in health outcomes. SHG created a Peer House to meet the non-medical needs of clients, who could wait for a ride after an appointment, participate in groups (i.e. Narcotics Anonymous, Alcohol Anonymous, grief counseling, etc.), and meet with peers to work on resumes, job searches, etc. The Peer House also provided holiday dinners, craft rooms, a meditation room, a full kitchen, laundry services and Wi-Fi. The Peer House coordinates transportation for clients to get between the SHG clinics or between their home and any medically necessary appointments. SIM funds were not used directly to support Peer House, but went toward strategic planning and implementation of a work plan to incorporate services with medical services.

Billing Improvements: Through SIM participation, but not using CMMI funds, SHG hired a certified coder in Award Year 2 to ensure sustainability. The coder returned the investment within the first 90 days with increased collection rates for appointments. The coder also developed a process that better informed patient attribution so all initial appointments are now billable.

Looking Ahead: Thanks in part to the efforts listed above, SHG was better able to maximize its revenue, allowing for sustainability of the model. SHG used its SIM-funded PF to conduct root cause analyses for the health home. Through this process, SHG learned that primary care providers, who were offering services to the general public as well as SHG patients, should be brought back into the mental health center to work solely with the integrated population. After the conclusion of SIM, providers will be used as another service to complement mental health center programs. They will begin groups for Naloxone, comorbidities, medication-assisted therapies, etc., which will only serve clients of the mental health center. SHG believes this shift will prioritize increasing quality of care and not quantity of encounters. SHG has also committed to sustaining its coder beyond the term of the initiative, and plans to contract with a management group to form strategies for overall sustainability of the health home.

Sustainability:

Each of the four centers is committed to sustaining integrated care for as long as possible, but anticipate funding will be challenge. CBHC is exploring how to leverage funding from Medicaid and Accountable Care Collaborative entities to maintain staff levels for integration, and will use a report prepared by Milliman analyzing SIM's overall cost savings and return-on-investment to better understand the true cost of integration. This data will inform discussions with Medicaid, ACC entities, and ongoing conversations with other third party payers, regarding the funding and sustainability of integration efforts in CMHC settings.

Status of Technical Assistance Activity

The following table describes the final status of the key activity related to technical assistance for CHMHCs listed in the SIM Award Year 4 terms and conditions.

TECHNICAL ASSISTANCE (CMHC) KEY ACTIVITY	STATUS	LOOKING AHEAD
 Support four community mental health centers in advancing integration of primary care.	All four CMHCs created bidirectional health homes and are either partnering with FQHCs or created primary care offices at facilities. CMHC integration scores improved on the Monitor.	All four CMHCs report they will continue to provide primary health care services for patients as they are able. Bidirectional health home sites created a template that other CMHCs can use to integrate care.

3 Population Health

SIM supported new ways to connect the health care delivery system with community-based services in order to create a comprehensive, whole-person system of care.

Avenues for Improving Population Health

Traditional clinical approaches

Innovative patient-centered approaches and community-clinical linkages

Total population or community-wide approaches

Key SIM Activities

- Created Road Map
- Monitored & Mapped Metrics
- Funded Local Public Health Agencies & Behavioral Health Transformation Collaboratives
- Deployed Regional Health Connectors
- Disseminated Provider Education
- Issued Call to Action

Major Accomplishments

1. **CALL TO ACTION:** The SIM Population health workgroup drafted and issued a Call to Action, which offers a 10-year roadmap to reducing behavioral health and substance use disorders.
2. **REGIONAL HEALTH CONNECTORS:** SIM helped launch an innovative new workforce that helps care teams identify and connect patients to community resources. Twenty-one Regional Health Connectors (RHCs) and one Veteran Health Connector (VHC) served communities across Colorado.
3. **COMMUNITY-BASED INVESTMENTS:** SIM supported two Behavioral Health Transformation Collaboratives and funded eight Local Public Health Agencies, which reach 31 counties. Investments have advanced community-based awareness, prevention, stigma reduction and behavioral health screening.
4. **SUPPORTING PROVIDERS:** SIM supported development of e-learning modules, resource hubs, and trainings to help clinicians increase their ability to prevent, screen for and treat behavioral health disorders. SIM also helped advance provider understanding of population health metrics in their communities by linking them to the interactive VISION Tool.

Future Considerations

1. **EVALUATING EARLY:** Experiences from the RHC programs as well as community-investment partners highlight the need to design and fund grantee-specific evaluation strategies from the outset in order to better understand return on investment.
2. **FUNDING BEHAVIORAL HEALTH METRICS**: SIM funded the addition of questions related to behavioral-health stigma to the Behavioral Risk Factor Surveillance Survey and Colorado Health Access Survey. The SIM office recommends that future behavioral health grants fund these state-level measures.
3. **SUSTAINING REGIONAL AND VETERAN HEALTH CONNECTORS:** SIM recommends that state agencies or foundations commit funds to statewide efforts that coordinate the RHCs, VHC, and other state investments. Funding is needed to continue workforce development activities.

Population Health

Overview

The state of Colorado is large and geographically diverse. As of July 2018, an estimated 5.69 million people lived in Colorado's 64 counties and two tribal nations. Approximately 85% of the population is concentrated on 20% of the state's land, primarily in the 200-mile stretch along the eastern side of the Rocky Mountains known as the Front Range. The remaining 15% of the population spans the state's 24 rural and 23 frontier counties.[1]

Colorado is the seventh-fastest growing state in the nation. There was a 13.2% population increase from 2010 to 2017.[2] As of 2018, an estimated 67.9% of Colorado's population is non-Hispanic white, 21.7% is Hispanic, 4.6% is Black, 3.7% is Asian or Pacific Islander and 1.6% is American Indian or Alaska Native, with 3.1% of the population identifying as two or more races.[3] Seventeen percent of Coloradans aged five years or older speak a language other than English at home.[4] Colorado's diverse geographic and cultural landscapes influence health needs and related issues among its residents, which can be compounded by barriers to accessing care due to geographic barriers (e.g. mountain passes) or low population density. At the start of SIM, 27 Local Public Health Agencies (LPHAs) had prioritized mental health and 22 had prioritized substance use disorders as a pressing public health need in their communities.

From the outset, SIM aimed to address the state's unique health care challenges and improve population health through two primary vehicles – an improved public health system and a transformed health care delivery system that integrates physical and behavioral health services – to create an effective and sustainable community-based system. The SIM Office entered into an interagency agreement with the Colorado Department of Health and Environment (CDPHE) to develop and implement a statewide Plan for Improving Population Health (Plan). Initially published in the first SIM Operational Plan, the Plan identified specific behavioral health care needs and charted a path for addressing them through systematic, coordinated interventions at various levels of care.

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[1] Colorado Rural Health Center, "Colorado: County Designations, 2018," The State Office of Rural Health, http://coruralhealth.wpengine.netdna-cdn.com/wp-content/uploads/2013/10/2018-map.pdf

[2] U. S. Census Bureau. QuickFacts: Colorado (V2018). https://www.census.gov/quickfacts/table/PST045216/08.

[3] Ibid.

[4] Ibid.

CDPHE supported implementation of the Plan by engaging two full-time employees who focused on supporting the work of LPHAs and health systems and ensuring that population health efforts benefited children and families. SIM dollars were also used to partially fund an epidemiologist, who identified population health trends and reported on public health data. Under CDPHE's leadership, SIM created a robust governance structure that engaged dozens of stakeholders to inform and advance priorities outlined in the Plan. CDPHE staff leveraged stakeholder expertise to inform the development of provider education to provide clinicians with the skills needed to advance the Plan's priorities.

Forming and strengthening partnerships with local communities also proved critical to achieving progress under the Plan. SIM worked with the Colorado Health Institute (CHI) and the Trailhead Institute to launch Health Connectors (RHCs), a new workforce. Twenty-one RHCs were hired at host organizations across the state, where they connected primary care providers with community resources to promote health within and outside of traditional medical settings of care. Partner organizations identified nearly 3,000 connections to local resources that RHCs either created or strengthened, according to the Social Network Analysis conducted by CHI (included as Appendix D1). Recognizing the potential of the RHC model to serve specific populations in need, SIM funded CHI to hire a first-of-its-kind Veteran Health Connector (VHC) who focused on coordinating suicide prevention resources for veterans in Northeastern Colorado. The initial SIM proposal included work with the Veteran's Administration (VA).

In addition to fielding RHCs across the state, SIM facilitated efforts at the local level through community investments in Behavioral Health Transformation Collaboratives (BHTCs) and LPHAs. Through an open and competitive processes, CDPHE awarded SIM funds and technical assistance to two BHTCs and eight LPHAs that used this support to advance local behavioral health promotion efforts, reduce stigma and improve community-based awareness, prevention and screening of behavioral health disorders. Innovative social media campaigns, referrals for service, in-person trainings and other educational activities developed by BHTCs and LPHAs reached millions of Coloradans.

Throughout the initiative, CDPHE monitored public health indicators related to SIM goals. It is too soon to tell if SIM activities influenced these indicators but monitoring was important during the initiative. CDPHE helped the SIM Office identify areas of high burden and high cost that required attention. These data supported SIM's work and aligned with other efforts across Colorado, such as Colorado Winnable Battles. Thanks to VISION, an innovative data visualization tool at CDPHE, SIM-participating practices, LPHAs and other partners had access to these data by region, which allowed them to identify specific goals they hoped to accomplish with SIM support. Furthermore, SIM helped build capacity of CDPHE to monitor and understand behavioral health on a statewide level by funding additional questions to the Behavioral Risk Factor Surveillance System (BRFSS) and the Colorado Health Access

Survey (CHAS). These investments provided SIM partners with access to valuable data and ensured that leaders of future initiatives can draw on these indicators to inform their work.

Influencing care in the future

The SIM Population Health workgroup issued a Call to Action to improve behavioral health awareness, prevention and treatment for men and boys. The report and "one-pagers" described in this chapter include specific action items that stakeholders can take to implement priorities outlined in the plan. The Call to Action was endorsed by Governor John Hickenlooper and several LPHAs have committed to integrating priorities into their efforts.

While progress has been made, Colorado continues to face significant risks to the health of its population. However, the commitment of local and state partners to sustain progress made with SIM initiative demonstrates that SIM investments have laid a strong foundation for addressing these challenges in the future. CDPHE committed to supporting two SIM-funded positions: the health systems specialist and child development systems integration specialist. Continued funding proves a recognition of the value these positions bring to advancing population health efforts. CDPHE also asked members of the SIM Population Health workgroup to join its Suicide Prevention Steering Committee so that lessons learned from SIM can guide ongoing work. On a statewide level, more than half the RHC host agencies, both BHTCs and several LPHAs have secured funding to continue the work begun by SIM.

The following chapter describes the population health work funded or facilitated by SIM. The chapter starts with an explanation of how SIM defines population health. It then describes the governance structure used to guide this work. The chapter then provides an update on the SIM Plan for Improving Population Health. This section complements and summarizes the final reports submitted to the SIM Office from CHI regarding the work of the RHCs (Appendix D2) and the Veteran Health Connector (Appendix D3) as well as information on investments in BHTCs and LPHAs provided by CDPHE (Appendix D4). The chapter concludes with a discussion of cross-cutting approaches to improving population health, including the SIM Call to Action and monitoring of population health metrics.

Defining Population Health

SIM defines population health as the health of a population, including the distribution of health outcomes and disparities. The group can be defined by geography, income, ethnicity or other characteristics. In Colorado, SIM designated two population targets for its population health efforts: A smaller population (p) which is a subset of a larger population (P).

- Small p: Patients who are part of a SIM-participating practice in the state. These "SIM lives" are patients whom SIM can directly impact (through SIM

cohort practice transformation efforts and community mental health centers). Final small p attribution is 760,992 Coloradans.

- Large P: All people who live in the state. The population is approximately 5.6 million, according to 2018 US Census estimates. The population of SIM patients (small p) are a subset of this larger population.

Ideally, interventions that occur in small p (example: increased depression or substance use disorder screening) will eventually influence long-term outcomes in large P (example: statewide decrease in suicide rates or substance use disorder deaths), if the small p interventions are effective, sustained and expanded to include more people across the state.

Population Health Governance

Interagency Partnership with CDPHE:

CDPHE used SIM funding to support the following positions:

- Health Systems Specialist;
- Children and Families Behavioral Health Integration Specialist; and
- Epidemiologist to report public health surveillance data.

In June 2018, CDPHE rescoped the Children and Families Behavioral Health Integration Specialist role, changing it to the Child Development Systems Integration Specialist position in response to findings from the stakeholder groups listed below, which identified childhood development as a top priority.

Population Health Workgroup:

This workgroup guided SIM's efforts to improve health outcomes at the community and population levels. It regularly engaged 17 members, with support from the SIM population health and workforce program manager. Objectives of the group were to:

- Define "population health" and associated terms as they relate to the SIM initiative;
- Ensure that SIM strategies and approaches address the social determinants of health;
- Work with the Evaluation workgroup and steering committee to align population based metrics with indicators of success at the individual level;
- Recommend strategies to reduce stigma regarding behavioral health at both the individual and population levels in the state;
- When requested, provide guidance on the best manner to achieve deliverables outlined in the Interagency Agreement between the SIM Office and CDPHE; and
- Provide recommendations for inclusion of public and community health initiatives in RHC work.

The group produced several work products that prove value beyond SIM including the SIM Call to Action, which is described in detail below with associated documents.

Stakeholder Groups Focused on Children and Families:

Throughout the initiative, the SIM-funded Children and Families Behavioral Health Integration Specialist convened and facilitated numerous stakeholder groups to ensure that children and families benefited from the gains made by Colorado SIM.

SIM Pediatric Stakeholder Group:

The Children and Families Behavioral Health Integration Specialist convened a SIM Pediatric Stakeholder Group in July 2017, to leverage the SIM effort to support the pediatric population of Colorado and identify a project that could help sustain SIM successes. The group ultimately focused its efforts on making recommendations regarding an alternative payment model that encourages investment in child health promotion (physical, mental and social). The group proposed a strategy that included developing a business case for pediatric services along with a full continuum of care including health prevention and promotion, which are key components of integrated care in the pediatric setting. While this group no longer meets, the Rose Community Foundation took action steps to fund a feasibility study assessing pediatric payment models with Colorado Children's Healthcare Access Program (CCHAP).

Community Norms Workgroup:

The Children and Families Behavioral Health Integration Specialist co-facilitated the Community Norms workgroup, a group of early childhood leaders focused on strengthening community and social connection to address stigma for help seeking in parents and caregivers in tandem with Illuminate Colorado and the Essentials for Childhood Coordinator. The Community Norms workgroup is developing a toolkit to strengthen community and social connections. CDPHE will continue to convene this group beyond the end of SIM.

The Early Childhood Screening and Referral Policy Council:

CDPHE received a Maternal and Child Health (MCH) Block Grant to advance the following two strategies: a) identify and implement policy and systems changes that improve developmental screening, referral and services and b) support individualized technical assistance to local communities on best practices in early childhood developmental screening, referral and intervention services. Beginning in October 2017, the Children and Families Behavioral Health Integration Specialist served as the MCH Implementation Team lead for this work. The Specialist co-facilitated a group of statewide early childhood leaders with Assuring Better Child Health and Development (ABCD), called *the Early Childhood Screening and Referral Policy Council* (Policy Council). ABCD is the statewide expert on implementing best practices in screening and referral systems building efforts and is also engaged with SIM-funded LPHA efforts. The Policy Council advances systems change to improve service coordination and promote optimal child development for children (birth through five years old) to receive developmental screening and referral to appropriate services.

The Policy Council identified the need for comprehensive data that includes the following five data points: 1) whether the child was screened; 2) the results of screenings; 3) whether an evaluation was completed; 4) whether the child entered into services; 5) whether services for the child were sustained. A pilot project was completed from January to June 2018 in order to better understand local efforts related to data collection in screening and referral processes around the five data points in Boulder, Chaffee and Denver counties. The main findings from the pilot included:

- Access to data is a high priority for all communities;
- Agreements exist on data collection, but they are usually informal;
- There are differences in how data is gathered and used in each community;
- Agreement across communities that access to referral data are particularly challenging;
- Agreement across communities that deeper data assessment and utilization would be beneficial; and
- Opportunities were identified to improve expertise in data and data systems, local infrastructure and capacity and leadership including oversight, coordination and influence needed to impact state and local systems. Promising models in Colorado and other states showing success should be expanded or shared.

Based on the pilot study findings, the Policy Council identified the following recommendations: 1) to create a state data coordination role, 2) to develop a Health Insurance Portability and Accountability Act (HIPAA)/ Family Educational Rights and Privacy Act (FERPA) training for community partners working with families in need of referral for developmental evaluation and services and 3) to improve data system interoperability. In response to these priorities, a subgroup of the Policy Council is developing the HIPAA/FERPA webinar series for health care providers, education professionals, and community based service providers. The webinar series is planned for early fall of 2019 and will include a basic overview of the laws and obtaining consent, how to address challenges specific to special populations, such as children living in foster care, engaging families using family-friendly language through the referral process, and closing the loop with referring providers. A second subgroup of the Policy Council is focused on identifying opportunities to strengthen state data coordination for the developmental screening, referral and evaluation process. The workgroup interviewed contacts recommended by the Early Childhood Data Collaborative from Utah, Minnesota, Rhode Island, Wisconsin and Pennsylvania. Learnings from these interviews will continue to inform future work.

The MCH block grant funds work through 2020. The Policy Council will continue to play an active role in this grant. CDPHE will continue to fund the Child Development Systems Integration Specialist, who will work to implement recommendations from this group in the future.

Looking Ahead:

Many of the governance structures that provided guidance for SIM practice population health efforts will continue beyond the end of the initiative.

Governance Structure	Future Vision
SIM-Funded Positions at CDPHE	The SIM-funded Health Systems Specialist and Childhood Development Systems Integration Specialist will continue past the end of the initiative. CDPHE will assume responsibility for the positions.
Population Health Workgroup	CDPHE has invited members of the SIM Population Health workgroup to participate in its Suicide Prevention Steering Committee.
SIM Pediatric Stakeholder Group	This group no longer meets. CCHAP has convened a smaller steering committee to guide their Rose Community-funded work.
Community Norms Workgroup	CDPHE will continue to convene this group beyond the end of the SIM initiative.
The Early Childhood Screening and Referral Policy Council	The group will continue to meet beyond the end of SIM to support goals of the MCH block grant.

Plan for Improving Population Health:

From the outset, SIM aimed to address Colorado's unique health care challenges and improve population health through two primary vehicles – an improved public health system and a transformed health care delivery system that integrates physical and behavioral health services – to create an effective, sustainable community-based system. Based on the social determinants of health model, the SIM Office and CDPHE created a plan for improving population health, which was updated throughout the initiative. The plan was designed to align with the following state level assessments:

- The State of Health: Colorado's Commitment to Become the Healthiest State;
- Colorado's 2013 Health and Environmental Assessment;
- Shaping a State of Health: Colorado's Plan to Improve Public Health and the Environment, 2015-2019;
- Local Community Health Assessments and Public Health Improvement Plans.
- Colorado's Winnable Battles; and
- Colorado's MCH 2016-2020 Needs Assessment.

After conducting an in-depth review of population health indicators and priorities, the SIM Office selected the following population health goals as priority areas to address in its plan:

- Reducing substance use (including alcohol, prescription drugs, and smoking);
- Preventing suicide;
- Promoting mental health;
- Expanding health care access and capacity;
- Improving health system integration and quality; and
- Overall promotion of prevention and wellness.

Addressing these pressing behavioral health care needs required a strategic approach of incorporating systematic, coordinated interventions at various levels. Colorado SIM adopted the "three buckets of prevention framework" as outlined by John Auerbach at the Centers for Disease Control and Prevention, and worked to ensure that the plan included interventions at each of the following levels:

- Traditional clinical approaches;
- Innovative patient-centered care and funding models and/or community-clinical linkages;
- Total population or community-wide approaches; and
- Cross-cutting approaches.

Traditional Clinical Approaches:

Traditional clinical approaches include increasing preventive care and screening activities in health care settings, such as clinics and hospitals. Developing opportunities for provider education was at the cornerstone of SIM's strategy to address traditional clinical approaches. The SIM Office initially identified three areas in which there was a demonstrated need to increase provider knowledge and skills:

- Pregnancy-related depression;
- Depression in men; and
- Obesity and depression.

The SIM Office entered into an interagency agreement with CDPHE to develop and disseminate courses to enhance behavioral health delivery on these topics. CDPHE developed a provider education and evaluation plan that identified target providers for the courses, the type of education to be provided, and a description of communication strategies to disseminate the trainings.

In fall 2016, after working with the University of Colorado Department of Family Medicine (UCDFM), CDPHE's Children and Families Behavioral Health Integration Specialist, distributed a Perinatal Mood and Anxiety Disorder Training to Maternal and Child Health (MCH) and SIM contacts. This training was supplemented by online Pregnancy-Related Depression Resource Hub. Maintained by CDPHE, this resource

includes training opportunities, toolkits for screening, billing, and making referrals, and other relevant tools. The goals of this training were advanced via a live webcast of the 2020Mom Forum on Maternal Mental Health and Infant Mental Health drawing more than 60 participants, including SIM providers and practice transformation coaches. The 2020Mom event also included a panel of maternal mental health experts working in Colorado on innovative practices that integrate efforts to promote maternal and early childhood mental health in behavioral health and pediatric settings and through a public health lens. CDPHE contracted with UCDFM to create the Depression in Men and Obesity and Depression training modules.

In addition to the three training courses originally envisioned, the Children and Families Behavioral Health Integration Specialist also worked in coordination with UCDFM to develop a provider education course on Adverse Childhood Experiences (ACEs), which was disseminated to SIM and MCH contacts.

SIM encouraged these provider education partners to align education opportunities. therefore, all e-learning modules have been migrated to a platform hosted by UCDFM. Modules are available for credit and will remain available on this platform beyond the conclusion of SIM. See the **Workforce chapter** of this document for a full description of all provider education activities.

Recommendation

The importance of learning events and team-based training activities is critical to team performance and must evolve over time. As team integration evolves so will team-members' needs for new skill development and more advanced competencies. It is essential that an entity be designated to create, update and distribute new curricular content, learning events and team-based training activities and information.

Innovative patient-centered care and community clinical linkages:

The second approach to prevention includes innovative approaches and evidence-based strategies to address community health needs. These approaches generally occur in clinical or health systems operating with value-based payment structures and include integrating clinical and community resources. The launch of an innovative new workforce of RHCs served as the cornerstone of this approach for SIM.

Regional Health Connectors:

The Affordable Care Act authorized creation of a national Primary Care Extension Program that deploys community-based Health Extension Agents to help providers "improve the accessibility, quality and efficiency of primary care systems" and to "collaborate with local health departments … and other community agencies to identify community health priorities and … address the social and primary determinants of health."[5] SIM recognized this model as a promising opportunity to improve population health. However, SIM also recognized that its goal of integrating physical and behavioral health care required modifications to the original health extension framework. Upon the recommendation of the SIM advisory board and various stakeholders, the SIM Office decided to launch a unique RHC workforce.

RHCs are local residents whose full-time job is to improve the coordination of services to advance health and address the social determinants of health. RHCs promote connections among clinical care, community organizations, public health, human services and other partners. RHCs do not provide any direct services to individuals or families. rather, they work with organizational-level partners to improve coordination at the systems level. Each RHC is employed by a local host organization (Host) with a history of serving its communities and building relationships with the people and organizations working to improve people's health. Much of the following description of the Colorado RHC program and its outcomes was taken from the RHC final report submitted by CHI, included as Appendix D2.

Funding Structure: The Colorado RHC program was supported by two federally funded initiatives: SIM and EvidenceNOW Southwest (ENSW), which is one of seven regional cooperatives funded by the Agency for Healthcare Research and Quality (AHRQ) to provide small primary care practices with support to improve heart health in their patients using the latest medical evidence. ENSW is a collaborative effort of the University of Colorado, the Colorado Health Extension System, the New Mexico Health Extension Rural Offices and multiple other organizations.

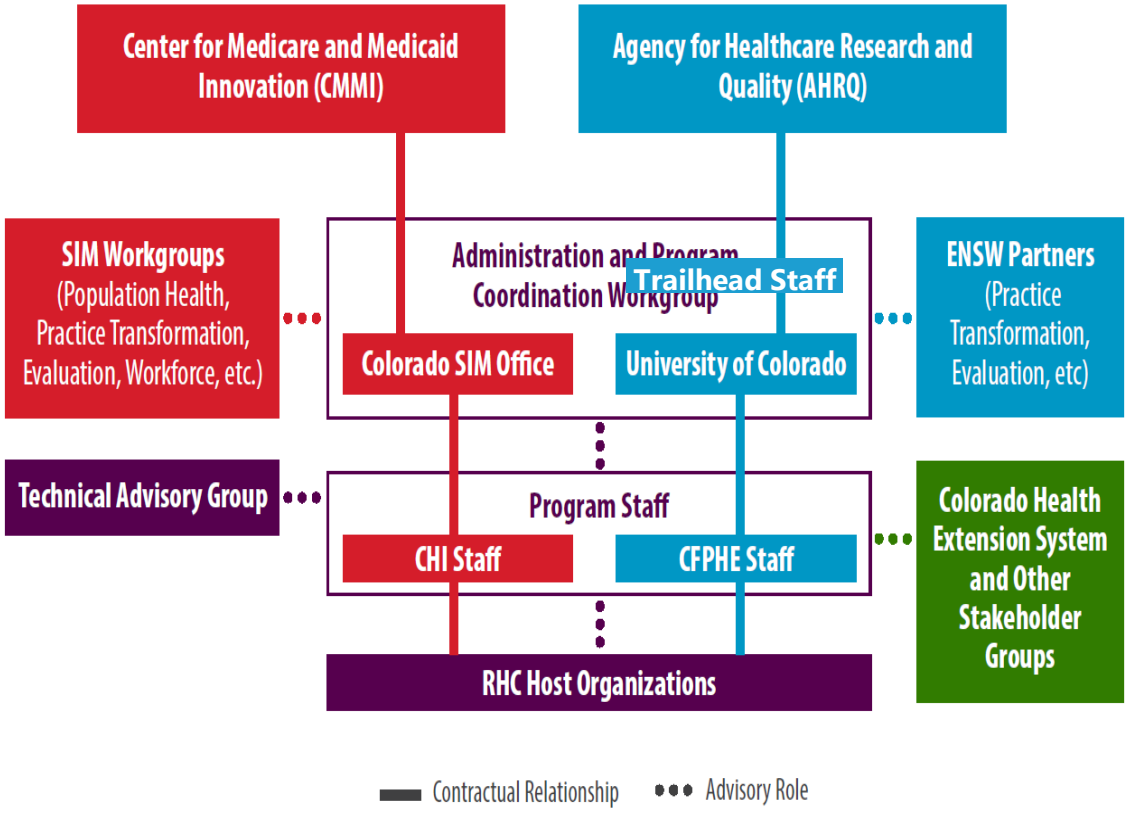
[5] Phillips, Robert. "The Primary Care Extension Program: A Catalyst for Change" Annals of Family Medicine. 2013. 11(2) 173-178.

The Colorado RHC program was developed and managed by the Colorado Health Institute (CHI) and the Trailhead Institute (formerly the Colorado Foundation for Public Health and the Environment) under contract with the SIM Office and the University of Colorado. In the summer of 2017, CMMI and AHRQ approved a braided funding strategy. SIM provided 70% of the funding for the RHCs and ENSW provided the remaining 30% of funding with specific contractual requirements to ensure funding was not co-mingled.

The contractual and advisory relationships between CHI, Trailhead, the Colorado SIM Office, the University of Colorado and other key partners are shown below.

- Entities in red are part of the SIM funding mechanism;
- Entities in blue are part of the ENSW funding mechanism;
- Entities in purple, or outlined by purple, are part of both the SIM and ENSW funding mechanisms;
    - Program staff: CHI and Trailhead employees formed the RHC Program staff and worked together as a team;
    - RHC host organizations: RHCs are hosted by local organizations with existing relationships and a history of community-based work in the region. The host organization or collaboration (Host) receives SIM and ENSW funding to hire and manage an RHC for a specified region; and
- The entity in green is the Colorado Health Extension System.

RHC Funding and Administrative Structure



Selection of Hosts: To ensure work was locally driven, each RHC was hosted by an organization (Host) or collaboration with existing relationships and a history of community-based work in the region. The Host coordinates stakeholders and mobilize action to address local priorities by:

- Ensuring the RHC is engaged in existing relationships and forging new relationships with local partners.
- Supporting the RHC in developing and implementing three regional projects.
- Expanding the scope of a host's work and joining a statewide network to develop the RHC workforce.
- Enabling the RHC to serve communities across the region and address local priorities rather than focusing on organization-specific projects.

To support the single RHC model, SIM funding was allocated to support seven existing Hosts who were previously selected through ENSW. All additional funding was awarded through a competitive process to select Hosts for open regions. The competitive selection process was a joint effort by the program staff. The joint selection of Hosts helped to solidify the coordination of the two funding streams.

Through a competitive procurement process, CHI and the Trailhead Institute selected one local organization to serve as a Host for an RHC in their regions. The RHC regions largely map to the 21 Health Statistics Regions (HSRs) in Colorado. During the competitive selection process, program staff assigned a program manager to serve as the primary contact for each of the RHC regions.

The Hosts have been a valuable partner in launching and developing the RHC program. In SIM Year 2, RHCs quickly build on existing local relationships with the Hosts over many years rather than starting as a completely new entity in the community. In SIM Years 3 and 4, Hosts have played a key role in planning for and ensuring local sustainability. They have historical knowledge of current and past efforts that help to avoid duplication of efforts.

Regional Implementation: The Colorado RHC Program coordinated local efforts to improve health through three phases of program implementation in each region, as shown below. In the first phase, Hosts and RHCs conducted common planning activities across the state. After completing the first phase, day-to-day responsibilities of the RHC were driven by local relationships and priorities in each region in alignment with SIM and ENSW goals.

Phases of Program Implementation

Phase	Description	Timeline for completion*
1	Planning	6 months
	Step 1: Host hires or assigns RHC	*6 weeks*
	Step 2: Review existing data and initiatives to identify local priorities	*3 months*
	Step 3: Align local priorities with SIM and ENSW Target Areas	*3 months*
	Step 4: Develop a plan to address local priorities (RHC Roadmap)	*6 months*
2	Implementation of the RHC Roadmap	Through April 2018
3	Transition to sustainability	Through June 2019

*Measured in weeks/months from execution of contract.

Due to variations in contract execution dates and hiring processes among the Hosts, the hiring and onboarding of the RHCs occurred on a rolling basis from December 2016 through April 2017. Each Host was solely responsible for selecting and hiring the RHC(s), with guidance from the program staff.

All RHCs received a one-on-one onboarding training from program staff shortly after being hired. The onboarding training included information about two funding initiatives, additional training opportunities, requirements of shared statement of work and suggested activities for the first 30, 60 and 90 days as an RHC. After the initial onboarding phase, each RHC spent approximately six months reviewing local health needs assessments and meeting with local stakeholders to determine the health-related priorities in the region. Local priorities can be anything from a shortage of behavioral health providers in the region to a lack of affordable housing. The program staff encouraged RHCs to consider social determinants of health during this process. The following table provides an aggregate list of top local priorities identified by RHCs across the state:

RHC Local Priorities

Local Priorities	Number of RHCs who selected each Local Priority
Substance Use - Opioids/drug addiction	12
Access to Care	7
Healthy Eating & Active Living	7
Access to Behavioral Health	6
Depression	5
Obesity	4
Anxiety	3
Suicide	3
Tobacco	2
Mental Health First Aid	2
Housing	2
Access to healthy food	1
Cardiovascular Disease	1
Behavioral Health Stigma	1
Health Literacy	1
Refugee Health	1
Diabetes	1
Childhood Social and Emotional well-being	1

In the final step of Phase 1: Planning, each RHC developed a local implementation plan (the RHC Roadmap) to address local priorities selected in the prior step. The roadmaps were not intended to provide detailed work plans but rather an overview of what each RHC hoped to accomplish by the end of the cooperative agreement. By November 30, 2017, every RHC submitted and received approval for his/her RHC Roadmap. The chart at the end of this section indicates the specific priorities and successes of the RHCs in each region.

Evaluation: An evaluation of the RHC program is included in the CHI Social Network Analysis (SNA) PARTNER report, included as Appendix D1. However. In addition to the SNA work, CHI monitored and evaluated the RHC program throughout the initiative. In particular, CHI used a set of data collection methods, ranging from tracking deliverable submissions to conducting a bidirectional social network survey. During SIM Year 2 and SIM Year 3, program staff deployed the following methods:

- RHC Monthly Reports – Collected qualitative information about local successes and challenges.
- RHC Partnership Tables – Collected qualitative information about meaningful contacts in each region, submitted monthly with the RHC Monthly Reports.
- RHC Quarterly Progress Reports – Tracked progress against project objectives and milestones.
- Program to Analyze, Record, and Track Networks to Enhance Relationships (PARTNER) – Collected bi-directional survey data about relationships within a bounded network

The Monthly Reports, Partnership Tables, and Quarterly Progress Reports were collected on a regular basis and provide self-reported data from the RHCs, which has the potential for bias and does not allow for community feedback. PARTNER gathers data from both RHCs and their partners, providing an objective perspective on the strength and nature of each RHC's network and including meaningful input from community partners in the evaluation. however, PARTNER can only be deployed once per year due to the significant time commitment required from community partners, the RHCs and program staff.

Program conducted two PARTNER surveys during the SIM cooperative agreement term, collecting hundreds of responses from partner organizations across the state in each iteration. Surveys were conducted in December 2017 (during SIM Year 3) and December 2018 (during SIM Year 4).

Survey responses from nearly 500 organizational partners in 2018 provided insights into the complexity of organizational networks across the state, the role played by RHCs in developing these networks and how this role has evolved in the initial years of the program.

The survey found:

1. RHCs play a growing role in developing and strengthening relationships between local organizations working in different sectors. In 2018, partners reported that 1,877 relationships were either developed or strengthened through RHCs. This represents 31% of all connections reported in 2018, an increase from 23% of all connections reported in 2017. Most (88%) of these new or strengthened connections have crossed sectors, reflecting an RHC focus on facilitating multi-sector partnerships.
2. Partner organizations valued the contributions of other organizations within their RHC networks more in 2018 than they did in 2017. As the RHC program has matured, organizations report finding greater value in their partners' power and influence, level of involvement, and resource contribution. In both surveys, partners reported higher levels of trust and value in relationships that RHCs had helped to create or strengthen.
3. The work of RHCs and partner organizations within their network is becoming more intertwined. In 2018, 97 percent of partner organizations reported that they were involved in RHC work, and 88 percent reported that RHCs were involved in the work of their organization or department. This is up from the 2017 rates of 93 percent and 82 percent, respectively.
4. Most partner organizations strongly value the presence of an RHC in their region. More than 300 partner organizations (75%) said their region needs an RHC. When asked about the value of RHCs in their regions, partner organizations emphasized the increased knowledge and access to resources that RHCs provide. They also cited improvements in cross-sector communication.

The survey suggests that RHCs play a valued role in the work of partner organizations within their networks and have facilitated cross-sector relationships in their regions. Survey findings were compiled into a final summary report. (Appendix D1).

RHC Workforce Training and Support: Qualitative and quantitative data collected through monthly reports, partnership tables and quarterly progress reports referenced above were used to identify opportunities for technical assistance and training needs. In additional to the evaluative data collection methods, each RHC completed a core competency checklist every six months to identify training needs. The checklist included the following competencies:

- Fundamentals;
- Communication;
- Creating networks;
- Fostering networks;
- Cultural humility;
- Facilitation;

- Program development and implementation;
- Funding and using resources; and
- Strategic planning.

The Core Competencies Checklist was a key tool in determining the topics for weekly virtual trainings and biannual in-person trainings. Over the course of the SIM, program staff coordinated over 100 virtual trainings, on topics ranging from facilitation skills to physician burnout. In addition to the virtual trainings, program staff convened all RHCs for six biannual in-person retreats, with topics ranging from strategic planning to quantitative analysis of the PARTNER survey results. The first RHC retreat was held in September 2016 and the final SIM-funded RHC retreat was held in March 2019. A satisfaction survey was sent to all RHCs after each retreat to inform the planning and agenda for the next retreat. RHCs reported high satisfaction with the training content of each retreat.

RHC Program Lessons Learned: The RHC Program has evolved significantly over the course of the SIM cooperative agreement and program staff identified many lessons learned. These lessons have and will continue to shape the Colorado RHC program and inform future efforts. A few key lessons learned follow below. For a complete discussion of program learnings, read the CHI Final Report (Appendix D2).

- RHCs must be embedded in local host organizations to be effective. The Hosts have been a critical partner in launching and developing the RHC Program. In SIM Year 2, RHCs were able to quickly build on existing local relationships built by Hosts over many years rather than starting as a completely new entity in the community. In SIM Years 3 and 4, Hosts played a key role in planning for and ensuring local sustainability. They also have historical knowledge of current and past efforts that help to avoid duplication of efforts.
- Local host organizations provide varying levels of support. While Hosts are critical to the success of the RHCs, there are unavoidable differences in organizational capacity among the 17 Hosts participating in the program. Larger organizations tend to provide more administrative, training and financial support to their RHCs while smaller organizations tend to offer RHCs more autonomy and access to internal and external leadership opportunities. Urban organizations tend to position their RHCs as subject matter experts in several areas, while rural organizations tend to ask their RHCs to do a little bit of everything. Best practices are emerging from all of these models, and it is not yet clear which factors are most important to an RHC's success. It is likely the answer will be different in each region as unique local priorities require each RHC to play a slightly different role.
- Colorado's vast geographies require difficult trade-offs between population served and driving distance. The RHCs in urban regions serve populations of up to 700,000 people, while the RHCs in rural and frontier regions serve partners that are up to one hundred miles away. While the RHC regions offer an

imperfect balance between population size and geographic area, RHCs in several regions say they are overwhelmed by the sheer number of partner organizations or unending miles of driving between partners in their regions. With initial funding to support 21 RHCs, the regions are likely the best compromise between these extremes. however, key stakeholders have lamented that additional RHC positions are needed to better serve densely populated urban regions and the vast rural and frontier regions.

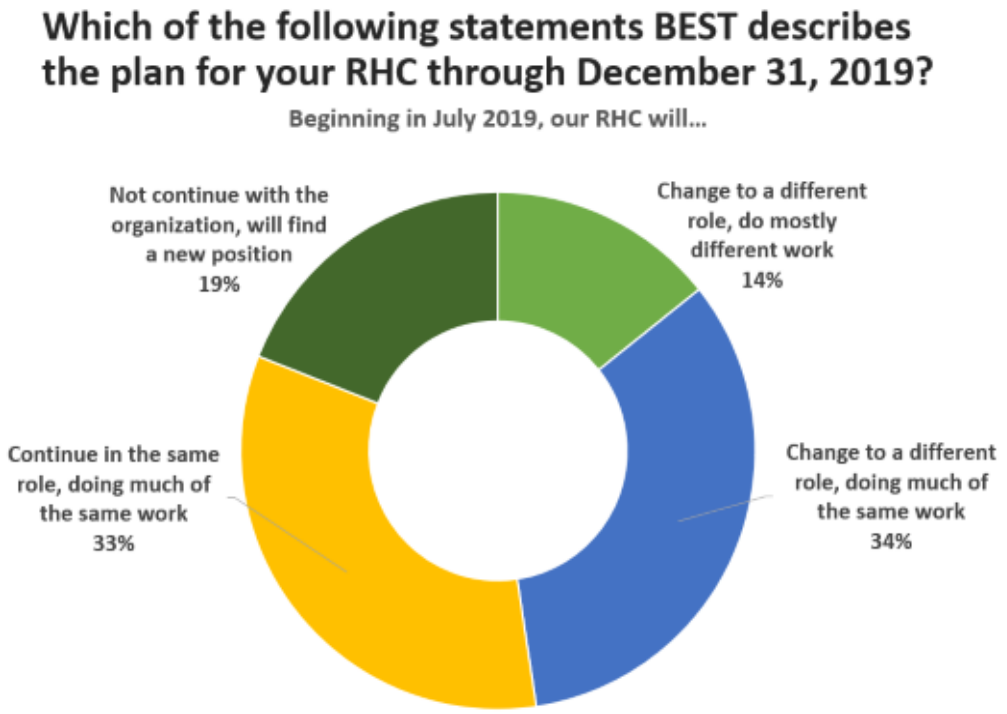
- Program-specific evaluation is critical to sustainability. The overall SIM and ENSW evaluations conducted by TriWest Group and the University of Colorado, respectively, were intended to cover the RHC program. No additional funding was allocated to a specific evaluation of this program. During SIM Year 2, the unique nature of this component of both programs drew attention from statewide and national stakeholders and it became apparent that a more in-depth evaluation of the RHC program would be needed to support a sustainability plan for the program. In SIM Year 3 and SIM Year 4, additional funding was allocated to support program-specific evaluation including the SNA, which provided a rich data set to support sustainability efforts.

Sustainability: A sustainability group of nine members was convened in SIM Year 3 to make decisions about the future of the RHC Program. It included initial funders, RHCs, host organizations and other stakeholders.

The sustainability group met once a month from March through October 2018, and reviewed the current state of the program, identified areas for improvement and made recommendations for future program design, capabilities and financial models. The group recommended that program staff and RHC host organizations pursue a shared funding model that accounts for the eligibility requirements of a variety of national, state and local funding opportunities. The shared funding model asks each Host to secure 70% of the funding needed to sustain local RHC work in their region(s) while program staff focus on securing 30% of the funding needed to sustain local RHC work in every region as well as 100% of the funding needed to sustain the statewide RHC network. Program staff estimate that a total of $3 million year is needed to maintain the scope and scale of the program. Under a shared funding model, this budget translates to a funding goal for each Host to secure approximately $70,000/region and a funding goal for program staff to secure approximately $1.5 million total. In Award Year 4, program staff worked closely with the Hosts to support local sustainability efforts. Program staff support has included the following activities:

- Providing marketing material highlighting RHC successes and impacts;
- Facilitating regional small group conversations about sustainability;
- Offering training and guidance on how to use available sustainability tools, such as the ReThink Health Financing Workbook; and
- Serving as a thought partner on various sustainability options.

In December 2018, program staff asked Hosts to indicate a commitment to pursuing the shared funding model by signing and submitting a partnership agreement letter. Signed letters were submitted by 15 of 17 Hosts. One partner organization on the western slope submitted an unsolicited letter of support although it does not serve as an RHC Host Organization. A majority of Hosts planned to keep the RHCs in the same or similar roles at the organization.



A total of 14 RHCs will continue work in their regions. Three RHCs will stay at their host organizations but transition to different roles. Only four RHCs plan to leave their host organizations at the end of SIM. Program staff continue to work with RHCs, Hosts and other local stakeholders to determine the future of the program in these regions.

The outlook for additional funding to support the statewide RHC network is somewhat bleaker than the local perspective. To date, only a modest amount of funding to support statewide training has been secured through a partnership with the Rocky Mountain Public Health Training Center. Funding will support approximately 0.05 FTE at Trailhead to convene the RHC learning community on a quarterly basis.

Program staff at CHI and Trailhead continue to seek funding to support the statewide RHC network and a portion of the local RHC work beyond SIM. In the near term, program staff activities will be limited to facilitating quarterly learning community calls and supporting ongoing sustainability efforts across the state. Program staff and other key stakeholders remain hopeful that additional funding can be secured to sustain evaluation and workforce development efforts in the future.

Summary of RHC Work by Region		
Region & Host	**RHC Priorities**	**RHC Accomplishment**
Region 1 Centennial Area Health Education Center	1. Develop a training model for care coordination that will be implemented in clinics throughout northeast Colorado. 2. Involve providers and young people in the implementation of an action plan to reduce youth alcohol and drug use in Sterling, Otis, and Yuma. 3. Coordinate Mental Health First Aid training events, disseminate educational materials about mental health, and help install a prescription drop box in each county.	RHC Erika Greenberg connected the state Office of Behavioral Health with local partners to bring mobile Medication Assisted Treatment (MAT) units in the area. The MAT units will begin in September 2019 thanks to these connections.
Region 2 Health District of Northern Larimer County	1. Provide tools and processes for primary care providers and others related to tobacco, e-cigarette, and marijuana use. 2. Connect primary care providers to community behavioral health resources and improve communication between providers. 3. Build primary care providers' skills in identifying substance use disorders and referring patients to community-based behavioral health resources.	RHC Jane Gerberding developed a toolkit to providers with resources to identify social determinants of health needs and referrals to local community services. It was shared with 167 providers. The toolkit will continue to be available online after SIM funding ends: www.larimercountyproviderresources.com.

Summary of RHC Work by Region		
Region & Host	RHC Priorities	RHC Accomplishment
Region 3 Tri-County Health Department	1. Create a tool doctors' offices can use to improve referrals from providers to community-based healthy eating, active living, and cardiovascular health resources. 2. Identify provider needs, support workgroups, and create shared messaging with the Tri-County Overdose Prevention Partnership to improve coordination among behavioral health and primary care stakeholders. 3. Build a free medical clinic in a food pantry with co-located enrollment specialists to improve access to healthcare and social services for the underserved population in Douglas County, and support health literacy training for a multiagency collaborative.	RHC Laura Don formalized the Douglas County Health Alliance into an official health alliance by facilitating the creation of a charter, steering committee, and meeting structure. Without any paid staff, Laura brought capacity to this group addressing health-related needs.
Region 4 Central Colorado Area Health Education Center	1. Increase coordination of healthy eating and active living resources for people dealing with obesity and food insecurity in El Paso and Teller Counties. 2. Implement screening tools and education about opioids, alcohol, and other substances in primary care practices, government agencies, and community organizations. 3. Formalize communication and partnerships to simplify access and referrals to behavioral health treatment and social determinants of health resources.	RHC Darlyn Miller helped plan and host a summit for faith communities and behavioral health providers. As a result, there have been seven Mental Health First Aid and Bridges of Hope trainings for faith communities to help them address the stigma of behavioral health issues.

Summary of RHC Work by Region		
Region & Host	RHC Priorities	RHC Accomplishment
Region 5 Centennial Area Health Education Center	1. Care coordination pilot in a rural setting. 2. Opioid awareness and prevention. 3. Behavioral health integration into primary care.	RHC Kim Fairley planned three Narcan trainings for law enforcement officers and distributed Narcan kits in rural areas to prevent opioid overdose deaths.
Region 6 Otero County Health Department	1. Create a bi-directional referral system between primary care, health departments, and community resources to address chronic disease prevention and self-management. 2. Create a bi-directional referral system between primary care, health departments, and community resources to address behavioral health treatment. 3. Create a formalized regional network that will share resources and implement prevention and awareness activities around substance use disorders and overdose deaths.	RHC Cassandra Wyckoff facilitated an agreement between a tele-mental health provider and multiple rural hospitals and clinics to expand the capacity for mental health care in the area, so that people can receive treatment in their local communities.
Region 7 Pueblo City-County Health Department	1. Partner with the community revitalization group to improve walkability, bike-ability, safety, and healthy food access in the Bessemer, Eilers, and Grove neighborhoods. 2. Provide Mental Health First Aid Training classes to members of the community and providers 3. Facilitate a coalition of those working to address opioid misuse and improve collaboration by identifying assets and gaps for partners	RHC Ryan Turner facilitated a coalition that advocates for opioid prevention, treatment, and recovery. With support from the coalition, nine providers and one emergency department agreed to provide Medication Assisted Treatment. Regional capacity for MAT has increased by 100%.

Summary of RHC Work by Region		
Region & Host	RHC Priorities	RHC Accomplishment
Region 8 San Luis Valley Behavioral Health Group	1. Develop website MySLVConnect.com to provide online resources specific with in-depth information for care coordinators, record owners, health care professionals, public health, schools, and more. 2. Reduce the stigma around seeking help for behavioral health issues, including depression, suicide, anxiety, prescription and substance abuse. 3. Bring attention to the lack of public transportation available in the San Luis Valley and help partners identify and implement solutions.	RHC Dee Kessler led the development of MySLVConnect.com, a website specific to the area for all health and human services to simplify resource identification and referrals. Dee also facilitated a relationship between a local health system and a transportation coalition that resulted in financial support for free and low-cost transportation options in the San Luis Valley.
Region 9 Southwestern Colorado Area Health Education Center	1. Implement provider trainings and public messaging campaigns for diabetes prevention and management among Tribal communities. 2. Coordinate community forums and trainings, provider education, and a media campaign to reduce youth suicide in Montezuma and Dolores counties. 3. Engage providers in efforts to reduce opioid misuse such as stigma reduction campaigns, increased use of monitoring programs, and participation in trainings.	RHC Mary Dengler-Frey helped a pediatric practice start a food prescription program for families. She designed a prescription pad to local food resources and shared the resource list with other practices in the area.
Region 10 Tri-County Health Network	1. Implement a food prescription program in clinics to provide those with chronic diseases with increased access to healthy food and nutrition education. 2. Assist in creation of a mental health crisis triage plan in San Miguel County and replicate throughout region. 3. Coordinate a ride-share program to provide medical transportation for residents in San Miguel, Montrose, and Ouray counties.	RHC Alexis Klein developed a Food Rx manual based on lessons learned from two local practices who first implemented the program. This tool guides clinics through the process of creating a program that works with a group of patients for six weeks to receive vouchers to locally sourced food, nutrition education, recipes, and other supports.

Summary of RHC Work by Region		
Region & Host	RHC Priorities	RHC Accomplishment
Region 11 Northwest Colorado Community Health Partnership	1. Implement the "Blue Zones framework," a program that works with community leaders to change to the built environment to make individual choices easier. 2. Launch a "Community Care Team Network" in each county to better understand and coordinate local services and resources. 3. Provide information and resources about mental health services at local community venues such as farmers markets and community gardens.	RHC Stephanie Monahan convened four hospitals, local public health and a federally qualified health center to complete a collaborative Community Health Needs Assessment. The process will inform the funding and allocation of services in the community and reduce duplication.
Region 12 West Mountain Regional Health Alliance	1. Create a care coordination system after identifying local assets and gaps. 2. Support a collaborative regional effort to implement the Zero Suicide Initiative Systems Approach. 3. Coordinate regional efforts to address social determinants of health using the Thriving Colorado Dashboard.	RHC Namrata Shrestha coordinated a Medicaid Enrollment & Credentialing event training which resulted in eight private behavioral health providers enrolling in Medicaid with the Colorado Department of Health Care, Policy and Financing and started the credentialing process with the Regional Accountable Entity.
Region 13 Chaffee County Public Health Department	1. Increase access to healthy eating and active living resources by creating a regional diabetes roundtable and coordinating with Weigh N Win programs. 2. Provide resources of support, education, and advocacy to LGBTQ individuals, their families, and the wider community. 3. Create the first region-wide coalition addressing opioid misuse, then host regional education events for community members and providers.	RHC Mike Orrill secured funding for and led a coalition responding to substance use in the area. Mike has organized 13 provider opioid education events, 9 community awareness events, 6 SBIRT seminars, 4 Narcan trainings, and 2 prescription drug take-back days. He was also instrumental in securing a prescription drug drop box and increasing the number of MAT providers in the region.

Summary of RHC Work by Region		
Region & Host	RHC Priorities	RHC Accomplishment
Region 14 Tri-County Health Department	1. Develop an engagement strategy to share cardiovascular disease resources with primary care providers throughout the Denver metropolitan region. 2. Facilitate the Tri-County Overdose Prevention Partnership Program Provider Education workgroup with the goal of increasing screening rates for mental health and substance use. 3. Improve access to care by developing policies for reliable transportation to medical appointments, and by providing health and social services at local events.	RHC Meghan Prentiss secured funding for and organized the Adams County Healthy Farmer's Market in partnership with several local organizations and community members. The market hosts 100-250 community members and 10 vendors each week over the summer and will expand to a second location in 2019. The Farmer's Markets are health focused and include integration of a free clinic with medical volunteers from local SIM practices.
Region 15 Tri-County Health Department	1. Ensure residents of Arapahoe County have access to navigators to assist with insurance applications and to understand the benefits and value of primary care. 2. Catalog and connect community efforts that are improving the integration of refugees and immigrants. 3. Provide a space for partners to combine resources and expertise to seek solutions to factors affecting health, with a focus on housing.	RHC Kaitlin Wolff planned two events to help public health better understand and communicate with primary care practices. As a result, the public health department now has an internal workgroup devoted to provider outreach and continue to connect partners to practice transformation organizations so they can help align the work of different sectors.
Region 16 City and County of Broomfield Health and Human Services	1. Strengthen connections between primary care, public health, and social services in Broomfield County through direct outreach, shared strategies, and innovative collaborations. 2. Convene existing groups of behavioral health and social services stakeholders to identify and prioritize potential solutions for easier access to services. 3. Support locally-based efforts to prevent and treat prescription drug misuse.	RHC Heather Ponicsan created a fact sheet regarding the challenges local clinics faced when trying to become fully integrated and ways they were able to overcome these challenges. This information is available for other clinics to use as a guide when they become integrated, with recommendations specific to the local community context and resources.

Summary of RHC Work by Region		
Region & Host	RHC Priorities	RHC Accomplishment
Region 17 Central Colorado Area Health Education Center	1. Support the development of a new clinic in Clear Creek County and participate in the South Park Health Service District to ensure sustainable access to primary and behavioral care for all Region 17 residents. 2. Collaborate with stakeholders to align regional efforts with the new Regional Accountable Entity (RAE) to create a culture of collaboration while increasing awareness and knowledge of mental health resources. 3. Assist with the creation of strategic, workforce, and sustainable plans with the Colorado AmeriCorps Community Opioid Response Program Coalition to bring diverse partners together to tackle the opioid epidemic in Region 17.	RHC Ashley Hill convened partners and identified resources to open a school-based health center that provides students and their families with primary care, behavioral health services and dental care. This is the first time in six years that county residents have been able to access these services locally.
Region 18 North Colorado Health Alliance	1. Produce education materials about healthy eating and active living, and disseminate 2,400 messages through primary care clinics and community organizations. 2. Identify and engage clinics in providing more mental health services, including telehealth. 3. Develop a community garden that will increase access to fresh produce and foster a sense of participation, inclusion, and accomplishment in the Greeley community	RHC Tanya Trujillo-Martinez connected clinical care partners to a community garden that is producing fresh produce and reducing social isolation. Providers are referring patients with anxiety and depression to become involved in the garden so they can have healthy food and social connections.

Summary of RHC Work by Region		
Region & Host	RHC Priorities	RHC Accomplishment
Region 19 Mesa County Health Department	1. Facilitate relationships to increase coordination and collaboration among community partners. 2. Convene a community coalition to create a strategic plan for a collaborative approach to address substance use and opioid issue. 3. Advise the develop and implementation of the Community Resource Network, a referral database for medical and community services.	RHC Charity Weir heard from local care coordinators that there was a need for primary care to be better connected to behavioral health. She planned a behavioral health summit for primary care professionals and behavioral health clinicians to meet, earn CMEs, and start creating new referral networks. Over 70 providers attended and requested that this event be held annually.
Region 20 Mile High Health Alliance	1. Promote screenings and share resources related to social determinants of cardiovascular health in clinic and community settings. 2. Connect practices to trainings and resources for substance abuse disorders. 3. Support partners in the implementation of stigma reduction campaigns, Mental Health First Aid training, and other community resources.	RHC Stephanie Salazar-Rodriguez arranged, planned and implemented twelve community health events, including two Health and Wellness Expos. These collective events provided services to over 800 community members including the distribution of 80 blood pressure cuffs, to individuals who presented with high blood pressure. In-kind contributions of $40,000 were provided through direct services at the events.
Region 21 Jefferson County Public Health	1. Create collaborative opportunities for regional organizations and provider groups. 2. Provide educational opportunities for partners and primary care practices related to behavioral health and substance use. 3. Coordinate the implementation of three mobile health events to increase access to care in rural Jefferson County.	RHC Cynthia Farrar joined a rural health and human services group. Through this partnership, Cynthia organized mobile mammogram screenings a local recreation center in collaboration with providers and payors. promoted mobile immunization clinics. connected partners to implement a Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) pilot project. brought Silver Sneakers activity classes and Medicaid enrollment and navigation programs to mountain towns.

Veteran Health Connector Pilot Program:

While the RHC program sought to serve all members of a population within a geographic region, SIM also helped test this model as a means of promoting behavioral health among members of a specific population. In particular, SIM recognized the high burden that behavioral health issues place on many veterans in rural Colorado.

Colorado has the 10th highest suicide rate in the country and veterans are disproportionately affected. Veterans and active-duty servicemembers account for 20% of all suicides in Colorado, despite making up only 9% of the state population. The suicide rate among veterans and active-duty members in Colorado was more than two times higher than non-veteran adults in 2017, at 52.1 deaths by suicide per 100,000 compared with 22.1 per 100,000.

To help address this problem, CHI partnered with Together With Veterans (TWV), an initiative that provides tailored suicide prevention training and equips rural communities with strategies to reduce stigma and promote help-seeking with the ultimate goal of preventing suicide. The TWV model enlists rural veterans and their local partners (behavioral health providers, clinicians, local leaders, etc.) to reduce suicide. TWV uses five suicide prevention strategies to support local planning efforts:

- Reduce Stigma and Promote Help Seeking;
- Promote Lethal Means Safety;
- Improve Access To Quality Care;
- Provide Suicide Prevention Training; and
- Enhance Primary Care Suicide Prevention.

These strategies are implemented using the following five-phase process to guide communities in crafting a locally-tailored plan:

1. Build Your Team: Inform veterans and community members about veteran suicide and establish a TWV team and steering committee to shepherd this work.

2. Learn About Your Community: Learn what community strengths and needs are for suicide prevention through a readiness assessment and SWOT analysis.

3. Teach Your Team: Train your TWV team in both:

- *Individual Suicide Prevention:* Teach people what to do when speaking with someone who may be at risk of suicide.
- *Community-Based Suicide Prevention Strategies:* Increase community awareness of veteran suicide and improve community response to the needs of local veterans.

4. Plan for Action: Develop an action plan for each community-based suicide prevention strategy based on what is learned from the community and its suicide

prevention needs (from step two) as well as any local, state, and national resources that can assist in implementing an effective plan.

5. Follow Your Plan and Measure Results: Carry out the action plan, measure and track change for the five suicide prevention strategies.

In the San Luis Valley, which includes Alamosa, Conejos, Costilla, Mineral, Rio Grande and Saguache counties, an organization called the Veterans Coalition of the San Luis Valley partnered with the WV team starting in 2015 to implement the TWV model. The TWV team identified the San Luis Valley as an area with high suicide rates, so they worked with the Veterans Coalition to create a locally tailored suicide prevention plan. The area's RHC also helped link the Veterans Coalition to health care resources and transportation services in the region, much needed by veterans in the San Luis Valley.

SIM-Supported Work: Building off the success of TWV work in the San Luis Valley and elsewhere, SIM partnered with the VA to replicate this work in northeast Colorado. This region includes Logan, Morgan, Sedgwick, Phillips, Washington and Yuma counties and is home to more than 4,500 veterans. From 2004 to 2017, nearly 30 veterans in this region died by suicide, which underscores the need for preventive action.

In fall 2018, SIM created the VHC position to organize community partners in developing a plan inspired by the TWV suicide prevention model. The position is hosted at the Centennial Area Health Education Center (CAHEC) in Greeley, Colorado, but the VHC's work spans northeast Colorado.

The VHC is a veteran from Morgan County, and has been forming a community coalition focused on suicide prevention for veterans in northeast Colorado. From January through June 2019, the VHC implemented the first two of five phases in the Morgan County community of Brush, where a TWV team learned about the community's strengths and weaknesses in suicide prevention. This work was coordinated with the TWV team at the Rocky Mountain Mental Illness Research, Education and Clinical Center, Western Interstate Commission for Higher Education Behavioral Health Program, the VA and CHI.

The VHC has undertaken the following major activities:

- Building a Team (Phase One): From January through March of 2019, the VHC built a "Together With Veterans" team that comprised local veterans, providers and community leaders in Brush, Colorado. The VHC also put together the Steering Committee, responsible for shepherding this work forward and who work with the TWV staff at the Rocky Mountain Mental Illness Research, Education and Clinical Center (MIRECC) and Western Interstate Commission for Higher Education Behavioral Health Program (WICHE BHP) to identify needs for their community in veteran suicide prevention. Veterans hold the majority

membership of the steering committee and this group provides support, guidance and oversight of the TWV process in coordination with the VHC.

- Community Kick-Off Meeting: Part of phase one is an initial meeting with veterans in the community to share information on TWV, veteran suicide, and gauging buy-in from the veterans and community members. A key part of the TWV process is explicitly asking the local veteran community for permission to start the process. The VHC coordinated, hosted and presented the TWV model and her role as the VHC at the VFW in Brush in March 2019. Nearly 40 veterans attended, shared their stories and granted permission to proceed with the TWV process in Brush.

- Learning About the Community (Phase 2): From April to May 2019, the VHC coordinated a Community Readiness Assessment and a Strengths Weaknesses Opportunities Threats (SWOT) analysis in Brush.

    - The Community Readiness Assessment was a focus group of community members that helped determine local awareness, attitudes, and commitment towards addressing veteran suicide prevention. The VHC identified members of the community to participate in the focus group, and also conducted the Community Readiness Assessment with assistance from the team at MIRECC.
    - The SWOT analysis was organized by the VHC and conducted with assistance from WICHE to guide the Steering Committee in Brush in evaluating what strengths and opportunities are helpful in addressing veteran suicide. Results from the SWOT analysis will be used to help the TWV team decide key areas of focus.

Sustainability: The pilot stage of the VHC program sunset in June. While short-term funding for the VHC and TWV process catalyzed this work, the goal is to create a locally tailored suicide prevention plan, which requires long-term funding. This work will continue although details are still being worked out. Phase Three of the five-phase process is set to begin this summer. Members of the Brush TWV team will learn suicide prevention strategies, which will lead to a comprehensive action plan tailored to, for and by veterans on the eastern plains. During the next year, the steering committee will develop a suicide prevention action plan and will need to factor in long-term sustainability when selecting strategies to include in the plan.

Behavioral health transformation collaboratives (BHTCs):

In addition to the population health-facing work of the RHCs, SIM encouraged community-clinical linkages through an innovative public-private partnership with CDPHE and The Denver Foundation. In September 2015, the two entities released a joint request for applications (RFA) to support collaboratives of community

organizations and government agencies that worked together to meet shared behavioral health goals. BHTCs were asked to focus on bridging gaps among local health systems, schools and other stakeholders to increase appropriate and timely access to mental health services for youth. Through a competitive process, Aurora Mental Health Center and the Health District of Northern Larimer County, were selected as the two BHTCs.

The following descriptions of the BHTCs' work, successes, challenges and lessons learned were taken from CDPHE's final report, which was produced by Health Management Associates (Appendix D4).

Aurora Mental Health Center

Aurora Mental Health Center (AMHC) is a full-service community mental health center that provides a wide range of mental and behavioral health services to individuals and families in Aurora, Colorado. AMHC also provides consultation and educational services that focus on prevention on wellness.

Program Summary

Aurora Mental Health Center (AMHC) used SIM funding to build a multi-stakeholder coalition to implement life skills trainings and conduct a social norm campaign. The coalition was established to address youth and substance use disorder prevention in Aurora and included representatives from the police department, schools, youth and families. Based on findings from a local community needs assessment, AMHC implemented a life skills training program in partnership with Aurora Public Schools. AMHC used the evidence-based Botvin LifeSkills curriculum initially for sixth and ninth graders. Due to growing demand, the program was expanded to any middle or high school grade. SIM funding was also used to conduct a social norming campaign to address misconceptions about youth drug use in the community. With a focus on enhancing youth mental health promotion and substance use prevention, AMHC delivered the Botvin Life Skills training to more than 3,600 middle and high school students in Aurora during SIM.

AMHC PODCAST: To hear more about AMHC's strategies and successes, listen to the SIM podcast featuring AMHC staff as they discuss the importance of providing teens with a safe space to talk about substance use.

Successes

Teachers, youth and families expressed high satisfaction with the life-skills training, which reached around 1,300 students per year for three years. AMHC and its partner Aurora Research Institute used a youth survey to measure risk and protective factors

before and after the life skill trainings. They also made connections with local community agencies working with children, such as Boys and Girls Club, Denver Kids, and Girls/Boys Hope. Participating youth were asked by the Aurora Research Institute before and after the programming about the level of protective factors in their community, such as positive feelings about their school or community and positive relationships with trusted adults. Even though most youth didn't see a shift in underlying living situations, they reported improvements in those areas.

The program has many individual success stories. For example, a child with communication issues was referred to a communication and conflict resolution class that the whole family attended. This referral greatly improved the child's condition and promoted positive feelings of community.

Challenges

Staff turnover was a key challenge for sustainability of the program. Approximately 80% of staff change annually at Aurora Public Schools, which required AMHC to continually establish new relationships and educate new faculty and administrators about student needs and the benefit of the life skills training. However, AMHC hopes to fund key staff positions after the SIM funding ends to keep up the training program and will look for grant funding to continue to provide workbooks to students.

Competition for teachers also posed a challenge to retaining staff. The program was successful in engaging individuals who were interested in obtaining a teaching certificate. Once those staff obtained the certificate, however, they moved on to teaching positions at different schools. As a community mental health center, it was hard for AMHC to compete with the salary demands in the community.

Lessons Learned

AMHC found that building relationships with teachers was critical to success and helped keep the focus of their resources on student needs. Focusing too much on working with school administration took resources away from their program. The coalition was also a good vehicle to inform the community about available services and methods of communicating about mental health and substance use issues. A broad set of community stakeholders were made aware of opportunities to refer students to programs that would address their needs.

Health District of Northern Larimer County

The Health District of Northern Larimer County provides a wide range of medical services including dental services, mental health care, tobacco cessation, health insurance assistance and advance care planning to the residents in northern Larimer County.

Program Summary

As a BHTC, the Health District of Northern Larimer County (The Health District) used SIM funding to create the Child, Adolescent and Young Adult Connections (CAYAC) program. This multi-agency collaborative behavioral health team connects youth and families in Larimer County directly to mental and behavioral health resources. CAYAC uses community navigators to help families maneuver the often-complicated process of identifying a mental or behavioral health issue, finding appropriate treatment options, obtaining referrals and scheduling appointments. The CAYAC program also acts as a stopgap for short-term services until families can obtain long-term services and supports. The CAYAC program, and much of the other work done by the Health District, supports the overall program goal that children, adolescents and young adults with emerging or potential behavioral health needs be identified and referred for treatment. CAYAC staff have referred more than 4,400 youth to care during SIM.

CAYAC IN THE MEDIA: CAYAC was featured on two local radio shows. Visit healthdistrict.org/community-work-radio-shows to hear more about CAYAC's success.

Successes

The Health District increased community awareness of the need for intervention during early childhood. A key to early intervention is working with children during the 0-5 age bracket. A common conception is that this is too early. however, the Health District recognizes that when it comes to mental health conditions and related behavioral issues, "it starts super early." During SIM CAYAC staff helped spread an understanding of the value of upstream, preventive services for all children in the community, not only those experiencing the most acute challenges.

According to many who work on or with the program, CAYAC's greatest success has been filling a vital need for Larimer county schools. While local school districts have prioritized school-based counseling and mental health referrals, these services are constantly over-burdened during the school year and often leave families adrift during the summer. CAYAC placed a mental health coordinator within area schools who can act as a bridge between districts, students, families, and other mental health services. By establishing formal working relationships with schools beyond the usual community mental health center referral process, CAYAC has increased faculty and staff comfort in discussing a wide range of concerns. Schools that work with CAYAC have reported that they are more comfortable addressing student mental health issues now that they have an option for direct services and referrals that does not involve immediately taking students out of class and sending them for evaluation at local mental health centers or emergency departments. CAYAC also works extensively

with family and takes a two- or three-generation approach to addressing drivers of behavioral health issues.

Community feedback about CAYAC has been overwhelmingly positive and grateful. Multiple families have shared stories that credit the program with offering hope when there seemed like nowhere else to turn, building stronger family relationships, bringing teachers and parents together to make a difference in youths' lives, and reducing stress around the question of "where to start?" with youth mental health consultation and treatment. SIM allowed the Health District to prove the efficacy and popularity of this program, which it has now incorporated into its permanent roster of services for the people of Larimer County and northern Colorado.

Challenges

One of the main goals of the CAYAC program was to focus on the early identification and early intervention for children with mental health needs. As the program launched, a more immediate need presented itself: Working with children and young adults who were already diagnosed with mental health conditions and were seeking appropriate services or were dealing with undiagnosed issues. This resulted in much of the work focusing on intensive cases, which still makes up a sizable portion of its caseload.

Another challenge has been lack of capacity in the local community to meet demand for youth behavioral health services. Capacity issues presented themselves in two ways: not enough available psychiatrists and therapists, particularly those who work with children and adolescents, and not enough providers who could provide testing and evaluation to families to identify the main issues that need to be addressed.

Lessons Learned

Key components of the CAYAC program included the use of peer navigators, individuals who were familiar with the often-complex world of behavioral health and worked with families to identify services and begin treatment. Another key component was a partnership with Poudre School District. With SIM funding, the Health District placed a school navigator in the district to allow for collaboration and communication between the district and CAYAC program. This allowed for the sharing of information between providers and schools, helping to wraparound more services for children. The school district hopes to fund this position in the future to continue the work CAYAC is doing with students.

Relationship building was also crucial in furthering this work. Throughout the program, CAYAC helped bring together providers, families, school staff and Health District employees to connect families to resources. This facilitated invaluable connections both between and within organizations. One notable example includes an

enhanced referral system amongst providers. Providers in the Health District created a network they can use for outward referrals and to ask for help, which provided a valuable community resource and created a long-lasting, sustainable model.

Sustainability:

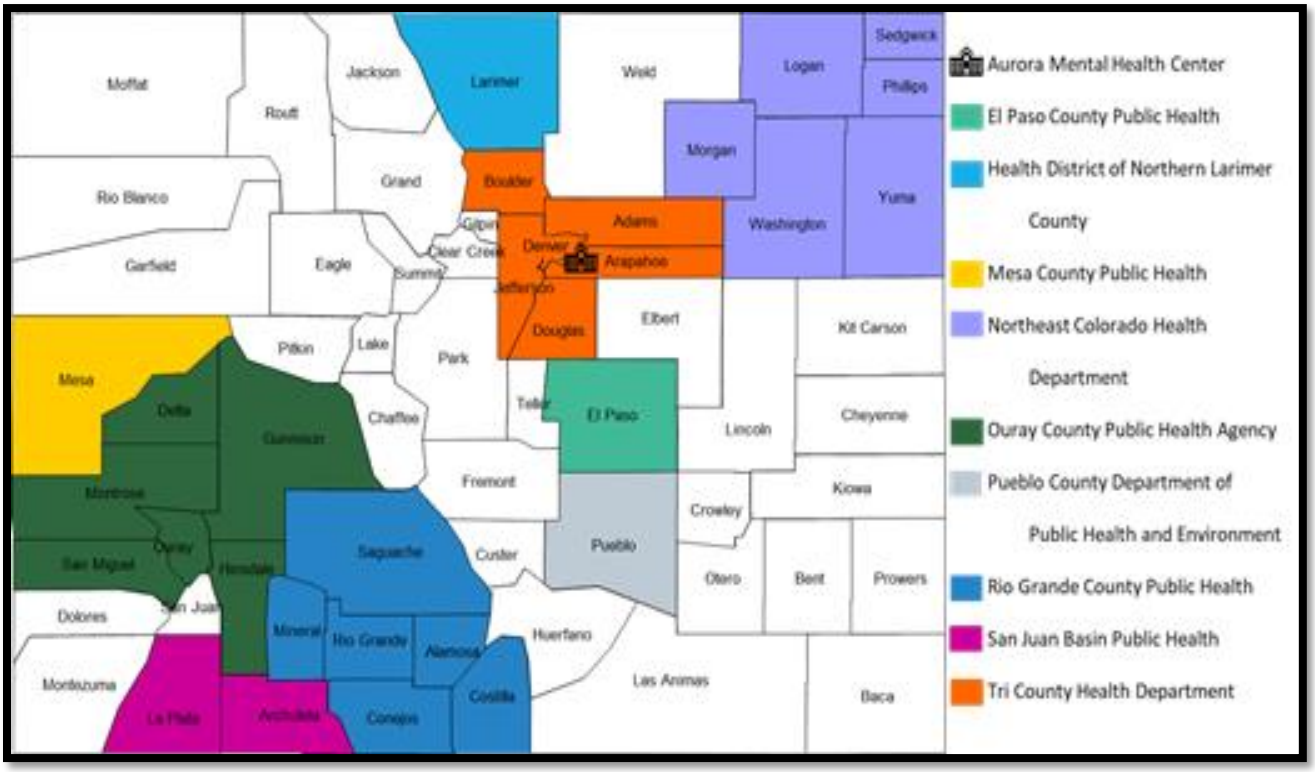
Both SIM-funded BHTCs have secured ongoing support for training and referral programs serving youth and will continue to offer these programs beyond the conclusion of SIM.

Community-Wide Approaches:

Community-wide approaches focus on factors that affect the health of a population and include system-wide interventions. These approaches address factors, including social and environmental, that affect a person's health and well-being. Community investments in LPHAs have served as a primary strategy for this approach.

Funding for LPHAs:

Based on an RFA released in October 2015, CDPHE funded eight LPHAs across the state to support activities that promote behavioral health and improve community-based awareness, prevention and screening of behavioral health disorders. The following map demonstrates the coverage of LPHA awardees, as well as the two BHTCs discussed above:



Grantees were required to address the following two focus areas:

1. Behavioral health promotion, outreach, education, and/or stigma reduction focused on evidence-based/research-informed behavioral health, wellness, and prevention strategies; and
2. Coordination of systems that improve integration of behavioral and physical health services.

The following descriptions of LPHA work, successes, challenges and lessons learned were taken from CDPHE's final report on the SIM initiative (see Appendix D4 for full report). The following narrative provides an overview of activities by each LPHA.

El Paso County Public Health

El Paso County Public Health is based in Colorado Springs, Colorado and serves residents of El Paso county by providing a broad spectrum of services to address ongoing and critical public health and safety issues.

Program Summary

The SIM-funded project was created to address teen suicide in El Paso county. Teen suicide was identified as a priority area through the county's Child Fatality Review Team in 2015, as they saw a discontinuity of care and lack of service coordination around youth at risk for suicide. El Paso County Public Health sought SIM funding to address this issue in a more organized, inclusive way. SIM funding was focused around three areas: enhancing coordination of care for youth at-risk for suicide, increasing depression screenings in primary care for youth ages 12-19 and stigma reduction activities including training and youth development programs such as Sources of Strength and youth Mental Health First Aid.

A youth suicide prevention workgroup was also convened, bringing stakeholders together to address coordination of care. This was the first community convening around this topic.

Successes

One of the key accomplishments is creating a coordinated workgroup that uses a collective impact approach to address teen suicide in the community. This unified approach did not exist prior to SIM and its success has been attributed to the involvement of a local government agency that is seen as credible on the topic of suicide prevention. Increased coordination among partners enabled each member organization of the coalition to reach more people, connect them to supports and services and identify new approaches to communicating with and engaging youth around suicide. It also allowed El Paso County Public Health staff the time and flexible focus to form new partnerships with the area's large, influential faith

communities, which requires a significant investment in relationship- and trust-building. SIM funding helped the LPHA work more intentionally with the El Paso County Coroner, who has helped bring together stakeholders such as media and the sheriff's department to improve suicide-safe communications and messaging trainings.

Having an active and diverse coalition that meets consistently and can authentically prioritize community needs and action items has helped El Paso County Public Health secure funding from the Board of County Commissioners, which voted to support funding for the year after SIM ends and committed to supporting throughout the five-year public health improvement roadmap. Without this SIM-supported coalition, funding for Sources of Strength in one school district and youth Mental Health First Aid for a local LGBTQ youth organization would not have been secured. The coalition was also a key driver in bringing the co-responder model to the El Paso County Sheriff's office, which received additional training on responding to youth suicide. On top of the service delivery wins, the coalition raised awareness about responsible and safe reporting in the media about suicide, especially among youth, and how community members can support each other.

Challenges

Communicating the importance of evidence-based youth suicide prevention strategies to diverse audiences in Colorado Springs and surrounding areas has posed some unique challenges. El Paso County is known for its large faith-based communities and conservative politics, and the dominance of those groups in local affairs poses challenges to reaching many at-risk youth. While some faith communities have partnered extensively in the coalition and been open to change where a need is indicated, others remain skeptical or even dismissive of efforts led by a local government agency. El Paso County Public Health is committed, however, to finding new approaches to coordination and collaboration with these groups.

Secondary trauma can also be very challenging. Training and support for staff, who work on youth suicide-related issues needs to be prioritized. It can be discouraging even for non-clinical public health professionals to work on these issues and failing to appreciate how that impacts staff mental health can create additional challenges. LPHAs are aware that they must be mindful of what staff are exposed to, particularly in relation to topics like suicide, and need resources and guidelines as well as self-care for staff.

Lessons Learned

Suicide prevention work is challenging on many levels, and while El Paso County Public Health has succeeded in forming a coalition of local advocates and professionals to focus on the issue, it has learned that keeping that work going

requires a lot of special maintenance, attention and mutual support. In addition to secondary trauma from working with people who might be suicidal, there is the burnout and fatigue that comes with being committed to long-term goals whose most tangible intermediate successes, in the case of suicide prevention, are often invisible (the prevention of a suicide attempt or death).

To combat burnout and fatigue, the LPHA has taken time to recognize and validate short-term successes, such as onboarding new coalition partners, holding a large community event or sharing an individual or family's personal story. A mindful, recurring re-connection to purpose and recognition of the ongoing nature of the work can help people feel satisfied even as metrics are slow to move.

Mesa County Public Health

Mesa County Public Health, headquartered in Grand Junction, serves the residents of Mesa county by providing health education, disease surveillance and response, immunizations, programs and community collaboratives.

Program Summary

Mesa County Public Health focused on suicide prevention and destigmatizing mental health for its SIM-funded project. They worked to achieve this goal by building infrastructure throughout the community, creating capacity for community education, working with local media partners, increasing data collection and working with local providers on depression screenings.

Successes

One of the biggest successes has been an increase in the collection and sharing of data related to suicides in the region. Mesa County Public Health has worked with community agencies to get real-time or near real-time data on suicide deaths and attempts, school suicide risk assessments, 911 data for mental health and mental health-related calls, and levels of participation in postvention groups. This has allowed the agency to be more responsive after crisis events. For example, if there were a reported death by suicide of a well-known individual, Mesa County Public Health could ensure that at-risk individuals received extra support in order to mitigate the risk of additional suicides or other related mental health issues.

Mesa County Public Health has also leveraged SIM funding to continue to build relationships in the community. Staff have worked with the local board of education to advocate for funding a staff position that would deliver mental health education and suicide prevention curricula in schools. They used their status as a SIM grantee to engage the Medicaid managed care entity for their region about including more independent care providers in the Medicaid network. They have also worked with

local philanthropies, such as the Rocky Mountain Health Foundation and Western Colorado Community Foundation, to align regional funding decisions with statewide suicide prevention strategies. This outreach has resulted in many stakeholders taking on more of the work on their own, such as local teens who created their own public safety announcement about suicide that was used by local media.

Challenges

One challenge has been maintaining interest in suicide prevention. After significant traumatic experiences, many people come forward wanting to participate in a variety of ways to support the work of the public health agency. However, participation and interest start to wane after time so it was challenging to keep people engaged. Much of the work was focused on infrastructure building, which occurs behind the scenes and can be hard to see, leading even more people to lose interest as they are not readily aware of all the work that is happening.

Another challenge has been working with media partners. Grand Junction serves as a starter television market for young reporters and news anchors, which means many journalists are eager to break big stories and make a name for themselves, which can clash with the work of suicide prevention. It takes a lot of time and effort for a public health agency to train new news reporters on appropriate reporting methods, mainly in relation to suicide, but also to create buy-in so news anchors will prioritize the reporting guidelines.

Lessons Learned

A key takeaway shared by Mesa County leaders is that it is essential for public health to offer and focus on hope. Hope keeps people engaged and encourages community members to identify ways they can connect with each other and provide support. For Mesa County this meant outreaching to a variety of groups such as the local homeless coalition, hunger alliance and various civic and faith communities. By reaching out to people where they are, local public health can help them see how the work they are already doing connects to suicide prevention. Feedback from Mesa County residents indicated they found great value in learning that they can make a broader change in their communities simply by being an active and engaged parent, an empathetic friend or friendly hiker or cyclist on a local trail. Making these individual connections can help build networks that distribute messages about addressing upstream risk and protective factors as well as information about substance use and suicide prevention. This kind of social capital can be used in a variety of ways and becomes a sustainable resource for building and repairing community connectedness. Establishing Mesa County Public Health as a backbone entity of this community-building approach was an unexpected but welcome outcome of SIM.

Northeast Colorado Health Department

Northeast Colorado Health Department (NeCHD) is a rural public health workforce that covers six counties – Logan, Morgan, Phillips, Sedgwick, Washington and Yuma – in northeast Colorado, which is an area roughly the size of Vermont. They provide such services as environmental health protection, client services and health promotion and disease prevention programs.

Program Summary

NeCHD focused its SIM funding on pregnancy-related depression, outreach to populations at risk of suicide using the Man Therapy resource from CDPHE's Office of Suicide Prevention and community training. The Department developed a locally tailored pregnancy-related depression toolkit for primary care providers in response to a community needs assessment identifying the need for better mental health screenings of new and expecting parents. To share the Man Therapy resource with rural, working age men who are statistically at high risk of suicide, NeCHD staff conducted targeted outreach by driving to automotive and farm equipment stores, farm co-ops and any other place where men congregate to advertise the website and distribute literature, including satirical posters that male business owners were happy to display. The NeCHD website had high traffic volume during this outreach effort. This initiative was so well-received that local radio stations began running public service announcements without Department prompting.

The final component consisted of community trainings including Mental Health First Aid for adults, youth and law enforcement. Question, Persuade and Refer. More than Sad. Ride the Wave (a new suicide prevention program for fifth graders) and Applied Suicide Intervention Skills Training. The Department was able to use SIM funding to pay for all the trainings and offer them at no cost to attendees for all three years of the grant cycle.

Successes

The Department worked extensively on reducing stigma through trainings and by getting out into the community and talking to people on their own terms. This authentic outreach method was well received and generated impressive community support. Provider outreach using the pregnancy-related depression toolkit was also well received. Some physicians have said that women seem to be more comfortable talking with their physicians about their mental health even before being screened, which encouraged them to accept the toolkit and open themselves up to further partnership with NeCHD.

Private providers coming together to share information and create a more robust referral system was another success. A new referral form was developed at the

request of providers who wanted to know a connection was made from their referral. This has helped providers feel more confident making referrals and has helped create a stronger provider network across the six counties where NeCHD operates.

Challenges

Maintaining consistent relationships with primary care practices is a time-intensive task. This work required many phone calls with lots of follow up and repetitive explanations of the value of screening and prevention tools. The time and effort required made it difficult to get this work going in the first year of funding. However, once one physician was reached, the word spread and facilitated further connections.

Lessons Learned

Working with private counselors and practices evolved during SIM. Behavioral health providers need to share their successes and challenges. Counselors and therapists can feel disconnected from each other, so having biannual meetings where they can share their excitement and concerns has been very useful.

Ouray County Public Health Agency

The Ouray County Public Health Agency provides services, such as an immunization program, tobacco prevention education program, communicable disease control and emergency preparedness and response planning with individuals living in the county.

Program Summary

Ouray County Public Health, in collaboration with Delta, Gunnison, Hinsdale, Montrose, and San Miguel counties focused on two priority areas of work with their SIM funding: stigma reduction and primary care integration. Targeted stigma reduction campaigns were chosen by a regional steering committee. The stigma reduction initiatives included Mental Health First Aid and Question, Persuade and Refer suicide prevention gatekeeper training along with crisis service hotlines and Man Therapy. For integration of care, Ouray Public Health Agency worked with primary care clinics in the county to apply to become members of the SIM practice transformation cohort. This allowed multiple clinics across the six counties to build out integrated care services, enhancing patient access to care throughout the region.

Successes

One of the big successes during SIM was increased awareness in the community of mental health and creating a culture that allows people to feel more comfortable asking for help. There has been widespread uptake of Mental Health First Aid across the region. In San Miguel County, the county commissioners made a strong recommendation for all county employees to be trained in Mental Health First Aid and

the City of Ouray is working to do the same. Ouray Public Health Agency has had several local governments and nonprofits in the region ask about making mental health education a routine part of their employee onboarding and training offerings.

Another success has been the relationships formed across the region, resulting in the creation of a regional steering committee and a push to enact a coordinated mental and behavioral health strategic plan. SIM funding was instrumental in allowing the participation of multiple counties in the steering committee and helped to increase collaboration and communication across the mountainous region.

Challenges

A lack of qualified personnel living in the area and rapid turnover in many key positions is an endemic challenge in Ouray. At the start of the funding period the region lacked an RHC for many months, and since then the position has switched hands multiple times. This resulted in a lot of time being spent on training and establishing the same functional relationships multiple times, which made the RHC position less valuable as a resource and led to delays in some of the work involved with the SIM funding.

Lessons Learned

The grantee said it would have been beneficial to work more closely with practice transformation teams that were part of local health plans when connecting with integration work to define the role of the LPHA in practice transformation while allowing the agency to better connect to clinics and hospitals in the region.

Pueblo Department of Public Health and Environment

The Pueblo Department of Public Health and Environment serves the people and protects the environment of the city and county of Pueblo, one of Colorado's most storied and culturally diverse areas. People who live in Pueblo and surrounding areas have high levels of substance use and mental health problems, including drug (opioid and methamphetamine) overdose and suicide deaths.

Program Summary

In response to ongoing quantitative and qualitative data about acute behavioral health needs among youth in Pueblo, the Department focused its SIM-funded efforts on education and outreach to Pueblo county schools and youth-serving organizations, a targeted youth and suicide prevention stigma reduction campaign, and coordination of efforts among primary and behavioral health care services. Soon after implementation began, Pueblo determined that its capacities and the needs and receptiveness of local primary care providers were not well-aligned, and program staff shifted their focus to youth mental health promotion and suicide prevention

activities. The Department worked with local youth volunteers to develop a presentation titled “Stand Up to Stigma” that staff and youth leaders delivered to every high school and several middle schools in the county. In an effort to draw larger crowds at these school-based and youth-connected events, the Department leveraged SIM funds to bring Kevin Hines, noted suicide prevention speaker and author, to Pueblo on two occasions. This strategy increased the visibility of Pueblo’s official focus on suicide prevention and generated a great deal of community interest in further connections to mental health services and supports.

In addition to youth outreach, the Department organized several ‘lunch and learn’ events for mental and physical health care providers that featured speakers with lived experience of mental health challenges, family crises, and suicide loss and attempt survival. Several of these events focused on how to engage resistant and otherwise hard to reach populations, such as middle-aged men who are at elevated risk of suicide but typically do not engage in mental health treatment. The Department leveraged the flexibility of SIM funding for staff time dedicated to mental health to reach out to people who engage with LPHAs for other reasons, including mothers who access WIC programs and other services for new and expecting parents and their kids. Staff were also trained as instructors for Mental Health First Aid and Question, Persuade, Refer trainers and offered free services to a wide variety of entities and groups representing the diversity of the Pueblo Community.

Successes

School-based outreach and presentations for the community organized in partnership with youth and school leaders stood out as examples of successful collaboration and awareness-building supported by the SIM grant. Bringing Kevin Hines to local high schools and promoting his talks in the community attracted significant interest beyond the “usual suspects” of health care providers, social workers and mental health advocates in the community. SIM funding allowed the Department to serve as a validated messenger of a positive mental health messages by organizing these events, which showcased the connection of Pueblo to a global network of communities focused on issues like youth suicide prevention.

Challenges

Pueblo experienced significant challenges throughout SIM, beginning with the need to shift from a focus on promoting integrated primary care to it education and youth outreach efforts. Staff describe the difficulty of gaining access to primary care offices, even as the local public health authority focusing on a key population health issue with the support of a major, well-publicized federal initiative. The Department believes its inability to offer additional financial incentives to providers contributed to the difficulty establishing active working relationships.

Lessons Learned

Pueblo staff communicated that they would have benefitted from more active, intentional and focused technical assistance from CDPHE and better communication with other SIM grantees. The grant-funded activities that were almost entirely new to this particular LPHA (most county-level mental health issues are routed to human services) so the warm-up period was long and arduous for Pueblo. In addition to more technical assistance and connectedness with other grantees, Pueblo identified critical feedback from funders as an important need. While staff were never led to believe their work was unhelpful or undertaken in error, they felt that incorporating critical evaluations of mental health promotion activities on an ongoing basis, rather than assuming that any awareness-building is automatically beneficial, would have strengthened their SIM-related work.

Rio Grande County Public Health

Rio Grande County Public Health protects and improves the health of Rio Grande county residents. Staff work to prevent epidemics and injuries, promote and encourage healthy behaviors, respond to disasters, and assure the quality and accessibility of health services. Rio Grande County is located in Colorado's San Luis Valley, which experiences high levels of poverty and physical and mental health challenges.

Program Summary

Rio Grande County Public Health partnered with the San Luis Valley Behavioral Health Group to devise a long-term plan for physical and behavioral health integration in the region. The first part of the plan was for public health to be a liaison for stigma reduction and behavioral health information sharing. The Behavioral Health Group provided evidence-based trainings and the Public Health Agency helped distribute information about the trainings to drive community uptake. The Agency also conducted a media/outreach campaign on stigma reduction, including handing out pamphlets at schools.

The second part of the plan was to improve integration within clinics in the valley. Since behavioral health did not have an established relationship with Rio Grande Hospital, they focused outreach on that connection and provide support. They also set up a community services resource website, MySLVconnect.com, which offered providers a one-stop-shop for patient resources.

Successes

The grantee successfully adapted materials from the Let's Talk Colorado campaign to reduce mental health stigma, reaching a robust cross-section of community members

through radio segments and an advertisement that plays before every feature presentation in the area's sole movie theater. Reducing the stigma associated with behavioral health clinics in the area was another success. Clients at local primary care, human services and specialty care facilities were made aware of the option to engage in therapy and receive other supports with the help of a SIM-funded care coordinator. It is likely that many of the people who accessed counseling this way would not have done so otherwise.

Challenges

Staff turnover was a challenge as those who initially created the plan then left the Department. The large geographical area of the six counties covered by the grant also made it difficult to reach target populations. However, the funding of an RHC helped get information out and receive information from the population. The outreach work is very time consuming but rewarding.

Policy uncertainty early on posed another challenge. For example, there was some confusion about when a service that was part of the grant-funded effort should be billed to Medicaid under a physical or mental health procedure code.

Finally, sharing and accessing certain types of behavioral health data was limited. Data literacy in the region is very low. the group was not able to get down to the neighborhood level to get a view of health equity data, which would have been beneficial.

Lessons Learned

Flexibility of funding for training activities allowed the public health agency to have a much broader reach. While initially the trainings were only going to reach a few entities with a limited curriculum, flexible funding has allowed them to add trauma-informed trainings in schools, work with law enforcement agencies, and other partners who would not have otherwise received that education.

Having clear templates for tracking, reporting and sharing data was also critical to success. It is easy to get caught up in the day-to-day tasks and important to share accomplishments with stakeholders. The grantee said it was helpful to have SIM be a third party between the grantee and federal government as SIM helped mediate any issues that came up in the funding allotments and requirements.

San Juan Basin Public Health

San Juan Basin Public Health (SJBPH) provides public health services to residents of Archuleta and La Plata counties, such as health promotion, health protection and prevention, assessment and planning services.

Program Summary

The focus of the work by SJBPH was bringing a collective impact model to the community. This enabled the formation of a robust coalition of partners in the community who worked together around risk and protective factors influencing youth suicide. The region has a core group of individuals functioning as a steering committee in both La Plata and Archuleta counties, along with additional efforts in San Juan, that are engaged in strategic planning to sustain the work going forward.

Successes

From the work on suicide prevention, SJBPH has seen increased awareness of behavioral health needs and identified gaps in services in the region. In the most recent public health improvement plan, the number one issue that came to the forefront was suicide and access to mental health services. This work has been amplified by work done with local partners, as part of the collective impact process, such as local media outlets that have worked with SJBPH on messaging.

There has been an increase in general awareness about the need to increase integrated care in the community. The protocol of care workgroup that was formed, as part of the work with the steering committee, is made up of different individuals such as school counselors, providers, and therapists, which allows conversations to occur between various sectors. These conversations facilitate warm handoffs between providers to ensure that no one is falling between the cracks.

There has also been an increased understanding of resources available to the community. SJBPH highlights community partners and what they are doing in a variety of ways, such as community forums and newsletters. This allows information to be spread back out to the community so people know where to go when they need services and have more options to choose from when they seek services. Spreading information has been bolstered by connections with new community partners, such as the faith community and first responders, who helped spread the word about resources and act as resources.

Challenges

As with any broad community effort, it can be difficult to bring together a wide variety of stakeholders and reach consensus about key decisions and action steps. This can be particularly challenging due to the large region. City centers are miles apart and can be drastically different in terms of perceptions and community norms. The creation of an organizational chart for the collective impact process, as well as founding multiple workgroups helped to create an organized structure. The effort has slowed down and sped up as interest ebbed and flowed and as people's schedules allowed, sometimes impeding the flow of the work.

Lessons Learned

One key lesson learned was the importance of communication. Much of the work done with SIM was "behind-the-scenes" infrastructure work that is not always public facing. This means that the backbone organization, in this case SJBPH, needs to be strategic in communicating to the community about work. The backbone organization can also work with partner organizations to be champions of the work so they can spread the word. Frequent check-ins are key instead of waiting until there is something important to share. This work has been enhanced using Basecamp software, which allows resource and information sharing between partners and helps keep everyone informed of the work being done across the community.

When trying to build a coalition, the first meeting with community partners when you are doing outreach should not be focused around an ask. Instead, focus on building a relationship first by talking about the bigger picture and showing a partner how the work they are doing aligns with the bigger picture. This development leads to a bigger ask, but it is important to have patience and be able to understand when the organization is ready for that ask.

Tri County Health Department

Tri-County Health Department (TCHD) serves residents in Adams, Arapahoe, and Douglas counties and offers a wide range of programs and services including birth certificates, health care referrals, restaurant inspections and infectious disease investigations.

Program Summary

The SIM work of TCHD encompassed a collaboration between five public health agencies in the Denver metro region. This included TCHD, Boulder County Public Health, Broomfield City/County Department of Health and Human Services, Denver Public Health, and Jefferson County Public Health. Two areas of focus for the county collaborative were stigma reduction and an assessment (gap analysis) of the types of screening that occurs in primary care serving low-income patients.

Successes

Through SIM funding, the collaborative expanded its work on stigma reduction by bringing in the Make it OK campaign and by hiring a communications agency to craft a stigma reduction message tailored to Colorado. The message creation process included the use of focus groups to test a variety of messages, such as with men and Spanish speakers, as well as surveys. This work resulted in the Let's Talk campaign, which was launched across the state. The Let's Talk campaign helped to increase

awareness of mental health and of available resources for people who are looking to talk more about mental health issues.

An assessment tool for providers that measures levels of integration was developed and piloted. This tool helps identify challenges and gaps facing providers looking to integrate care, and helping to think of and craft solutions that assist providers in bridging the gap between physical and behavioral health.

Challenges

Crafting a memorable and impactful public message can be a difficult process. With the Let's Talk campaign it was difficult to re-think the messaging to create statements that would resonate and help people grasp the concepts the campaign was trying to convey. For example, if one were to say, "1 in 5 people reported poor mental health in the last month," it is easy for an individual to identify with the "other 4" and think that poor mental health is not something they have to worry about. However, if you say, "the number of people who reported poor mental health would fill Mile High stadium seven times over," that resonates much more strongly and causes people to think that they could in fact be someone affected by poor mental health. The collaborative conducted focus groups, worked with community members, created a Message Action Team and brought in outside resources to craft messages that worked for Coloradoans.

Lessons Learned

One key aspect of the work, accomplished through the metro public health departments, was the group working together towards common goals – stigma reduction and an assessment tool. Each community had flexibility and autonomy to adapt their work to their own local context. While each community participated in common activities, such as being on the Message Action Team that was working with Let's Talk, the SIM funding gave flexibility to the departments to also pursue their own activities. For example, Denver Public Health was able to focus on health equity and its relationship to behavioral health. Staff attended a variety of speaking events to talk about this critical intersection in health. Overall, the SIM funding helped to increase relationships between the local public health departments, allowing each to build on the work of the other as they work to improve mental health in their communities.

Policy Recommendations:

Several SIM-funded LPHAs drew on their experiences to identify policy recommendations and goals at the local and state level. The Colorado Association of Local Public Health Agencies (CALPHO) is committed to supporting LPHAs in implementing policy recommendations detailed below.

Recommendations

San Juan Basin Public Health found that lack of funding for arts, sports and other after-school programming in southwest Colorado is a contributing factor to youth depression, substance use and suicide. In community conversations held in Durango, they identified positive, diverse extracurricular programming for high school students as a policy goal.

Mesa County Public Health worked with a local hospital to conduct syndromic surveillance of suicide-related emergency department visits as well as suicide attempts, and deaths. This connectivity helped Mesa Public Health staff target their outreach to affected communities, something that could be replicated on the state level through policy change.

The Health District of Northern Larimer County's CAYAC program was successful in connecting youth to mental health care by hiring a school-based coordinator who could help parents, teachers, and youth themselves navigate referrals and, critically, health and education privacy laws and the interaction of mental health, disability, and other service programs. Several parents commented that such a coordinator role should be a defined function at the school or school district level. Policy intervention could be used to ensure such a role exists in each school district.

Sustainability:

Several LPHAs have secured funding from their local governments to continue SIM efforts after July 2019. El Paso County Public Health, Tri-County Health Department, and Northeast Colorado Health Department have all obtained funding or commitments of support from local governments to continue staff roles started as part of their SIM grants. Pueblo and Rio Grande are still actively seeking support to continue SIM-funded efforts, and local leaders are confident that they will be able to find solutions to keep work going in one form or another. CDPHE's Office of Suicide Prevention is working actively with the remaining LPHAs to identify immediate and long-term funding opportunities and support their efforts to institutionalize mental health promotion efforts at the local level.

Status of Community Investment Key Activities

The following table describes the final status of the key activities related to community investments listed in the SIM Award Year 4 terms and conditions.

COMMUNITY INVESTMENT KEY ACTIVITY	STATUS	LOOKING AHEAD
 Establish Regional Health Connector (RHC) workforce to coordinate activities between providers, the public health system and community resources	The SIM-supported RHC program deployed 21 RHCs across Colorado. A Social Network Analysis indicates that RHCs were successful at coordinating activities between providers, the public health system and community resources. SIM funding also supported an innovative new Veteran Health Connector position.	Fourteen RHCs will continue their work beyond SIM. Short-term funding for the VHC catalyzed long-term efforts to create a locally-tailored suicide prevention plan.
 Fund Local Public Health Agencies (LPHAs) and Behavioral Health Transformation Collaboratives (BHTCs) to implement strategies that reduce stigma, increase screening or promote behavioral health.	Two BHTCs and eight LPHAs were funded and supported with technical assistance from CDPHE.	Both BHTCs and several LPHAs have secured funding to continue efforts beyond the end of the SIM initiative. The CDPHE Office of Suicide Prevention is working actively with the remaining LPHAs to identify immediate and long-term funding opportunities and support their efforts to institutionalize mental health promotion efforts at the local level.
 Work with state and local public health agencies to jointly advance policy initiatives that improve population health.	Several SIM-funded LPHAs identified local and statewide policy recommendations based on their work with SIM.	CALPHO has committed to helping LPHAs implement identified policy goals.

Cross-Cutting Approaches:

Call to Action:

In 2017, the SIM Office funded a statewide environmental scan and gap analysis of population-based behavioral health initiatives focused on promotion and prevention in Colorado. The scan identified pronounced gaps in prevention resources and programming for working aged men, school-aged children (especially boys), and older adults. These findings aligned with population health metrics data showing the disproportionate levels of suicide and substance use-related deaths among males in Colorado. Workgroup members chose to use the environmental scan and leverage CDPHE's involvement in SIM to craft a report titled "Seeking a different approach to behavioral health awareness prevention and treatment for boys and men: The Colorado State Innovation Model issues a Call to Action" (Call to Action).

The Call to Action report leverages existing and emerging opportunities to build momentum through 2028. In addition to strategies targeting boys and men, there are general recommendations to improve mental health and boost prevention efforts across Colorado. State agencies and LPHAs are supportive of this Call to Action and plan to incorporate the report into their workstreams. For example, CDPHE, Tri-County Health Department, Jefferson Center for Mental Health, Anthem and SIM collaborated on a panel presentation at the Public Health in the Rockies conference. The purpose of the panel was to educate health care professionals about the Call to Action, identify ways in which health care partners can work across the spectrum to improve mental health in Colorado and help attendees understand the importance of taking an active role in changing the culture of care in Colorado.

Major Accomplishment

The Population Health workgroup led efforts to conduct an environmental scan that identified gaps in behavioral health promotion. The group used the results of the scan to issue a Call to Action. This document charts a path forward for the next ten years. It was endorsed by Governor John Hickenlooper and distributed across the state. Several organizations have committed to transforming the Call to Action into concrete change.

One of the Call to Action's objectives was for CDPHE to work with SIM population health stakeholders to develop concise "one pager" documents for specific audiences with specific action items to advance health improvement goals. These documents, SIM Call to Action: School Edition, SIM Call to Action: Local Public Health, and SIM Call to Action: Policymaker Briefing, contain evidence-based policy and practice recommendations informed by CDPHE and diverse LPHA subject matter experts, providers and people with lived experience. CDPHE's Office of Suicide Prevention and its public advisory commission have committed to incorporating these materials into outreach efforts and continuing to explore opportunities for advancing Call to Action priorities.

The Call to Action provides a logical path forward that taps into existing work streams while expanding circles of influence and creating new partnerships. Many LPHAs chose behavioral health as a priority in their Community Health Improvement Plans and the Call to Action serves as a resource to help them sustain efforts related to this priority. For example, the following SIM podcast describes how the Call to Action influenced new messaging from Let's Talk Colorado, the social media campaign launched by TCHD discussed above (https://soundcloud.com/user-118904494/letstalkco).

Sustainability of Call to Action Implementation:

Numerous stakeholders and organizations – including LPHAs, state agencies and SIM Population Health workgroup members – committed to the ongoing implementation of the Call to Action. These efforts were supported and augmented by Colorado's State Two-Generation Program Coordinator, located within the Governor's Office. The intergenerational focus of the Call to Action aligns well with Colorado's work to advance adoption of two-generation (2Gen) approaches, which seek to improve child and adult caregiver outcomes simultaneously by building the entire family's health, education, economic assets, and social capital. The state's extensive network of 2Gen stakeholders provides multiple opportunities to increase dissemination and awareness of the Call to Action but engage new cross-sector partners to implement the report's strategies and recommendations. Colorado's position as a national leader in 2Gen will facilitate the expanded distribution of the Call to Action to other states, national policy institutes (such as Ascend at the Aspen Institute, the National Governors Association, Center for Law and Social Policy) and state and national philanthropic organizations.

CALL TO ACTION BLOG POST: For more information about the call to action, read the SIM Office's blog post about how the document is being used to sustain momentum achieved during SIM.

Status of Call to Action Key Activity

The following table describes the final status of the key activities related to the Call to Action listed in the SIM Award Year 4 terms and conditions.

CALL TO ACTION KEY ACTIVITY	STATUS	LOOKING AHEAD
 Issue a Call to Action based on the results of an environmental scan of behavioral health initiatives, for the purposes of sustainability and planning for future efforts.	The Call to Action has been issued. It was endorsed by Governor John Hickenlooper and has been disseminated widely.	Implementation of the Call to Action will be sustained and expanded through ongoing outreach to existing and new cross-sector partners, at both the state and national level. This outreach will be spearheaded by the State 2Gen Coordinator.

Population Health Monitoring:

Monitoring population health outcomes provided critical information needed to set priorities for SIM and to inform the SIM evaluation. The SIM steering committee and Population Health workgroup in conjunction with an epidemiologist from CDPHE

established public health surveillance measures for SIM's population health monitoring needs. Measures were selected to align with the SIM clinical quality measures (CQMs) as well as with Governor Hickenlooper's "Healthy Economy, Healthy Colorado" plan and other state-level health care related goals.

SIM selected 20 behavioral health and 12 physical health measures providing corollary population-level data (SIM large P) to the SIM practice reported CQMs (SIM small p). The population health measures are collected through the Behavioral Risk Factor Surveillance System (BRFSS), the Colorado Child Health Survey, the Healthy Kids Colorado Survey, the Pregnancy Risk Assessment Measurement Survey, the Prescription Drug Monitoring Program, the National Survey on Drug Use and Health and Vital Statistics. The SIM-funded epidemiologist provided regular updates on these measured to the SIM Office and key stakeholder groups.

It was unlikely that SIM would see statistical movement of these measures during the initiative's implementation period, but SIM-funded work is expected to result in gains across these measures over longer periods of time.

BRFSS and CHAS Questions:

SIM also supported the expansion of state-level public health monitoring of behavioral health in Colorado through two mechanisms. SIM funded the addition of behavioral health-related stigma specific questions to the 2017 and 2019 BRFSS survey (only for the state-specific part of the survey) and the SIM Office worked with CHI to add questions about access to integrated care to the Colorado Health Access Survey (CHAS) in 2017. The addition of questions to these established surveys will support future evaluation of the impact SIM had on increasing access to integrated care and reducing stigma associated with behavioral health in Colorado.

VISION Tool: CDPHE launched its Visual Information System for Identifying Opportunities and Needs (VISION) data tool, which provides users with interactive data visualization so they can create and extract data reports. (https://www.colorado.gov/pacific/cdphe/vision-data-tool). In particular, the tool allows users to drill down by location, zip code, age, gender, income and other demographic categories, depending on population health measure, to identify and understand issues related to social determinants of health. CDPHE and SIM have frequently shared opportunities for training and presentations on the VISION tool to encourage widespread use and encourage RHCs, LPHAs and SIM practices to use the tool to focus and guide their efforts. The SIM implementation guide was updated to use the tool so SIM primary care providers could better understand the issues affecting communities they serve. CDPHE will maintain the tool after the end of SIM.

Recommendation

The SIM Office recommends that funding be sustained for inclusion of behavioral health questions on the BRFSS and CHAS. While the baseline information collected as a result of SIM investments in 2017 and 2019 is important, more information is needed to assess changes and identify areas of progress and concern. CDPHE and future grants related to behavioral health should invest in these questions.

Sustainability of Population Health Monitoring:

The SIM Office submitted a formal memo to CDPHE recommending that the Department continue to fund behavioral health questions on the BRFSS and CHAS. CDPHE will continue to monitor the SIM population health measures, using them to inform strategies related to behavioral health promotion. CDPHE will also continue to maintain the VISION tool.

Status of Call to Population Health Monitoring Key Activity

The following table describes the final status of the key activity related to population health monitoring listed in the SIM Award Year 4 terms and conditions.

POPULATION HEALTH MONITORING KEY ACTIVITY	STATUS	LOOKING AHEAD
 Monitor health outcomes on a population health level related to areas of behavioral and physical health aligned with 14 clinical quality measures	CDPHE has monitored and reported on all metrics.	CDPHE will continue to monitor population health metrics beyond the end of the initiative and will continue to host the VISION data visualization tool.

HIT

4

SIM worked with stakeholders to build and improve upon state HIT infrastructure that promotes data sharing and reporting while reducing burdens on practices.

SIM HIT Use Cases

Promote statewide health information and data sharing

Enhance quality measurement reporting and analytics

Key SIM Activities

- Connected 381 practices to broadband
- Collected & reported practice-level data via SPLIT
- Created strong data governance structures
- Launched eCQM solution
- Supported two health systems in expanding e-Consults

Major Accomplishments

1. **LAUNCH OF ELECTRONIC CLINICAL QUALITY MEASURES (eCQM) SOLUTION:** SIM funded a first-of-its-kind partnership to leverage blockchain for HIPAA-compliant data aggregation and reporting in the state of Colorado. Aimed at improving data quality and reducing burden on providers, the eCQM solution enables aggregation, consolidation and sharing of eCQMs.
2. **BROADBAND EXPANDED TO 381 SITES:** With support from SIM, the Colorado Telehealth Network expanded access to broadband for 381 rural or underserved practice sites. This work is critical to laying the foundation for telehealth efforts in the future.
3. **SUPPORT FOR ELECTRONIC CONSULTATIONS (e-CONSULTS):** Though a competitive application process, SIM supported two major health systems in planning for and expanding their e-Consult programs to reach primary and specialty care providers in rural or underserved regions.
4. **DEVELOPMENT OF SHARED PRACTICE LEARNING IMPROVEMENT TOOL (SPLIT):** SIM funded creation of SPLIT, which facilitated collection of practice assessment data and CQMs from SIM practices, among serving other functionalities. SPLIT supported over 6000 individual user accounts from over 850 organizations.

Future Considerations

1. **EXPANDING ECQM SOLUTION TO MEDICAID AND MEDICARE:** The SIM office recommends that the Department of Health Care Policy & Financing, the Centers for Medicaid and Medicare Services and the Office of eHealth Innovation implement the Medicaid & Medicare use cases identified for the eCQM solution.
2. **CONTINUING CONSENT MANAGEMENT EFFORTS:** The SIM office recommends that partners, led by the Attorney General's Office, continue efforts to standardize consent management. Doing so is critical to enabling behavioral health data sharing and compliance with 42 CFR Part 2.
3. **SUSTAINING E-CONSULT PROGRAMS:** The SIM office recommends that payers, especially Medicaid, implement e-Consult reimbursement policies that align with Medicare to ensure a stable funding source for e-Consult programs.

Health Information Technology

Overview

Health information technology (HIT) has the potential to promote data-driven change, gauge impact, expand services beyond traditional clinical settings and facilitate collaboration between payers, providers and the public health system. As a result, SIM chose HIT as the fourth pillar of the initiative and advanced a comprehensive HIT strategy that created new solutions and leveraged synergies between existing HIT resources. SIM supported development of the Shared Practice Learning and Improvement Tool (SPLIT), an electronic clinical quality measure (eCQM) reporting solution, the provision of a practice-facing data aggregation tool (Stratus™) and launch of a population health data visualization platform (VISION Tool). SIM also promoted consent management policy efforts, increased connection to Health Information Exchanges (HIEs), expanded access to broadband and executed a telehealth strategy focused on electronic consultations (e-Consults).

While SIM originally envisioned creating a central data hub that would aggregate clinical, claims, social determinants of health and practice assessment data, the technical specifications, cost, political will and time needed to create the solution rendered it infeasible. SIM then pivoted to developing several solutions that would work in concert to address each area of data needs. The amount of time spent at the beginning of the initiative attempting to plan for the central data hub eventually led to more reasonable and sustainable solutions, but also produced shortened implementation time frames. At the beginning of the initiative, there were significant technical issues with SPLIT that led to practice frustration with submitting assessment data and clinical quality measures (CQMs). Launch of the eCQM reporting solution that could automatically pull data from a practice's Electronic Health Record (EHR) and validate eCQMs was also significantly delayed. Given the rapidly shifting telecommunications environment, it also took SIM longer than anticipated to build consensus for a telehealth strategy.

Despite the downside of these delays, the extended planning time invested at the beginning of the initiative produced positive results. SIM collected extensive stakeholder input and successfully built sustainable HIT strategies and solutions that will benefit Colorado in the long term. The SIM HIT workgroup created a HIT plan that helped provide the momentum necessary to establish the Office of eHealth Innovation (OeHI). The workgroup also played a key role in guiding development of the statewide Health IT Roadmap. The eCQM governance structure created through SIM has spurred creation of an ongoing eCQM governance committee overseen by OeHI.

In addition to establishing sustainable governance structures, the software solutions that SIM funded provide a strong foundation for future HIT efforts. By the end of the initiative, SPLIT supported more than 6,000 individual user accounts from over 850 organizations in entering, accessing and understanding practice-level data. The solution will be sustained by the University of Colorado Department of Family Medicine (UCDFM) after the conclusion of SIM and is anticipated to provide infrastructure for future practice transformation initiatives.

Practices have submitted data to an eCQM solution that leverages Colorado's HIEs. Recognizing the long-term value of the solution, OeHI will assume responsibility for the eCQM solution beyond SIM. HCPF is working to further develop the solution's infrastructure to support reporting required under the Medicaid advanced payment model (APM). As discussed in more detail in the **Payment Reform chapter**, the SIM Office partnered with members of the Multi-Payer Collaborative to provide SIM practices access to Stratus™, a data aggregation tool designed to provide physicians, care teams and administrators with patient-centered, population health insights. SIM also funded launch of the VISION Tool, which allows users to better identify and understand issues related to social determinants of health (see the **Population Health chapter** for more details).

SIM has helped create lasting change at the practice level by increasing practice capacity to deliver integrated care. More than 380 practices were connected to expanded broadband access as a result of SIM's partnership with the Colorado Telehealth Network (CTN) and collaboration with the Office of Broadband. These practices will benefit from improved infrastructure and increased capacity to deliver services via telehealth. SIM also funded two health systems to evaluate workflow, engage providers, support technology and create an implementation plan to advance e-Consults in rural areas of the state. Collectively, these efforts have accelerated momentum toward providing whole-person care and succeeding with APMs.

This chapter of the report begins with a discussion of the governance structure established to oversee the planning, design, development and implementation of HIT strategies. The chapter then addresses the conceptual framework that drove SIM's HIT work, including the selection of two HIT use cases and alignment with the statewide Health IT Roadmap. It then discusses the specific software solutions funded by SIM, including SPLIT and the eCQM solution. It concludes with a discussion of the ways in which SIM has leveraged existing infrastructure to promote change, including maximization of HIEs, clarification regarding consent management laws, expanded access to broadband and promotion of e-Consults.

HIT Governance

The SIM Office created a robust governance structure to manage the complexities of its HIT strategy.

HIT Workgroup:

This workgroup played a key role in developing and implementing SIM's HIT strategy. Objectives of the group were to build infrastructure and provide technical guidance that would allow the SIM Office to:

- Develop a Quality Measurement Assessment Tool;
- Expand telehealth capabilities throughout the state, including:
    - broadband expansion;
    - an implementation strategy, including technical assistance for providers;
    - and the establishment of Telehealth Resource Centers aligned with Regional Health Transformation Collaboratives;
- Acquire and aggregate clinical and behavioral health data;
- Integrate claims data, resulting in the analytical capability to evaluate electronic CQMs and deliver value-based payment models;
- Create integrated data infrastructure with robust data quality standards, including clinical, behavioral health data, and claims data, to support population health; and
- Create reports and the capability to disseminate data to other sources or data stores.

Given the complexity of executing the HIT strategy, this workgroup did not create solutions but played an advisory role in selecting and guiding the numerous vendors who built out solutions related to the SIM-funded investments discussed below.

eCQM Data Governance Committee:

In April 2018, the SIM Office established the eCQM Data Governance Committee tasked with developing a governance framework and relevant implementation processes for SIM practices to accurately and efficiently extract and electronically report eCQM data. Goals of the committee were to:

- Develop a foundational governance structure around data sharing, validation and reporting to SPLIT;
- Maintain and refine a governance structure around data sharing, validation and reporting to SPLIT that ensures measure accuracy, reliability and practice participation;
- Adopt transparent, trustworthy and efficient processes for practice participation;
- Ensure that guidelines uphold the privacy and security of patient data;

- Evaluate and revise the governance structure to improve measure accuracy, reliability practice participation; and
- Facilitate the development of new use cases and the transition of governance to the Office of eHealth Innovation.

The committee played an integral role in developing the Health Data Colorado (HDCo) solution discussed in later in this chapter.

Office of eHealth Innovation & eHealth Commission:

Recognizing the use of HIT was revolutionizing health care in Colorado, Governor John Hickenlooper issued an executive order establishing OeHI in October 2015. The office is tasked with promoting and advancing the secure, efficient and effective use of health information, and informing, incentivizing and influencing future HIT initiatives. The eHealth Commission was created to provide advice and guidance to OeHI.

OeHI's efforts are focused on care coordination, advancing Colorado's regional HIEs, data sharing, defining requirements for consumer engagement and empowerment projects and working with state agencies and community partners to align how the state uses unique individual and provider identities. OeHI is supported with funds provided through the Health Information Technology for Economic and Clinical Health Act (HITECH).

OeHI and the SIM Office worked collaboratively throughout the initiative. The OeHI State Health IT Coordinator served as a co-chair of the SIM HIT workgroup mentioned above. Coordination between the two groups helped ensure that SIM worked toward a statewide HIT strategy that focused on engaging stakeholders, refining data governance, identifying funding resources, building on innovation and expanding technology infrastructure. SIM HIT workgroup members also played an instrumental role informing the State Health IT Roadmap mentioned in the Conceptual Framework section.

Colorado Telehealth Network:

This organization was established in 2008 through federal awards granted to develop statewide, dedicated health care networks. CTN's mission is to maximize access to health care services, especially in underserved regions of the state, through information and communications technology. CTN convenes stakeholders across Colorado and serves behavioral health and physical health care practices. As described below, the SIM Office contracted with CTN to implement its broadband expansion strategy.

Office of Broadband:

Housed within the Governor's Office of Information Technology (OIT), the Office of Broadband leads a statewide effort to expand broadband coverage and quality for all Coloradans. The office is committed to enabling development of a statewide digital communications infrastructure through public-private partnerships to meet the

growing demand for broadband access in the key sectors of public safety, education, healthcare and transportation. While CTN focuses on "last mile" efforts to connect practice sites to broadband, the Office of Broadband is focused on developing "middle mile" infrastructure that connects smaller towns to larger cities where broadband interconnects with major carriers. The SIM Office coordinated with the Office of Broadband to ensure efforts were complementary, not duplicative. The SIM Office also collaborated with the Office of Broadband on sensitive data sharing.

Department of Health Care Policy and Financing:

The SIM Office has worked extensively with leaders from the Department of Health Care Policy and Financing (HCPF), including experts in its Health Information Office, to guide and implement the SIM HIT strategy. In particular, the SIM Office has ensured that the telehealth strategy aligns with HCPF's long-term goals, as Medicaid policies will play a key role in sustaining progress beyond the end of SIM. HCPF has also provided support of the SPLIT solution as well as helped develop the Medicaid APM use case for the eCQM solution. Both SPLIT and the eCQM solution are described at length in the **SIM Funded Software Solutions section** of this chapter.

University of Colorado Department of Family Medicine:

The Practice Innovation Program at UCDFM played a key role in developing and administering SPLIT. UCDFM hired a dedicated staff member to oversee the solution and will maintain responsibility for the solution beyond the conclusion of SIM.

Governance Structure	Future Vision
HIT Workgroup	The SIM HIT workgroup will no longer continue to meet. SIM HIT workgroup efforts will be continued by OeHI and the eHealth Commission. All HIT work group members were invited to join the HIT workgroup formed by OeHI.
eCQM Governance Committee	The governance structure created for the eCQM solution will be coordinated by OeHI after the conclusion of SIM.
OeHI & eHealth Commission	OeHI and the eHealth Commission will be sustained indefinitely. They will continue to play a leadership role in implementing the initiatives identified in the Colorado Health IT Roadmap. OeHI will assume responsibility for the eCQM solution after SIM concludes.
CTN	CTN will continue to help sites apply for federal funds to subsidize broadband infrastructure.

Office of Broadband	The Office of Broadband will continue work to develop middle-mile infrastructure.
HCPF	HCPF will support SIM's HIT efforts moving forward and is requesting funding for a dedicated person to oversee transition of the eCQM solution to OeHI.
UCDFM	UCDFM will assume ownership of the SPLIT tool at the conclusion of SIM in July 2019. UCDFM has dedicated funds to hire a project manager to oversee the solution in the future.

With increasing workforce shortages in Colorado, which amplifies barriers to care especially for rural, low-income, and underserved communities, the SIM Office approached this issue from a multi-sector lens. While it is not an independent pillar, workforce was identified as a cross-cutting dimension that transcends every pillar of the initiative and is essential to sustaining SIM's work. While these should not be taken as a comprehensive scope of activities, examples of how SIM approached workforce can be found below. More detailed information about each activity can be found in the corresponding chapters of this report.

Conceptual Framework

Use Cases:

In developing its HIT plan, SIM identified specific use cases that would drive its work. The SIM HIT workgroup began with a broad stakeholder engagement effort to flesh out components of its statewide vision. The group sought to determine which statewide HIT goals should be funded through SIM and which should be supported by other sources. The team then conducted key informant interviews to determine the top 11 potential use cases. The Office of the National Coordinator Technical Assistance team led a prioritization process that resulted in selection of the following two use cases:

Use case 1: Promote statewide health information and data sharing: The exchange of health information, including behavioral health information across providers lays the foundation for the advancement of improved health outcomes at lower costs across the state. Use case 1 focused on broadly sharing health information across the state by increasing HIE connectivity and establishing enterprise-level infrastructure to continue to advance through the state's clinical and claims data acquisition and aggregation from various sources and telehealth efforts.

Use case 2: Enhance quality measurement reporting and analytics: SIM sought to align and advance the reporting and measurement of CQMs. Use case 2 provided SIM practices with an opportunity to advance methods for extracting and reporting CQMs beyond the manual entry of numerators and denominators.

These use cases informed development of SIM-funded solutions discussed later in this chapter.

Colorado's Health IT Roadmap:

In November 2017, OeHI and the eHealth Commission released the Colorado Health IT Roadmap (Roadmap), which outlines and recommends 16 initiatives intended to provide guidance and direction for Colorado's health IT efforts. This three- to five-year strategic plan leverages crucial work done through SIM, the Transforming Clinical Practice Initiative (TCPi) and other transformative efforts. The SIM HIT workgroup played an instrumental role in developing the plan, which was approved and funded by the legislature's Joint Technology Committee. The eCQM solution described below is an important component of the roadmap. Other key efforts of the workgroup are reflected in the Roadmap including care coordination for whole-person care, consumer engagement and empowerment, enhancing HIT and HIE infrastructure, consent management and data governance.

SIM-Funded Solutions

In the initial Operational Plan, SIM envisioned creating a central data hub that would aggregate information gathered from practice assessments, CQMs, claims data and public health data related to social determinants of health. Due to the reasons discussed in detail below, the SIM Office eventually concluded that the creation of a single solution was infeasible. As a result, SIM concentrated on creating a suite of software solutions that collected, aggregated and visualized the types of data that SIM initially intended to include in the centralized hub. These solutions complemented one another and gave practices, payers and other partners a comprehensive picture of relevant data.

SIM funded three software solutions and a data visualization platform:

- SPLIT: This solution provided multiple functionalities, including collection of assessment data and CQMs from SIM practices. All SIM primary care practices and Community Mental Health Centers (CMHCs) were required to use this solution;
- eCQM Solution: This solution automatically pulls and calculates eCQM data from practice EHRs via connections with HIEs. The solution was made available to all SIM practices;
- Stratus™: SIM funded licenses to Stratus™, an analytic software package designed to provide physician practices and care management administrators with patient-centered, population health insights generated from aggregated claims data; and
- VISION Tool: SIM funded CDPHE create and launch a Visual Information System for Identifying Opportunities and Needs (VISION) data tool. The tool allows users to drill down by location, zip code, age, gender, income and other

demographic categories, depending on population health measure, to identify and understand issues related to social determinants of health. The tool is free and available to the public.

SPLIT and the eCQM solutions are discussed in detail below. Stratus™ is discussed in the **Payment Reform chapter** and the VISION Tool is discussed in the **Population Health chapter**.

Shared Practice Learning Improvement Tool:

Evolution of SPLIT:

SIM recognized that capturing and understanding practice-level data would be critical to the success of Practice Transformation efforts. As a result, SIM funded the Practice Innovation Program at UCDFM to design and develop SPLIT to address the reporting needs related to practice transformation efforts. From concept to implementation, the goal of SPLIT was to provide a secure, web-based solution to collect, organize and transmit information about the SIM-related activities of individual clinics and organizations. The idea was to create a platform to support practices over time and across multiple transformation projects.

The Practice Innovation Program contracted with InterVision Media for initial platform development and support. The first version of SPLIT was launched in early 2016 and continued to serve as the assessment collection platform through mid-2017. The intent was to give practices the ability to enter and update numerator and denominator data that would be used to calculate SIM CQMs. In 2017, the Practice Improvement Program engaged an advisory panel of expert stakeholders to inform a reboot of the SPLIT platform. The advisory panel helped refine and prioritize use cases, upgrade technical specifications and solicit and review vendors. The process resulted in selection of IEQ Technologies as the vendor to develop SPLIT version 2, which was rolled out from December 2017 to January 2018. Between the Summer of 2017 and early 2018, the Practice Improvement Program maintained a scaled-down version of SPLIT that allowed for gathering SIM practice assessment data and CQMs.

Since 2018, the Practice Improvement Program took over the hosting and support for SPLIT using internal staff. Since its update, the new SPLIT platform has provided a single location for practices, practice transformation organizations (PTOs), regional health connectors (RHCs), the SIM Office and other initiative partners to collect, store, and disseminate information that supports integration as well as the transition to value-based payment models.

Use of SPLIT:

SPLIT provides a single location for practices and partners to update important information, complete assessments, submit and view clinical quality measures and review summary reports. The solution is accessed online. SPLIT facilitates project

coordination, client and vendor tracking, contract and deliverable management, data collection and management, evaluation efforts, and feedback reports. Additionally, a major objective of SPLIT was to support multiple practices through a unified interface. SPLIT achieved this goal by supporting the TCPi along with four other projects receiving federal and local funding. Practices and PTOs participating in SIM utilized SPLIT to complete various reporting and programmatic activities including:

- Completion of the following practice-level assessments and plans:
    - Medical Home Practice Monitor;
    - Clinician and Staff Experience Survey;
    - Integrated Practice Assessment Tool;
    - SIM Activity Inventory;
    - Practice Implementation Plan;
    - Practice Data Quality Improvement Plan;
- Reporting CQMs;
- Hosting provider rosters;
- Documentation of monthly field notes from PTOs; and
- Submission of practice invoices for SIM achievement-based payments.

SPLIT also provided a venue to communicate important information with practice sites and securely share practice level reports generated throughout SIM. Practices received quarterly feedback reports, which provided a point of comparison to baseline data as well as benchmark data from all practices in the SIM initiative. An example of a feedback report is included as Appendix E1.

Major Accomplishment

SPLIT supported more than 6,000 individual user accounts from over 850 organizations including 742 practices, 65 Colorado health systems, 30 practice transformation organizations, and all 21 Regional Health Connector host organizations. SPLIT collected over 15,000 surveys of individuals, practices and PTOs.

SPLIT Sustainability:

At the conclusion of SIM, ownership of SPLIT shifts to the Practice Innovation Program at UCDFM, which will be responsible for maintenance and future development costs associated with the solution. The Practice Innovation Program has committed to finding long-term funding sources for this work. the team has already secured funding to support a dedicated project manager to oversee the solution for the foreseeable future. For SPLIT to realize its full potential, development tasks need to be fully completed, resulting in an automated process between the practices and SPLIT. The SIM Office anticipates that future practice transformation initiatives will use SPLIT as a platform.

Status of SPLIT Key Activities:

The following table describes the final status of key activities related to SPLIT listed in the Award Year 4 terms and conditions.

SPLIT KEY ACTIVITIES	STATUS	LOOKING AHEAD
 Redevelop SPLIT to house data on practice progress toward practice transformation goals	SPLIT version 2.0 had the capacity to capture all practice assessments, including the SIM Activity Inventory, which helps track practice progress toward goals outlined in the Practice Improvement Plan.	The Practice Innovation Program team at UCDFM will maintain and further develop the tool moving forward. The University has committed funds to support a project manager to oversee SPLIT for the foreseeable future.
 Collect CQMs via Clinical Quality Measures Reporting Tool (QMRT)	QMRT, the original tool to report CQMS, was integrated into SPLIT. Practices manually input numerators and denominators into the solution. SPLIT houses eCQMs that are automatically captured from practice EHRs via the eCQM solution described in this chapter.	Practices that are not connected to a HIE will continue to manually input CQMs into SPLIT for the Medicaid APM. SPLIT will continue to accept eCQMs transferred from the eCQM solution described below.
 Provide baseline and benchmark reports of CQMs to practices	To aid practice quality improvement efforts, the SPLIT team created practice feedback reports for the assessments and quarterly CQMs. SPLIT allowed for the distribution of the files to SIM practices, their practice facilitators and Clinical Health Information Technology Advisors, and the SIM Office using its integrated file storage features.	Reports were specific to the SIM initiative and will no longer be provided. However, reporting capabilities developed through SIM have built the infrastructure necessary to provide similar feedback reports in future initiatives.

Development of an eCQM Solution:

Evolution of the eCQM Vision:

QMRT was intended to serve as a short-term solution until SIM could build out a more robust application. Originally, this application, called QMRT+ in the first SIM Operational Plan, was conceptualized as a solution that would link clinical and claims data as well as serve other functionalities, such as incorporating public health data. While QMRT was eventually integrated into SPLIT, as referenced above, submission of CQMS to the solution was undertaken manually, a process that was burdensome for practices and prone to error.

Difficulties in building consensus, delays in selecting vendors caused by cumbersome state procurement processes, rapid changes in the healthcare landscape, and practical limitations that were not originally delayed build out of the QMRT+ solution. The Multi-Payer Collaborative initiated a pilot project using state HIEs to send three eCQM data points to Stratus™ (for more information about Stratus™, see the **Payment Reform chapter** of this report). However, this project remained small in scope throughout the initiative and was never primed for expansion as there was not a strong business case to support this investment.

Despite these logistical roadblocks, the need for an improved eCQM solution grew as the initiative progressed. Payers expressed a strong desire to review reliable eCQMs as a way of evaluating which practices they wished to support with APMs. The advent of the Medicare Quality Payment Program also tied greater incentives to eCQMs. However, the SIM Office found that data submitted through QMRT was unreliable, as the individuals who input information could easily make a typo or miscalculate a numerator or denominator. Furthermore, methods of extraction were inconsistent among practices. Many SIM practices extracted clinical quality data from their EHRs and aggregated, visualized, and reported it using their own systems and other qualified registries, resulting in inconsistent data. Practices also reported frustration at the significant reporting burden associated with participating in SIM and other initiatives.

Formation of Health Data Colorado:

In response to the inconsistencies and burdens mentioned above, in 2018, the SIM Office convened three partners to form Health Data Colorado (HDCo), a non-legal, collaborative entity. HDCo was responsible for the design, development, and implementation of an eCQM solution. The following three entities collectively make up HDCo:

- Colorado Community Managed Care Network (CCMCN): CCMCN is a not-for-profit organization supporting Colorado healthcare communities by providing data management, quality reporting, data analysis and performance improvement strategies empowering organizations that provide services to

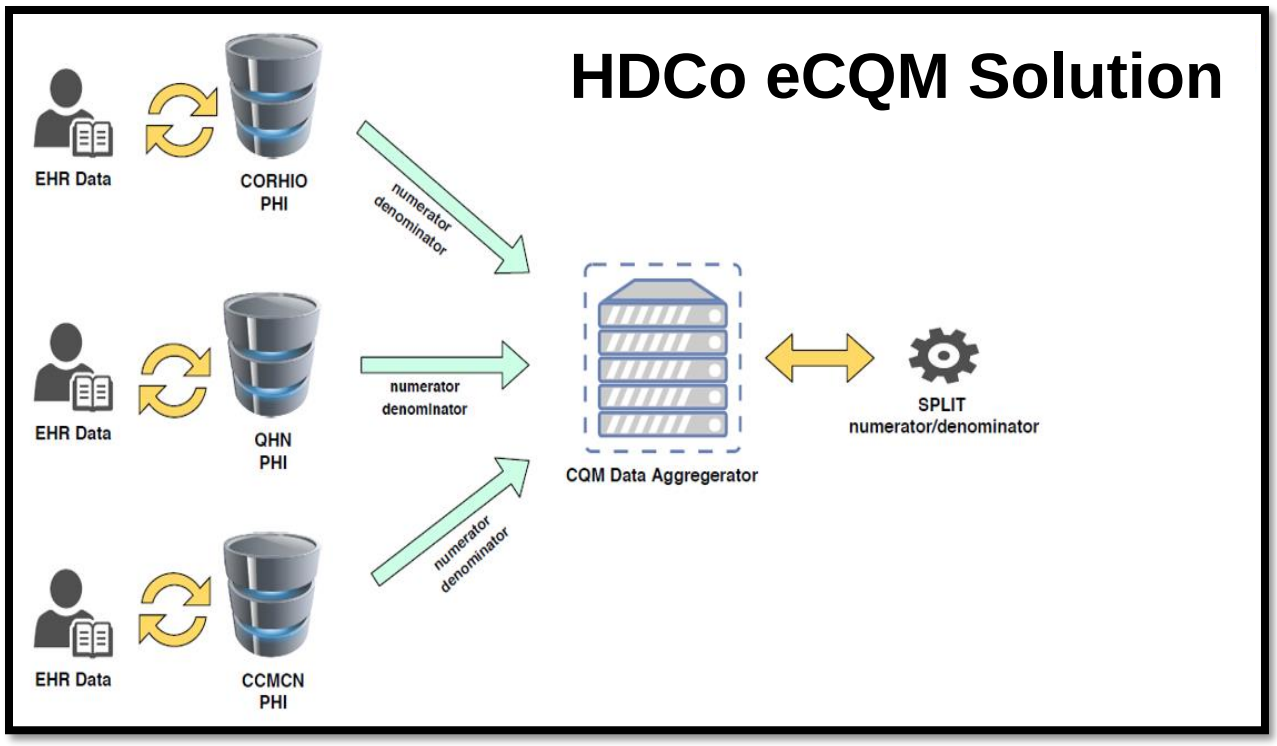
Colorado's vulnerable residents. CCMCN builds upon its 20 years as nationally recognized Health Center Controlled Network for Colorado and with this experience, CCMCN can ensure that providers have the health care technology strategies they need to be successful;

- Colorado Regional Health Information Organization (CORHIO): CORHIO is an established health information exchange with 13,000 network users primarily along the Front Range, Eastern Plains and some of the mountain towns. CORHIO is a contractor with the Colorado State Innovation Model working with practices to extract electronic clinical quality measures automatically from electronic health record systems using CORHIO's established processes and years of experience in this area; and
- Quality Health Network (QHN): QHN is a not-for-profit health information exchange partnership that has a mission to facilitate the availability of information to optimize the health of our communities, improve economic efficiencies of patient care and bring value to stakeholders.

Architecture of the Solution:

State leadership recognized that investing in existing infrastructure was the most effective means of supporting the eCQM solution. As a result, SIM partnered with CORHIO to lead the eCQM planning efforts. The SIM Office also contracted with HealthTech Solutions to provide technical subject matter expertise as the eCQM solution was being created. With support from HealthTech Solutions, the HDCo partners participated in retreat meetings and conversations with the SIM Office in order to come to a consensus on solution design.

Ultimately, HDCo partners created a solution that could automate the extraction of field-level clinical data from the EHRs of SIM practices. The partners were intentional in designing the solution so that it could be built out to accept data from other sources in the future. The graphic on the next page demonstrates the architecture of the overall solution.



QHN, CORHIO, and CCMCN receive source data from EHRs and extract the appropriate data and synthesize it to accurately calculate eCQM numerators and denominators. Once calculated, the HDCo solution relays extracted eCQM numerators/denominators in a standard format to SPLIT.

The HDCo solution is the first of its kind to leverage blockchain technology for data aggregation and reporting in Colorado that is compliant with the Health Insurance Portability and Accountability Act (HIPAA). A blog post published by CORHIO details how BurstIQ uses blockchain technology to support the solution, The solution also leverages eCQM applications delivered by AZARA Healthcare and Diameter Health that have been certified by the Centers for Medicare and Medicaid Services. These applications provide eCQM calculations using EHR clinical data as well as eCQM reports.

eCQM Data Governance:

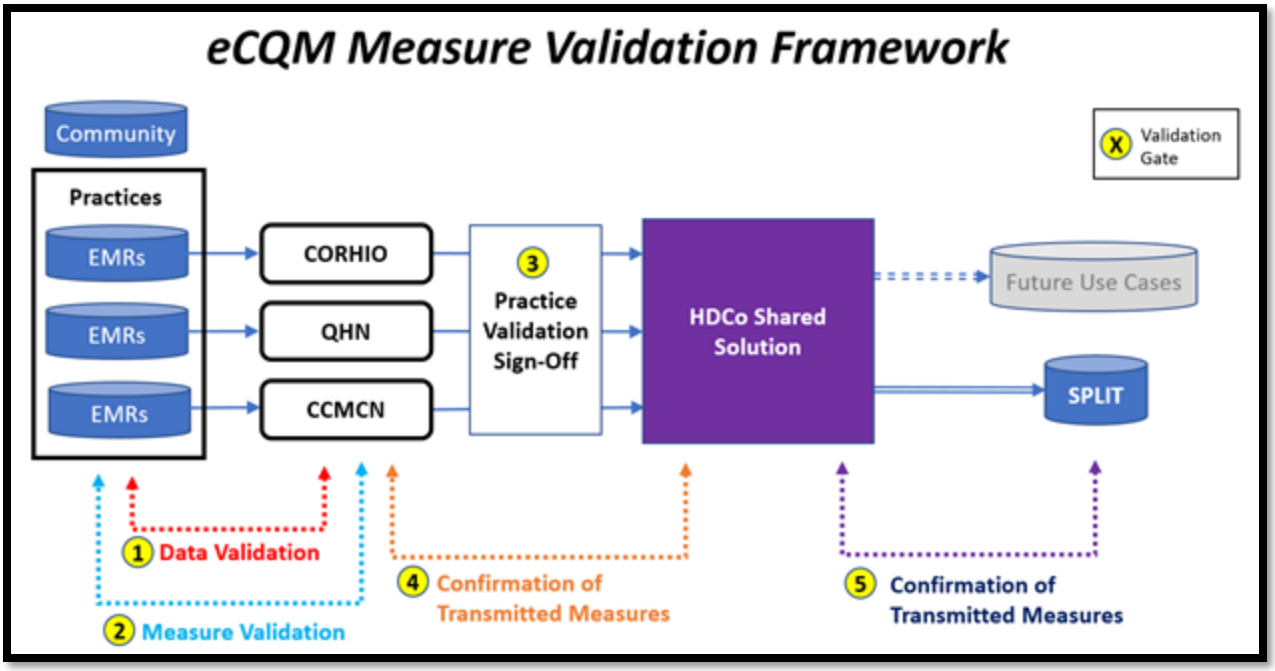
The SIM team engaged the Colorado Health Institute (CHI) to develop a data governance policy and work with the HDCo vendors to establish data standards and integrity goals. CHI facilitated the eCQM Governance Committee referenced in the governance section above. The committee met monthly and included representatives from primary care, mental health, payers, state agencies and technical partners. CHI worked with stakeholders to create a data governance charter (attached as Appendix E2), which outlined the following core values related to eCQM governance:

- Build and establish trust with stakeholders for establishing and using quality measures;
- Understand and communicate how data will be used;
- Promote transparency and buy-in across payers and practices;
- Promote scalability and continually communicate about the Colorado HIT Roadmap;
- Provide an appeals process for practices that may not agree on the measures;
- Promote knowledge transfer and how to use measures;
- Give stakeholders an opportunity to understand data uses and limitations;
- Create and update use cases as eCQM evolves;
- Share minimum necessary information to meet eCQM objectives;
- Reduce practice burden and increase trust of the measures by the recipient;
- Establish a rigorous validation process for measures across practices, payers, and recipients;
- Promote "public utility"/services;
- Ensure the governance model is iterative; and
- Provide a feedback loop for communications.

Once the committee established its structure, it focused on creating a validation process, developing a transition plan and developing both a Medicaid and Medicare use case centered on APMs. The governance structure created for the eCQM solution will be coordinated by OeHI after the conclusion of SIM.

Pilot Program and Data Validation:

To create trust in the extracted CQM data, practices need to validate that the data that is extracted from their EHR is accurate. Phase 1 of the two-phase approach consisted of a pilot project. Between May and July 2018, ten SIM primary care practices tested the solution by submitting three eCQMs to the solution. The eCQM Data Governance Committee adopted the following data validation framework and tested the validity of the pilot data.



SIM completed a comparative analysis of CQM measures reported by practices against the eCQM measure calculated by HDCo using data directly extracted from practice EHRs. HDCo made adjustments throughout the pilot period based on these comparisons.

In order to gain an understanding of the user experience related to the solution, CHI conducted key informant interviews with eight practices who used the solution. The following challenges came to light:

- The solution did not have the capacity to incorporate data from systems outside a practice's EHR, such as referrals for treatment tied to certain measures;
- Data can be reported multiple times in various locations in the EHR;
- One practice has two locations but the same patient population, so their data was counted twice;
- General issues surfaced regarding EHRs and what they were capable of providing; and
- Practices faced data validation difficulties when workflows or measure specifications changed.

Additionally, several practices consistently identified poor communication with HDCo partners as a concern. These practices were unclear on the value of participating as well as expressed frustration regarding slow response times.

Lesson Learned

SIM worked with three HDCo partners, each of whom worked with third party vendors to create the solution. While this structure was intended to give practices the ability to work with health information organizations with whom they had previous relationships, the number of partners involved made it difficult to coordinate on producing a single solution. Hosting joint vendor design sessions should have been a higher priority earlier on to ensure buy-in and reduce opportunities for miscommunication.

Use by SIM Practices:

All SIM practices were eligible to apply to use the eCQM solution. Practices could indicate a preference for which HDCo partner (CORHIO, CCMCN, or QHN) they wished to work with. This structure allowed practices to capitalize on existing relationships. Practice applications were submitted online and forwarded to HDCo partners to officially accept and onboard practices into the HDCo solution. Currently, 144 practice sites are using the solution to report out on the following eCQMs:

Measure #	Description	Type
cms2	Screening for Depression and Follow Up Plan	Adult
cms69	Body Mass Index (BMI)	Adult
cms82	Maternal Depression Screening	Pediatric
cms117	Childhood Immunization Status	Pediatric
cms122	Hemoglobin A1C (HBA1C) Poor Control (>9%)	Adult
cms138	Tobacco Use: Screening and Cessation Intervention	Adult
cms155	Obesity Adolescent	Pediatric
cms165	Controlling High Blood Pressure	Adult

Technical Assistance and Clinical Health Information Technology Advisor support:

The SIM Office recognized that effectively utilizing the solution required extra support. Clinical Health Information Technology Advisor (CHITAs) were trained on how to facilitate practice's use of the solution. Variability in practice readiness and

capability to address operational protocols around EHR use within the practice initially proved difficult. However, CHITAs have since coordinated with HIEs to define their operational roles. Cohort 1 practices, who were no longer receiving CHITA support as their involvement in SIM ended in March 2018, were offered the opportunity for continued support, targeting eCQM submissions and coordination with HDCo. All practices that participated in the extended CHITA services were linked with the HDCo partners to discuss the eCQM solution. CHITAs played a critical role in helping pull quality measures with the practices where necessary and assist in reporting, while best preparing practices for Medicare Access and CHIP Reauthorization Act (MACRA) and other emerging alternative payment models.

Future Functionalities:

The SIM Office and HDCo envision expanding the tool's use to capture data inputs from additional sources such as flat files, registries, the All Payer Claims Database, payers, social determinants of health, lab vendors and more. Additionally, CHI conducted two use case evaluations - one for reporting to Medicaid and another for reporting to Medicare in the future. The following language has been taken from the full Medicaid and Medicare Use Case Evaluations submitted by CHI, included as Appendix E3.

Medicaid APM Use Case: The Colorado Medicaid Alternative Payment Model (Medicaid APM) uses relative performance measures to adjust reimbursement for Medicaid services provided by Colorado primary care practices. Practices impacted by Medicaid APM include both Federally Qualified Health Centers (FQHCs) as well as non-FQHC practices with over $30,000 in paid annual Medicaid claims. Some of the Medicaid APM measures are eCQMs that can count toward practice "points," which in turn determine future payment rates for primary care providers in the state. Practices achieve eCQM points by closing the gap between their baseline year metrics and state-wide goals set by HCPF.

The majority of Medicaid APM program measures were also part of the SIM eCQM measures set. However, four additional measures will need to be added to the SIM eCQM program in order to offer all Medicaid APM measure options to practices. Those additional measures consist of the following:

Measure #	Description	Type
cms123	Diabetes: Foot Exam	Adult
cms130	Colorectal Cancer Screening	Adult
cms137	Initiation and Engagement of Alcohol or Other Drug Dependence Treatment	Adult
cms159	Depression Remission at 12 Months	Adult

Practices may need multiple format options in order to submit electronic medical records to vendor(s) for calculation of measures. These formats include, but are not limited to Continuity of Care Documents, Quality Reporting Document Architecture and flat files. Practice CQMs will be delivered to HCPF electronically for the Medicaid APM at least once a year to determine payment adjustments. HCPF may request that the data be delivered quarterly or semi-annually to encourage ongoing performance improvement by the practices. The data will include aggregated measure results for each practice and will be delivered in a simple flat file format.

The SIM Office has already worked to ensure that the solution could connect with the Medicaid data repository in the future. One option that is being developed with OIT and Medicaid is the Enterprise Service Bus (ESB) for data exchange. The ESB is a set of rules and principles for integrating numerous applications together over a common infrastructure. Connectivity between the solution and the ESB is critical for operationalization of the Medicaid use case. Staff from HCPF and OIT have worked with Mule Soft, which runs the Medicaid ESB, to ensure that the eCQM solution included technical requirements needed to build out this connection in the future.

Medicare Use Case: The Medicare Quality Payment Program (QPP) is a federal program that uses relative quality performance measures to adjust professional reimbursement rates for Medicare services provided by practices. Medicare QPP began in 2017 and is one of the largest value-based payment models in the United States. Practices must participate in the QPP Merit-based Incentive Payment System program if they receive over $90,000 in annual Medicare fee-for-services reimbursement and have over 200 Medicare fee-for-services patients.

Approximately 2,700 large primary care and specialty practices (16 or more providers) are required to submit measures for the Medicare QPP MIPS participation track in 2019. In addition, approximately 1,100 smaller practices in the state (15 or fewer providers) also are required to submit measures for the Medicare QPP MIPS participation track.

Practices can submit 257 eCQM measures for the QPP program in 2019. These measures must be submitted from practices as EHR-generated files, from Qualified Clinical Data Registries or from Qualified Registries. In Colorado, available options include:

- CORHIO and QHN are both officially Qualified Registries;
- Diameter Health officially supports a majority of these measures;
- CORHIO officially supports 21 of these eCQMs for QPP submission;
- QHN officially supports 33 of these eCQMs for QPP submission; and
- FQHCs are exempt from the QPP program, but CCMCN is evaluating supporting QPP registry certification for 2020.

Recommendation

The SIM Office recommends that OeHI, HCPF and CMS work to implement the Medicaid and Medicare Use Cases mentioned above. From a technical standpoint, the use cases are feasible and much of the infrastructure to implement them is already in place.

eCQM Solution Sustainability:

HCPF will continue to provide onboarding support for providers who began using the solution with SIM funding but had not yet completed onboarding activities by the end of the SIM initiative. In its Health Information Technology Implementation Advanced Planning Document (IAPD) Update for 2021, HCPF requested funds to support design, development and implementation of an expansion to the current eCQM solution. Looking ahead, HCPF seeks to leverage and expand the existing infrastructure to support the transition to automated Meaningful Use reporting for Medicaid providers. Continuation of this work is a strong component of Medicaid's implementation of APMS. Additionally, in the IAPD, HCPF requested funds for a dedicated position to oversee transition of the eCQM solution to OeHI, which will eventually take responsibility for the eCQM solution.

OeHI has secured $450,000 in funding approved by the Centers for Medicare and Medicaid Services to continue eCQM Data Governance activities in State Fiscal Year 2019-2020. OeHI will convene an eCQM Data Governance committee to build on the work of the SIM eCQM Data Governance committee.

Stakeholders interviewed by CHI recommended that the following data governance activities be sustained and fully implemented after the conclusion of SIM:

- Establish criteria for and oversee processes that ensure data are trusted, valid, consistent, and useable for approved use cases. The committee has developed

and implemented a validation framework for the eCQM solution in the SIM use case. The framework should be evaluated, revised as needed and applied to future use cases;

- Ensure data are protected at all stages of the process. Although data security was described as a shared responsibility between all eCQM stakeholders, the committee is charged with ensuring tested mechanisms are in place to uphold security. This includes defining who has access to data, at what stage in the process, and for what purpose. The committee should establish a standard process to define these parties that can access data such that it that can be modified, documented, and monitored for new use cases;
- Create guidelines for resolving disputes or disagreements among data submitters, technical partners, and data users. This may include establishing criteria for determining accuracy thresholds (cited in the Governance Report) as well as creating a framework for an appeals process. The committee would be charged with facilitating this process as needed or requested, according to the use case. For example, some payers may have their own processes for appeals and may not delegate or empower the committee with this task;
- Oversee the addition of new measures and the removal of existing ones. This may include establishing criteria, parameters, and timelines for adding and deprecating measures, as well as providing guidance on prioritization; and
- Provide a venue that encourages and facilitates measure alignment across payers and programs.

Status of Data Aggregation Key Activities

The following table describes the final status of the key activity related to data aggregation included in the Award Year 4 terms and conditions.

DATA AGGREGATION KEY ACTIVITY	STATUS	LOOKING AHEAD
 Create an HIT solution that builds on SPLIT to integrate clinical data with claims data.	While SIM originally envisioned having a single solution that aggregated clinical and claims data, development of a single solutions proved infeasible. Instead, SIM has developed and launched an eCQM solution that automates extraction for eCQMs from practice EHRs. To aggregate claims data, SIM extended access to Stratus™. 120 SIM practices are using the eCQM solution and 198 have activated their Stratus™ licenses.	OeHI will ultimately take responsibility for the eCQM solution and has secured $450,000 in funding for future data governance activities. HCPF is requesting funds in its IAPD to support future build out of the solution, onboarding of additional practices and transition to OeHI.

Leveraging Existing Infrastructure

Maximizing Health Information Exchange:

Onboarding SIM providers to HIEs for data submission was a priority for the SIM HIT investment. At the time of the Award Year 4 Operational Plan, approximately 84% of practices in cohorts were connected to HIEs in varying degrees. Extending HIE services to SIM practices was necessary to promote the secure and efficient exchange of data across providers. The SIM Office worked with CORHIO, QHN and HCPF to enhance state information exchange infrastructure and provide practices with more clinical information about their patients. Colorado is leveraging HITECH funds for onboarding providers to bridge this gap by paying for onboarding fees. High costs of system interfaces, limited practice resources and ongoing HIE subscription costs present ongoing challenges to HIE expansion.

SIM also promoted the use of HIEs through the "Shared Care" report pilot, which provides visibility into where a practice's patients are receiving care, regardless of practice connection to a HIE.

HIE KEY ACTIVITY	STATUS	LOOKING AHEAD
 Support SIM practices and bidirectional health homes in connecting to HIEs	Approximately 267 SIM primary care practices and two CMHCs are connected to HIEs.	CORHIO and QHN will continue to promote connection to HIEs. PTOs providing CHITA support will also continue to promote HIE connection beyond the conclusion of SIM.

Consent Management:

42 CFR Part 2 poses HIT challenges for behavioral health data sharing due to the granularity of data segmentation that is required. In order for substance use treatment information to be shared, the following conditions must be present:

- The substance use treatment data must be segmented from data only covered by HIPAA;
- The treatment data must be linked to the correct patient;
- The consent forms must be linked to the correct patient and indicated providers or organizations;
- The consent form must be able to be updated by the patient at any time; and
- The consent data must be stored in a standardized format.

As a result of these challenges, HIT stakeholders identified a need for consent management. Consent requires a patient to grant, revoke and to be able to see who has accessed his or her substance use data. To meet these requirements, a practice must offer the following:

- An up-to-date list of health care providers the patient can select;
- An up-to-date list of people who would be granting consent; and
- A centralized location to store the who, what, when for the consent process.

Obtaining consent at the point of care is considered the most effective approach.

To better understand behavioral health data sharing barriers and potential state-level solutions, the SIM Office convened state agencies and their legal representatives, subject matter experts, providers, representatives of HIEs and behavioral health advocacy groups. The SIM Office facilitated conversations between stakeholders and the Substance Abuse and Mental Health Services Administration (SAMHSA) to clarify the regulation. The SIM Office researched initiatives in other states aimed at improving the consent management processes and coordinated a convening with the architects of the California State Health Information Guidance for Sharing Behavioral Health Data in order to learn from their process.

Stakeholders have identified the following steps to support consent management:

- Identifying variations in consents used around the state;
- Obtaining provider, consumer, legal, and other expert opinions as a foundation for developing the approach;
- Leveraging Colorado resources such as work done by CORHIO and QHN as sources for consent management;
- Harmonizing consents to develop common process/forms that can be used statewide;
- Ensuring that the process for obtaining consent is well-integrated into providers' workflow;
- Incorporating behavioral health data when appropriate;
- Considering creating incentives to adopt the statewide consent approach;
- Researching the consent processes that other states have developed for statewide use;
- Including considerations for consent requirements for cross-state sharing of information;
- Involving key stakeholders in coming to consensus around a consent approach that would be used statewide; and
- Providing education and outreach to providers and consumers relating to consent processes, options and the impact of data governance.

In July 2019, the SIM Office submitted a memo to the Attorney General's office with recommendations about how to improve behavioral health data sharing in Colorado.

Consent Management Sustainability:

The Attorney General's Office hired a Chief Innovation Officer who started an internal workgroup focused on clarifying regulations surrounding data sharing, including 42 CFR Part II. One of OeHI's funded initiatives from the Colorado Health IT Roadmap is consent management. OeHI's efforts will focus on the technical aspects of standardizing consent while the Attorney General's Office will focus on a legal framework to operationalize 42 CFR Part II for the State.

Status of Consent Management Activities

The following table describes the final status of the key activity related to consent management listed in the Award Year 4 terms and conditions.

CONSENT MANAGEMENT KEY ACTIVITY	STATUS	LOOKING AHEAD
 Clarify state and federal regulations around data sharing, privacy and confidentiality, and patient consent	The SIM Office worked with stakeholders to identify barriers, facilitated conversations with SAMHSA to clarify regulations and held a convening with architects of California's State Health Information Guidance for Sharing Behavioral Health Data.	The Attorney General's office will continue to lead an internal workgroup to address clarification of data sharing laws. OeHI will continue to focus efforts on developing the technical aspects of standardizing consent.

Broadband Expansion:

The original SIM proposal acknowledged having adequate broadband capacity was crucial for providers to advance coordinated care and to fully engage in other components of the SIM HIT strategy, including telehealth. However, many sites across Colorado, particularly in rural regions, do not have access to broadband of a sufficient speed and quality to provide critical health care services. The first SIM operational plan outlined a vision for expanding access to broadband to 300 sites in rural or underserved communities. In April 2017, Governor Hickenlooper launched the Office of Broadband with the goal of expanding broadband coverage from 70% to 100% by 2020. SIM's vision for expanding broadband to 300 practice sites aligned with this goal.

To achieve its vision, the SIM Office contracted with CTN, the state consortium leader in administering federal dollars to help eligible health care entities get access to broadband connectivity. CTN leverages the Federal Communications Commission Rural Health Care Program's Healthcare Connect Fund (HCF), an annual $581 million federal fund, to administer these subsidies. Sites that participate in the HCF receive up to a 65% subsidy on broadband expenses and network equipment.

To be eligible to receive funds, sites must be one of the following:

- A post-secondary educational institution offering health care instruction, such as teaching hospitals or medical schools;
- A community health center or health center providing health care to migrants;
- A local health department or agency;
- A community mental health center;
- A not-for-profit hospital;
- A rural health clinic, including mobile clinics;
- A dedicated emergency room of a rural for-profit hospital; or
- A Skilled Nursing Facility.

Subsidies can be used to support any advanced telecommunications or information service that enables sites to post their own data, interact with stored data, generate new data, or communicate, by providing connectivity over private dedicated networks or the public Internet for the provision of HIT-related purposes. While sites can apply directly for the funds, the application process can be a time consuming and daunting task for many practices, and the cost for doing this work out-of-pocket is simply not an option more often than not. As a result, Colorado SIM engaged CTN to support practices in accessing HCF subsidies by:

- Conducting on-site technical readiness assessments;
- Assessing practices for subsidy eligibility;
- Maintaining relationships with HIEs to understand and assist facilities with requirements;
- Developing processes for completing and filing required forms; and
- Providing administrative support and technical assistance to health care providers.

SIM also partially funded an outreach manager position at CTN to scale its outreach efforts and encourage more practices to apply for HCF subsidies. In order to achieve maximum impact throughout the state, practice sites did not need to participate in SIM practice transformation cohorts to receive assistance.

Major Accomplishment

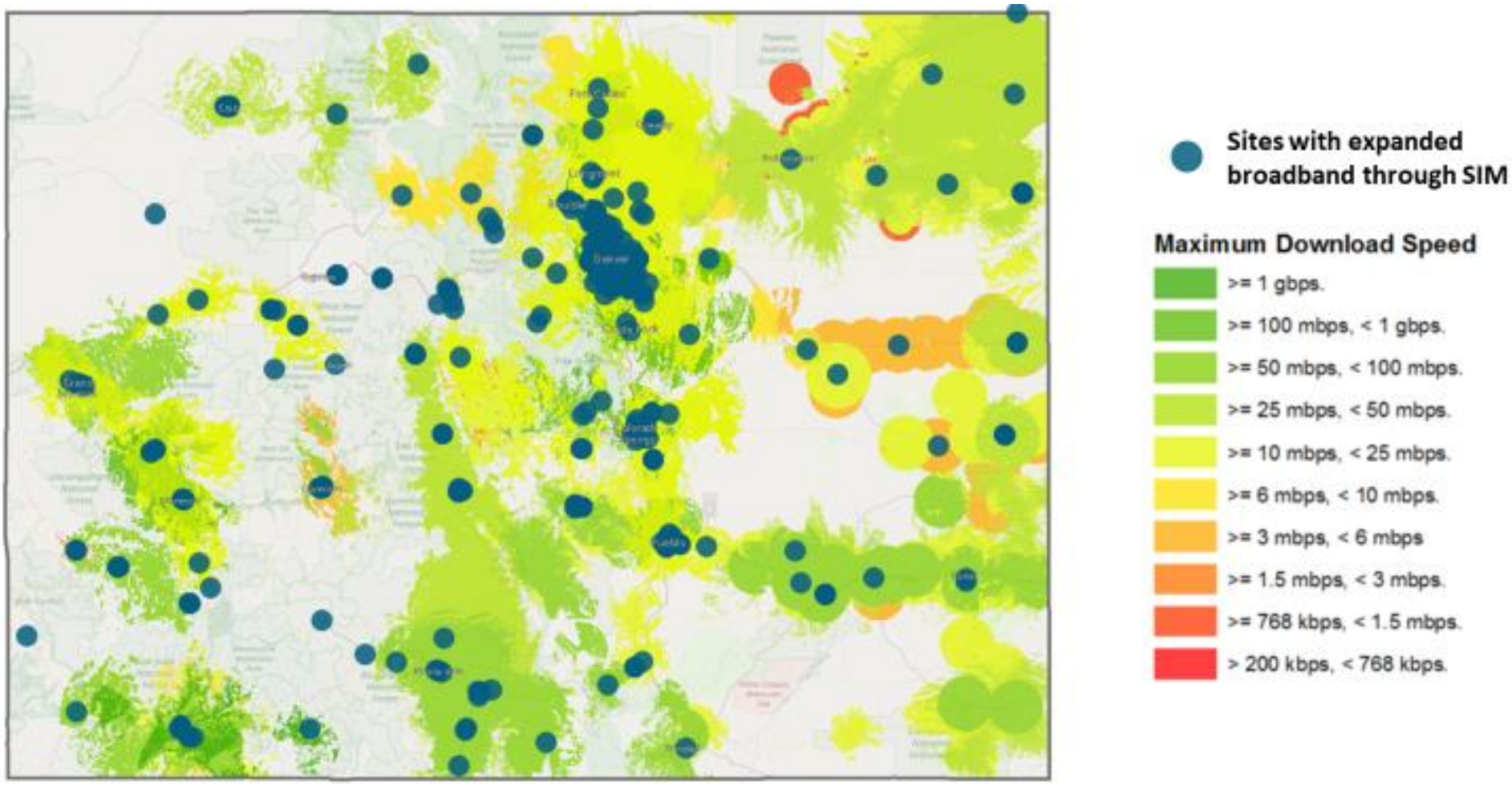
Thanks to a successful partnership with the Colorado Telehealth Network, SIM surpassed its goal of expanding broadband to 300 practice sites by 27%. CTN helped disburse $21,057,379 in federal funds to 381 practices, many of which focused on underserved populations. These practices are now better equipped to provide integrated care, including through e-consults and telehealth services.

Of the 381 sites that were connected, 122 were Community Mental Health Centers, 93 were Federally Qualified Health Centers, 90 were Rural Health Centers, 14 were School Based Health Clinics, and five were Local Health Departments. Thirty-two sites participated in a SIM practice transformation cohort. The map on the following page indicates the sites in Colorado with expanded broadband through SIM.

Broadband Sustainability:

SIM's broadband investment built upon existing efforts, allowing CTN to rapidly scale up. CTN will continue to provide services beyond the end of SIM. Broadband expansion through CTN will be sustained at a pre-SIM level by the Colorado Behavioral Healthcare Council and the Colorado Hospital Association, the two organizations that established CTN in 2008. CTN will not continue to employ an outreach manager, requiring a reduction in outreach efforts, but will continue to offer support for practices that seek it. Because practices are now aware of the funding opportunity and experienced in applying, CTN predicts that sites will continue to use the program and benefit from expanded access to broadband. CTN will continue to take a leadership role in the expansion of last-mile broadband services to rural health care sites.

Colorado Broadband Expansion



Data Sources: Sites with expanded broadband through SIM provided by the Colorado Telehealth Network in final report dated 6/17/19; Maximum Download Speed data from State of Colorado Broadband Mapping Program Interactive Broadband Coverage Map at https://gis.colorado.gov/broadbandviewer/index.html?Viewer=broadbandmapping.broadbandmapping_hv accessed 7/9/19, maps updated April 2019 using data current as of December 31, 2018.

Telehealth/e-Consult:

The original SIM proposal noted the significant opportunities emerging technologies offer related to expanding and improving the provision of integrated care. In particular, telehealth can provide an important mechanism for reaching populations that face geographic barriers to accessing care, extend services to homebound individuals, and connect primary care and behavioral health providers in settings where colocation is not feasible. SIM defines telehealth as healthcare services exchanged between patients and providers through telecommunications systems, including real-time interactions between patients and providers (i.e., video conferences).

SIM faced significant challenges and delays in developing and implementing a cogent telehealth strategy. As described below, shifts in the telehealth landscape, difficulty building consensus, challenges with procurement processes and competing deadlines impeded progress.

Since the original SIM proposal was submitted, the legislature passed HB 15-1029, which removed statutory barriers to the statewide use of telehealth in Colorado. Starting on January 1, 2017, health plans were required to reimburse providers who deliver care through telemedicine on the same basis as care delivered in person. As a result, the Colorado telehealth landscape has changed extremely quickly, but with little coordination, making it difficult for SIM to settle on a strategy that would coordinate statewide efforts.

While SIM initially envisioned creating Telehealth Resource Centers, an environmental scan in award year 2 revealed that SIM resources would best be put to use on other endeavors. In award year 3, the SIM Office recognized that additional information gathering was necessary to supplement the environmental scan, due to the rapidly growing and changing nature of the telehealth industry. In response to this need, the SIM Office convened a group of subject matter experts (SMEs) to guide the development of a telehealth strategy. This group included members who directed telehealth programs at various healthcare systems, providers who deliver services via telehealth, and other industry leaders who have worked extensively in the field and have a deep understanding of the telehealth environment in Colorado. The group met biweekly throughout the no cost extension period to inform a Request for Proposals for a telehealth solution that would be released in October 2017.

However, the SIM Office determined that many of the recommendations of the SMEs were duplicative of other efforts and ultimately unsustainable. As a result, the SIM Office pivoted its strategy to align with Medicaid's telehealth priorities, which are aimed at expanding e-Consults. E-Consults enable health care providers to consult remotely with specialists through secure platforms to exchange health information and discuss patient care. Typically, providers who are involved in e-Consults initiated

in primary care settings send written reports to a patient's treating/requesting provider with recommended treatments or referrals for care.

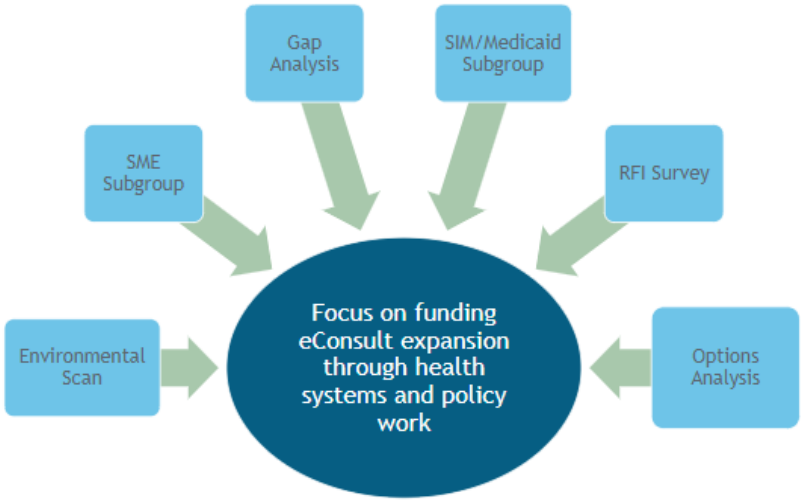
Due to promising evidence of cost-savings and improved health care access in other states such as Oklahoma through the Doc2Doc study and in Connecticut through the Community e-Consult Network, HCPF implemented a pilot with primary care and rheumatology, which ended in 2016. HCPF concluded that an e-Consult and referral program, developed with robust evaluation and quality metrics, can enhance appropriate access to specialty care while avoiding unnecessary visits. Development of this program would enable the Colorado Regional Accountable Entities to better coordinate care for patients, who require in-person consultations. An essential component of this solution is to build capacity within the specialty networks in Colorado to serve the Medicaid population.

Lesson Learned

The SIM Office invested in stakeholder consensus-building activities throughout the initiative and realized that while efforts engaged subject matter experts, it was more effective to select a narrow focus that aligned with Medicaid's investment in e-Consults.

e-Consult Strategy:

The SIM Office completed a gap analysis and worked with HCPF to release an Information Request in December 2017. In an options analysis that followed, stakeholders ranked a telehealth strategy that focused on e-Consults to improve access to behavioral health and specialty care as the best path forward. The SIM Office also convened a subgroup of SMEs that included Medicaid to inform strategy development. This diagram demonstrates the various inputs that led the SIM Office to focus on e-Consults as a central part of its telehealth strategy:



As a result of information gathered and stakeholder feedback, the SIM Office decided to fund a strategy that would achieve the following goals:

- Expand capacity of health care specialists to serve frontier, rural and underserved communities, especially Medicare and Medicaid populations;
- Improve capacity to manage populations and conditions within the primary care setting by partnering with Regional Accountable Entities, SIM practices and health care entities;
- Improve coordination between e-Consult programs to promote technical compatibility between systems;
- Enhance patient experience through improved coordination of care;
- Develop meaningful measurements and reporting of program outcomes;
- Improve cost effective care delivery and better patient outcomes while reducing unnecessary specialty services; and
- Improve population health outcomes through improved access and timeliness of health care services.

Request for Proposal:

The SIM team released a request for proposal (RFP) in October 2018 to fund three health systems with up to $250,000 to plan for and start implementing an e-Consult program that would increase access to specialty care and treatment using technology, with a focus on Medicaid and Medicare clients. SIM funds would be used by awardees to create an implementation plan, partner with primary care providers outside their current network in rural and frontier areas, and convert e-Consults to in-person visits when it is deemed medically appropriate. Up to $100,000 of the total award to each agency could be spent directly on technology. The following qualifications for potential awardees were outlined in the RFP:

Mandatory Qualifications:

- Must be a healthcare entity with an established specialty care and treatment network with capacity to partner with primary care practices in rural, frontier, and underserved areas to provide e-Consultation and follow up services, and in-person follow-up care as necessary;
- Plan to improve access to specialty care in rural, frontier, and underserved areas, including partnering with primary care providers outside of their usual network of physicians who meet the definition of rural, frontier, and underserved, for the purposes of connecting these providers to an e-Consult platform with follow up as needed;
- Demonstrate engagement with the Regional Accountable Entity;

- Have a network of specialty care providers for the intended e-Consult services located physically within Colorado and have capacity to follow up as needed for in-person referrals. A back-up source of specialty providers may be from a regional or national location if needed.

Preferred Qualifications:

- Currently serve Medicaid and Medicare clients, and should continue to serve Medicaid clients for the term of the contract. Medicaid and Medicare clients should make up at least 25% of the patient population; and
- Demonstrate support from executive leadership and stakeholders.

The RFP was open from October 18 - November 19, 2018. The SIM Office anticipated implementation to occur between February and June 2019. While the SIM Office planned to fund three health systems, there were an insufficient number of applicants to do so. When the SIM Office released the application, it was unaware that a major deadline for the Hospital Transformation Program was occurring the same week. Due to competing priorities and the short application window, many systems that may otherwise have applied did not have the capacity to do so. Additionally, some potential applicants expressed hesitation concerning the limited period of time in which the award had to be implemented.

Selected Health Systems:

The SIM Office ultimately funded MindSprings Health to build a psychiatry e-Consult program to serve the western slope and the University of Colorado School of Medicine will expand its e-Consult program, which includes 15 adult specialties and 12 pediatric specialties, outside of its network to support a federally qualified health care system. In June 2019, both awardees were required to submit an implementation plan based on the Implementation Logic Model from e-Consult toolkit out of California. The implementation plans are available as Appendices E4 & E5.

Sustainability of the e-Consult Strategy:

Both MindSprings Health and the University of Colorado School of Medicine are planning to expand their e-Consult programs beyond the end of the initiative. MindSprings is renegotiating their contract with their Regional Accountable Entity to include funding for e-Consult services. The School of Medicine will fund future expansion with Upper Payment Limit dollars received through Medicaid. Leadership at HCPF has expressed strong support of e-Consult expansion and is considering how to advance this work.

Status of Telehealth Activities

The following table describes the final status of the key activity related to telehealth in the Award Year 4 terms and conditions.

TELEHEALTH KEY ACTIVITIES	STATUS	LOOKING AHEAD
 Support expansion of broadband to 300 sites throughout the state.	SIM exceeded this goal and connected 381 practice sites to broadband.	Practices with access to expanded broadband will continue to benefit from this improvement beyond the end of the SIM initiative. CTN will support expanded broadband to new practice sites.
 Expand telehealth with a focus on electronic consultations to improve access to behavioral health/ specialty care.	SIM invested $500,000 to support expansion of e-Consult programs at MindSprings Health and the University of Colorado School of Medicine.	Both health systems have created a telehealth implementation plan and have identified funding to continue e-Consult expansion beyond the end of SIM.

Workforce

Overview

Providing integrated care in primary care settings requires a different set of skills, knowledge and attitudes than doing so in traditional models. SIM focused on building the capacity of providers to successfully deliver care on high-performing teams that address whole-person health. From the beginning, the SIM Office recognized that Colorado has a robust academic training environment that includes Colorado-based universities, colleges and educational institutions. By the start of the SIM initiative, many schools had already developed special training programs or initiatives to support team-based primary care, behavioral health integration and interdisciplinary training of health professionals.

However, the SIM Office also received feedback that programs were often fragmented and inconsistent in their approach to training. Furthermore, several providers said that while they saw a high degree of integration *within* behavioral health teams, with mental health providers, social workers, and addiction counselors collaborating, they often struggled to integrate physical and behavioral health services. Furthermore, many regions, including rural areas, faced a shortage of providers in specific behavioral health specialty areas including psychiatry and professionals with pediatric expertise.

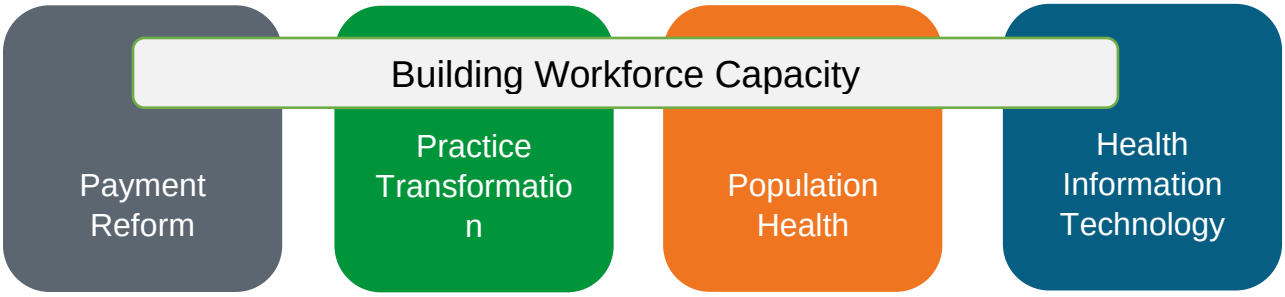
SIM prioritized building on workforce development and planning efforts and provided a valuable forum for continued collaboration and coordination of these initiatives. The SIM Office also led efforts to develop new training opportunities for practitioners in the field. SIM ensured that all efforts were aligned with eight core competencies and various priorities identified at the beginning of the initiative. This approach helped to ensure alignment between various partners and providers. SIM funded work in collaboration with the Colorado Department of Public Health and Environment (CDPHE), the Office of Behavioral Health (OBH) and the University of Colorado Department of Family Medicine (UCDFM) to bolster provider education through e-learning modules and an Integrated Behavioral Health Certificate of Completion. Collectively, these resources reached thousands of providers and will continue to provide value after SIM ends.

Resources developed to help train the integrated care workforce will be beneficial for the State in the future. All training modules will be free and available to the public via the UCDFM platform and the OBH webpage. Furthermore, the Area Health Education Centers (AHECs) will promote SIM-developed trainings and resources

through its scholars programs. Recommendations and lessons learned, which were compiled in key documents such as the "Thinking Beyond 2019: Sustaining Integrated Behavioral Health in Colorado" report will guide future workforce efforts.

Workforce as a Cross-Cutting Activity

With increasing workforce shortages in Colorado, which amplifies barriers to care especially for rural, low-income, and underserved communities, the SIM Office approached this issue from a multi-sector lens. While it is not an independent pillar, workforce was identified as a cross-cutting dimension that transcends every pillar of the initiative and is essential to sustaining SIM's work. While these should not be taken as a comprehensive scope of activities, examples of how SIM approached workforce can be found below. More detailed information about each activity can be found in the corresponding chapters of this report.



Payment Reform:

SIM offered business consultation supports to enhance skills and help practices develop value propositions, which could be used to negotiate APMs. This support was bolstered through participation in SIM-funded Multi-Stakeholder Symposiums (MSS), in which payer representatives engaged with practice representatives. The skills and relationships fostered during SIM will continue to be of value to practices as they negotiate value-based payment models.

Practice Transformation:

Twenty-one practice transformation organizations (PTOs) were approved to manage practice facilitators and clinical health information technology advisors to SIM cohort practices. SIM invested in a "train-the-trainer" strategy to build on the existing workforce rather than recreate it, to increase alignment across multiple groups and programs, and to help sustain efforts. PTOs worked with practice quality improvement teams to ensure that process improvements and data collection efforts were implemented using a plan, do, study, act (PDSA) process based on activities and milestones in the building blocks.

Population Health:

Regional Health Connectors (RHCs), a workforce focused on connecting primary care practices with community resources, took different approaches based on the unique needs of their communities. During the initiative, RHCs developed and strengthened nearly 3,000 relationships and became hubs of connection and knowledge.

Health Information Technology:

Electronic consultations (e-consults) are a component of telehealth services that enable health care providers to consult remotely with specialists through a secure platform to exchange health information and discuss patient care. E-consults improve the workforce capacity of primary care and specialists by allowing primary care providers to practice at the top of their license and avoid unnecessary specialty visits for patients, which reduces wait times for in-person appointments and expands access to specialists in rural or underserved areas.

Workforce Governance

Interagency Partnership with the Office of Behavioral Health:

The SIM Office entered into an inter-agency agreement with OBH at the Colorado Department of Human Services (CDHS). OBH was engaged to lead development and dissemination of educational opportunities that support behavioral health integration. To this end, OBH used SIM funding to support the following positions:

- Behavioral Health Integration Specialist; and
- Health System Specialist.

In addition to leading the efforts outlined below, the OBH team presented about SIM-related work and activities to over 700 stakeholders. Audiences included social work students at the University of Denver and Cherry Creek School District, Colorado Rural Health conference attendees, Public Health in the Rockies attendees, SIM Collaborative Learning Session participants, and others.

Workforce Workgroup:

Established as one of Colorado SIM's original eight workgroups, the Workforce workgroup met throughout the initiative to assess and plan for the development of the workforce needed to effectively deliver integrated care. Specific objectives of the workgroup were to:

1. Make recommendations regarding minimum standards and qualifications, credentialing, training, and job descriptions for new positions within the workforce;

2. Offer guidance on the best manner of delivering training to existing providers in order to promote successful integration of behavioral and physical health; and
3. Propose strategies that create a common language in the way that existing, but largely unregulated positions interact through integration efforts in Colorado.

The workgroup was supported by the SIM population health and workforce program manager. The group engaged stakeholders representing provider organizations, educational programs, state agencies, foundations, and mental health providers.

Workforce Education Subcommittee:

Recognizing that workforce training and education was a key focus of the SIM initiative, OBH and the SIM Office convened an education subcommittee, which included representatives of OBH, CDPHE, the University of Denver Graduate School of Social Work (GSSW) and UCDFM. The group played a critical role in planning and implementing various training activities, including the following:

- eLearning modules;
- Face-to-face trainings;
- Behavioral Health Training Consortium annual meeting;
- Dissemination of Best Practice Guidelines;
- Planning for the Best Practice Symposium;
- Coordinating collaborative presentations at local and state gatherings; and
- Involvement in planning the Collaborative Family Healthcare Association national conference.

Workforce & Education Workgroup:

The SIM population health and workforce program manager sat on the Workforce & Education workgroup, convened by the Colorado Department of Labor and Employment (CDLE) with the goal of aligning workforce needs with the educational system in Colorado. The group looks beyond traditional postsecondary education to programs such as registered apprenticeships, work-based learning opportunities and certificate programs to create a pipeline that is responsive to and meets the needs of the Colorado labor market. The population health and workforce program manager used input from this group to guide implementation of SIM-supported initiatives.

Workforce Development Council's Healthcare Sector Partnership:

The Colorado Workforce Development Council has launched various sector partnerships through a framework that fosters industry-driven alignment across economic development, workforce development and education. The SIM population health and workforce program manager regularly participated in phone calls with the health care sector partnership.

Governance Structure	Future Vision
SIM-funded Positions at OBH	These positions will not continue beyond SIM.
SIM Workforce Workgroup	The SIM Workforce workgroup held its last formal meeting in March 2019. A core group of experts from OBH, CDPHE, UCDFM and the University of Denver have committed to holding quarterly consortium meetings to support the core competencies and promote state policy efforts related to the behavioral health workforce.
SIM Workforce Education Subcommittee	The Workforce education subcommittee worked collaboratively to translate the core competencies concept into a curriculum used for the sustained delivery of training. The group developed an instructional handbook to accompany the delivery of future training.
CDLE Workforce & Education Workgroup	The CDLE Workforce & Education workgroup will continue to meet beyond the end of SIM.
Workforce Development Council's Healthcare Sector Partnership	The sector partnership will continue to meet beyond the end of SIM.

Partnership with Colorado Health Service Corps

The Colorado Health Service Corps is a student loan repayment program, administered through CDPHE's Primary Care Office, which offers incentives for providers to work in health professional shortage areas throughout the state. Increased funding for the program was provided by Senate Bill 18-204, which passed in 2018 in response to opioid use and substance use disorder trends and workforce shortages in predominantly rural areas. The goal is to increase the number of behavioral health care providers in underserved areas, which would increase access to care and improve health outcomes. As access to care is a key priority of the SIM initiative, the director of the Colorado Health Service Corps for CDPHE was an integral member of the Workforce workgroup and acted as a conduit of information for stakeholders to remain apprised of program developments and key findings. This partnership was key, as the provider directory developed by CDPHE allowed for a data-informed assessment of community health clinician capacity to determine where shortages exist. The Colorado Health Service Corps has enjoyed some key successes: 77% of alumni have been retained at eligible clinic sites, and 92.9% of active participants report an intention to stay at the clinic site for at least a year after the contract.

Identification of Workforce Priorities

Consensus Conference:

On November 17, 2015, SIM supported and participated in a Consensus Conference, which brought Colorado-based universities, colleges, and educational institutions together to develop common standards for behavioral health providers working in primary care. A team led by Dr. Benjamin Miller, chair of the SIM Workforce workgroup, reviewed input from the conference participants and identified eight Core Competencies for Behavioral Health Providers Working in Primary Care.

1. Identify and assess behavioral health needs as part of a primary care team: Behavioral health (BH) providers apply knowledge of cognitive, emotional, biological, behavioral, and social aspects of health, mental health and medical conditions across the lifespan. They incorporate their clinical observations into an overall, team-based primary care assessment that may include identifying, screening, assessing and diagnosing.

2. Engage and activate patients in their care: BH providers engage patients in their care, helping them understand how their BH factors affect their health and illness, and how the BH aspects can be integrated in a team-based care plan.

3. Work as a primary care team member to create and implement care plans that address BH factors: BH providers work as members of the primary care team to collaboratively create and implement care plans that address BH factors in primary care practice. These factors may include mental illness, substance use disorders and physical health problems requiring psychosocial interventions.

4. Help observe and improve care team function and relationships: BH providers help the primary care team monitor and improve care team function and collaborative relationships. By knowing their own and others' roles, they help the team pool knowledge and experience to inform treatment, engage in shared decision-making with each other and with patients and share responsibility for care and outcomes.

5. Communicate effectively with other providers, staff, and patients: BH providers in primary care communicate effectively with providers, patients and the primary care team with a willingness to initiate patient or family contact outside routine face-to-face clinical work. BH providers communicate in ways that build patient understanding, satisfaction and participation in care.

6. Provide efficient and effective care delivery that meets the needs of the population of the primary care setting: BH providers in primary care use available time and effort on behalf of the practice population, setting prioritized agendas (with roles and goals) with patients and the team, managing brief and longer patient encounters effectively, and identifying areas for immediate and future work with appropriate follow-up care for which BH availability is maintained.

7. Provide culturally responsive, whole-person and family-oriented care: BH providers in primary care employ a biopsychosocial model – approaching healthcare from biological, psychological, social, spiritual and cultural aspects of whole-person care, including patient and family beliefs, values, culture and preferences.

8. Understand, value, and adapt to the diverse professional cultures of an integrated care team: BH providers act in ways consistent with a collaborative culture and mission of primary care with an attitude of flexibility. BH providers adapt their work style to meet patient needs while building confidence and comfort in working in primary care culture, with providers and medical situations.

The competencies were reviewed by participants during a December 2015 convening of the SIM workforce workgroup and key stakeholders. The Farley Center for Health Policy produced a final report on each of the competencies. After extensive vetting and review by the Workforce workgroup, the SIM Office adopted the competencies to guide future workforce capacity work. The SIM Office set the stage for continued investigation of how this investment could be sustained. Workforce workgroup members will lead discussions and work with CDHS to implement.

Recommendation

Future workforce initiatives related to integrated care continue to rely on the eight Core Competencies for Behavioral Health Providers Working in Primary Care. Future initiatives should also prioritize building consensus around common standards and objectives early on to ensure coordinated movement toward shared goals.

Integrated Behavioral Health Training Consortiums:

First Consortium:

In November of 2016, the University of Denver's Center for Professional Development and the GSSW collaborated with the Colorado Health Foundation to host an inaugural meeting to discuss the status and future of Integrated Behavioral Health (IBH) training across the state. Four main themes were presented for consideration:

- Strengths within the IBH training landscape;
- Gaps and identified areas for improvement;
- Potential opportunities for resource collaboration; and
- Goals and action items to support IBH training.

The SIM Workforce workgroup co-chairs participated in the IBH consortium. Michael Talamantes, LCSW, acted as a facilitator for the consortium and Benjamin Miller, Psy.D., presented on the Eugene S. Farley, Jr. Health Policy Center and the University of Colorado School of Medicine's workforce-related efforts. They discussed the

importance of incorporating a standard set of competencies into integrated healthcare training and introduced the eight competencies.

Second Consortium:

In February 2018, the IBH Consortium reconvened at GSSW for an event titled "Thinking Beyond 2019: Sustaining Integrated Behavioral Health in Colorado." The agenda was built around workforce issues, with emphasis on the unique needs of the rural communities in Colorado, training and education, especially related to special populations, and sustainability efforts for integrated behavioral health. Speakers helped illuminate these issues and guide discussions. A pre-event survey was distributed to invitees to provide a snapshot of integration efforts taking place in Colorado's IBH communities related to the aims of the consortium. The survey included items to elicit perspectives to guide discussion topics during the meeting.

More than 30 stakeholders attended and made the following six recommendations:

1. Develop centralized infrastructure to provide leadership for integrated care in Colorado after SIM ends;
2. Advocate for alternative payment models to facilitate integration;
3. Focus on the education and training of all practitioners who work in integrated care;
4. Improve consumer education and engagement related to integrated care.
5. Provide ongoing advocacy and dedicated support to improve access to an IBH-qualified workforce in rural Colorado communities.
6. Provide ongoing statewide opportunities to promote collaborative networking, problem-solving, and creating solutions.

Recommendations were published in a final report, which included an analysis of the landscape related to each recommendation and proposed action steps that helped guide the last year of SIM.

Delivery of Workforce Training

SIM recognized the importance of developing high-quality, evidence-based training for individuals working in team-based care settings. Guided by the eight core competencies and feedback from the consortiums, the SIM team partnered with OBH, UCDFM and CDPHE to ensure that training was developed and disseminated across the state with a focus on rural areas. It was delivered through the following mechanisms:

A Mother's Connection:

OBH developed and provided information and resources about pregnancy and substance abuse for SIM practices. Resources were made available at A Mother's Connection. A letter containing materials identifying a contact person at OBH was

distributed to key stakeholders, health organizations, and professionals in the behavioral health and primary care sectors. Materials will continue to be available on the Mother's Connection website beyond the end of the SIM initiative.

State Guidelines - Psychotropic Medications for Children and Adolescents:

Children and youth who come to the attention of the child welfare system have disproportionately high rates of emotional and mental health challenges and are often prescribed psychotropic medications. In 2017, OBH worked with the Office of Children Youth and Family to distribute new State Guidelines on Psychotropic Medications for Children and Adolescents in Colorado's Child Welfare System. The guidelines were updated to reflect newer prescribing data, new guidelines and treatment algorithms, and to reflect changes in national standards. OBH created a video promoting the guidelines and distributed the document to practices in SIM and all applicable OBH contacts. The OBH video module was hosted on the UCDFM eLearning Management System platform in July of 2017. OBH intends to update the guidelines in 2021.

Collaborative Learning Sessions:

During the course of the initiative, SIM supported 14 Collaborative Learning Sessions (CLS) across the state with more than 3,000 clinicians, practice staff, behavioral health providers and other stakeholders in attendance. The CLS events provided valuable forums for primary care practices, CMHCs, regional health connectors (RHCs) and other partners to share best practices and learn from industry experts. Further information about the CLS can be found in the **Practice Transformation chapter** of this report.

eLearning Modules:

Colorado SIM partnered with OBH, the Practice Innovation Program through UCDFM and CDPHE to create and deliver online e-Learning Modules. To date, 21 modules are available for primary care practices in Colorado, ten modules developed by OBH, eight modules developed by the Practice Innovation Program team and three developed by the Practice Innovation Program team for CDPHE. These Modules were intended to help patient-care team members understand and work with whole-patient health needs, and how to work in an integrated care setting. The module content demonstrates how teams can work collaboratively to integrate both medical and behavioral health perspectives, relying on the expertise of all team members.

OBH staff, the SIM Office, and workgroup members identified topics for training modules by reviewing various workforce studies, agency priorities, and the environmental scan conducted by the Population Health work group (see the **Population Health chapter** for more information). The list of modules includes:

OBH:

- Caring for People with Intellectual & Developmental Disabilities in the Primary Care Setting;
- Early Childhood Development in Primary Care;
- Psychological Trauma & the Integrated Care Team;
- Psychotropic Medications - Children & Adolescents;
- Substance Use Disorder Part I: Introduction;
- Substance Use Disorder Part III: Opioids;
- Whole-Person Care for the Aging and Senior Patient;
- Delivering Whole-person care for the Deaf and Hard of Hearing Patient;
- Delivering Whole-person care for our Veterans;
- Provider Burnout and Resilience;

Practice Innovation Program:

- Introduction to BH for Primary Care;
- BH Providers and the Care Team;
- Integrated Workflow;
- Adverse Childhood Experiences;
- Patient Engagement and BH;
- Alcohol Screening and Treatment in Primary Care Part I: Evidence-Based Guidelines;
- Alcohol Screening and Treatment in Primary Care Part II: Implementation Strategies; and
- Depression, Distress & Anxiety.

CDPHE:

- Obesity & Depression;
- Men & Depression; and
- Adverse Childhood Experiences Study (ACES).

Dissemination:

SIM encouraged provider education partners to align educational opportunities. While OBH originally considered hosting the modules on LADDERS, a learning management system used by CDHS for other purposes, OBH staff determined that LADDERS did not provide the functionality needed to properly host the modules. Recognizing a value in consolidating all e-learning modules funded by SIM into one central platform, OBH and CDPHE determined that their modules would should be uploaded onto the e-learning platform hosted by UCDFM. All interactive modules are currently hosted on that site and are available for credit. At the end of each training module, the user can complete a post-knowledge skills assessment to confirm individual mastery of the learning outcomes as they relate to each core competency. Successful completion of

the post-knowledge skills check results in a module-specific certificate of completion. The user can then use the certificate to apply for continuing medical education or continuing education units.

In addition, OBH made "flat" content from its modules available to the public online via its behavioral health workforce development webpage. While the OBH page does not offer the interactive components of the modules available on the UCDFM platform, it does help ensure that key content from each module is broadly accessible by the public.

672 users have completed SIM e-Learning modules

Given the unique challenges faced by rural regions in Colorado, OBH loaded video content onto 600 thumb drives. Distribution of the drives was targeted at areas of the state that have inadequate broadband to support online access to the full training modules. To date, 672 users have completed at least one e-Learning module.

Sustainability:

The Practice Innovation Program will host the 21 e-Learning modules for at least one-year post-SIM funding and is looking to sustain the use of the e-Learning modules through offerings to other organizations, such as the AHEC Scholars program (mentioned below), that would pay for access to the modules. Modules will continue to be available, both on the CDHS website and through the UCDFM platform beyond the term of the SIM initiative.

IBH Training Bundle:

Rather than encouraging learners to complete modules in a one-off, fragmented approach, OBH sought to ensure that learners were encouraged to access the modules in a way that would cover each of the eight core competencies developed at the beginning of the initiative. While the SIM Office originally envisioned creating an endorsement for providers working in an integrated care setting, providers expressed concerns about requiring completion of yet another formal credential. As a result, OBH shifted its strategy to developing a "training bundle" that would cover the eight core competencies.

The training bundle initially contained six modules. However, as OBH expanded content and received feedback from providers that they would like the opportunity to tailor training to their specific needs, OBH added four core modules and two elective modules. To receive the certificate, learners must complete the following core modules:

- Introduction to Behavioral Health for Primary Care;
- Integrated Workflow;
- Behavioral Health Provider and the Care Team; and
- Patient Engagement and Behavioral Health.

Learners must then complete at least two of the following topic-specific electives:

- Substance Use Disorders Part I and II;
- Screening, Brief Intervention, Referral for Treatment (SBIRT);
- Psychological Trauma and the Integrated Care Team;
- Depression, Distress and Anxiety;
- Opioids;
- Whole-person Care for the Aging and Senior Patient;
- Men and Depression; and
- Obesity and Depression.

Upon completion of all six modules, users are issued a Behavioral Health Certificate of Completion.

IBH Best Practices Training Symposia:

OBH sponsored two IBH Best Practices Training symposia to promote completion of the IBH training bundle. The first symposium was simultaneously hosted at the following six locations across the state on November 2, 2018:

- GSSW;
- Durango (AHEC Scholars Program);
- Alamosa (San Luis Valley Regional Health Center);
- La Junta (Otero Junior College and Health Solutions);
- Grand Junction (Rocky Mountain Health Plans); and
- Ft. Morgan (RHC).

By holding the event at various sites, OBH ensured maximum reach. Over 200 providers attended, and demand was so great that some providers were placed on a wait list. Attendees represented a wide range of agencies, including law enforcement, armed forces, homeless shelters, youth groups, InnovAge, tribal-communities, university/college student health centers, religious organizations, private practices, mental health centers, Federally Qualified Health Centers, and hospitals and health systems.

Lesson Learned

After hosting the first IBH Training Symposium, OBH recognized that students entering the workforce and seasoned professionals who are beginning to work on integrated care teams have different learning needs. As a result, OBH focused its second Symposium entirely on student learners, allowing them to tailor content and the pace of the training to new members of the workforce. The SIM Office recommends that in the future, trainings related to integrated care consider the specific needs of different workforce members based on their skills and experience.

On April 27, 2019, Colorado State University (CSU), in collaboration with OBH, SIM, GSSW and the Caring for Colorado Foundation hosted the second IBH Best Practices Training Symposium. The symposium was targeted at graduate students, and designed to cover the learning objectives of the IBH Best Practices Training Bundle. Pre-work was assigned in an effort to familiarize participants with topic specific content designed to foster integrated whole-patient care delivery. Content was tailored to meet the needs of learners who are preparing to join the integrated primary care workforce. Attendees participated in small group, interactive and inter-professional experiential learning activities, which were facilitated by practicing behavioral health providers in integrated care models. All participants who completed the symposium were awarded a Certificate of Completion issued by the Office of Behavioral Health.

Partnerships with Area Health Education Centers:

In order to promote continued use of the IBH training bundle, OBH partnered with Area Health Education Centers (AHECs) that participate in the AHEC Scholars Program, supported through HRSA. The program requires AHECs to provide training for health professions students in the following areas:

- Interprofessional Education;
- Behavioral Health Integration;
- Social Determinants of Health;
- Cultural Competency;
- Practice Transformation; and
- Current and Emerging Health Issues.

AHECs are using the IBH training bundle as a key method of delivering Behavioral Health Integration training through its scholars program. In 2018, the South Western Area Health Education Center (SWAHEC) was one of the six sites to host the first IBH symposium (mentioned above). However, due to long travel distances between providers in rural Colorado that made it difficult to convene in-person trainings, SWAHEC decided to switch to a “virtual only” training format. This delivery mechanism allows the greatest number of providers to benefit from the content of the IBH Training Bundle. SWAHEC is disseminating IBH bundle virtually via a Canvas Platform made available to those students in the AHEC Scholars Program. Students get access to the bundle, which can be used as a step toward completing the AHEC

program. This program is intended to continue after SIM and will include the IBH training bundle in the future.

IBH Best Practices Instructional Handbook:

OBH used feedback from the IBH Training Bundle to create an instructional handbook that can be used by other agencies that want to offer similar trainings in the future. It includes the following topics:

- Learning objectives;
- Intended audience;
- Delivery mechanisms; and
- Planning considerations.

The handbook is included as Appendix F1, and will remain available as a resource for future trainers beyond the end of SIM.

Major Accomplishment

More than 225 learners have received the IBH certificate of completion. By offering the training bundle in a variety of formats (online and in-person) at locations around the state, SIM maximized use of the training. Demand for the IBH training bundle remains high, with individual practices.

Specialized Support for Practices:

SIM initially envisioned providing the IBH Training Module onsite at larger practices that wanted to train members of integrated care teams and selected three practices to test their approach. After speaking with practice leadership, it became evident that specific gaps and challenges existed that were unique to each practice. OBH shifted its strategy to providing tailored support based on each practice's needs.

Doctors Care: Doctors Care is a non-profit organization dedicated to improving health access for low-income individuals in the South Metro Denver area. The organization offers primary care, behavioral health, and dental services, as well as wrap-around supports, such as assistance obtaining health coverage. Since Doctors Care operates on a largely volunteer model with part-time providers, the organization faces significant turnover. As a result, Doctors Care leadership had trouble consistently orienting new providers to the value of integrated care and its core competencies. In response to this gap, OBH worked with Doctors Care to produce an onboarding video explaining the role of integration in the Doctors Care clinic. The content framed the Core Competencies and set expectations for providers coming into the care teams.

In addition to producing the video, OBH made recommendations regarding six new billing codes that apply to provision of short-term behavioral health services in primary care settings. Recommendations can help Doctors Care provide behavioral health services in a sustainable fashion.

Finally, OBH reviewed over 300 pages of patient education materials that Doctors Care was using to support patient understanding of a variety of topics, including behavioral health. Finding that the materials were only available in English and written in a complex manner, OBH made recommendations on how these materials could be improved to be understood at 4th grade reading level. Doctors Care intends to continue using the video, billing code recommendations and improved patient education materials beyond the end of SIM.

Boulder Community Health: Boulder Community Health is a community owned-and-operated not-for-profit health system dedicated to providing local access to high-quality medical care to people and businesses in Boulder and surrounding areas. When OBH met with the integrated care team, their primary concern focused on provider burnout. Most members of the OBH care team had already completed the IBH Training bundle and found it to be useful. As a result, OBH directed the team to the Physician Burnout module, which is currently not a core part of the training bundle. The Human Resources department is currently exploring how to incorporate the training into the onboarding process. OBH has also been working with Boulder Community Health to explore opportunities for placing all IBH modules within Boulder Community Health's own learning management system, so it is more easily accessible to providers.

Associates in Family Medicine: Associates in Family Medicine is a private practice with locations around Northern Colorado. Conversations with staff involved making recommendations regarding how Human Resources could incorporate the eight core competencies into onboarding documents and trainings.

Screening, Brief Intervention, Referral to Treatment:

Integrated care involving physical and behavioral health providers can identify health concerns related to substance use disorders earlier, thus reducing costs and improving outcomes. Screening, Brief Intervention, Referral and Treatment (SBIRT) is a critical avenue for improving outcomes in this arena. However, SIM stakeholders expressed concerns that many practices faced significant challenges implementing SBIRT, which affected potential uptake and influence. There was also limited communication between stakeholders and agencies engaged in SBIRT, which led to a lack of coordination and duplication of efforts. As a result, SIM convened thought leaders in this arena, and tasked OBH with surveying sites using SBIRT and those that had not yet implemented SBIRT to determine barriers to its use and implementation.

SBIRT Survey:

The survey was developed through the SIM Workforce workgroup subcommittee for education in collaboration with OBH staff members, SIM staff, and CDPHE's primary care team. The survey was conducted between October 2017 and March 2018. A total of 11,084 surveys were distributed cumulatively in the three rounds using United States Postal Services addresses obtained through the CDPHE Primary Care Directory. The survey was targeted at licensed medical and behavioral health providers in Colorado who were delivering direct patient care in integrated primary care settings.

While the accuracy of addresses in the Primary Care Directory proved a significant obstacle to receiving survey responses, OBH ultimately collected 415 completed surveys.

An analysis of survey responses revealed the following barriers to implementing SBIRT:

1. Limited access to behavioral health services and providers for referrals;
2. Logistical issues related to provider and practice capacity (e.g., lack of time, scheduling and privacy);
3. Poor integration and barriers related to electronic medical records;
4. Concerns about negative patient reaction to changes in practice and workflow; and
5. Limited patient motivation to address alcohol or drug use.

OBH also identified common themes and made the following recommendations.

Theme: Limited access to behavioral health services and providers for SBIRT referrals, such as logistical issues related to provider and practice capacity (e.g., lack of time, scheduling, and privacy).

Recommendations:

- Continue strengthening and expansion of workforce placement and capacity for onsite and local behavioral health referrals.
    - Expanded virtual access to behavioral health providers and services for health professional shortage area across the state as defined in C.R.S. 18-024, 25-1.5-502 Definitions.
    - Strategic expansion and location of residency, fellowship, and internship placements that complement the expanding Colorado Health Service Corps Program managed by the Colorado Department of Public Health and Environment (CDPHE) Office of Primary Care.
    - Innovative and cost effective expansion of supervision for social workers and other behavioral health care providers, as defined in C.R.S. 25-1.5-502, during clinical and internship experiences in areas identified as shortage areas across the state.
    - Consider proposing a specific partnership between the Office of Behavioral Health, the Colorado Department of Public Health and Environment, Colorado Department of Higher Education, the Colorado Department of Labor, the Colorado Workforce Development Council to create a strategic plan that will address workforce shortages.
- Continue developing funding strategies for transforming practices.
    - Support expanded access to behavioral health services for medical providers in workforce shortage areas.
    - Increase opportunities for reimbursement.

    - Align payment coding with integrated behavioral health workflow (e.g., SBIRT) in the primary care practice setting.
- Expand training for providers, practice managers, and other relevant staff to increase general workforce knowledge that can lead to maximization of reimbursement.
- Continue to study and expand coding to support SBIRT workflow.

Theme: Computer based technologies (e.g., software, Electronic Health Records, etc.)

Recommendations:

- Continue developing new and relevant tools for practices (e.g., software systems and platforms) that better meet the day-to-day needs of integrating physical and behavioral health providers.
- Expand communication and relational training for team members to better facilitate and utilize workflow, scheduling needs, maintain patient records, and maximize reimbursement.
- Study and make recommendations for multi-direction, HIPAA compliant, release forms to support referral for treatment.
- Develop standards of practice recommendations that support the inclusion of all relevant staff in HIPAA compliant access to patient records to ensure reliable referrals.

Themes:

- Concerns about negative patient reaction to changes in practice and workflow.
- Limited patient motivation to address alcohol or drug use.

Recommendations:

- Implement and streamline workflow protocols that support SBIRT.
- Communicate multi-directionally - between SBIRT team members - to track, and monitor care planning, treatment and patient compliance.
- Support patients as team members of the SBIRT team to strengthen and encourage compliance.
- Survey and consider patient satisfaction to inform reduction of barriers to SBIRT services delivery models.
- Expand provider education to reduce fear and debunk myths around the potential of reduced patient compliance due to integrated SBIRT services.
- Study and consider trauma informed care practices as they may apply to education for integrating medical and behavioral health providers.

- Create SBIRT Tool Kit to encourage full involvement of practice staff leading to shifts in practice culture that support SBIRT workflow.
- Expand current understanding of a "progression toward health" approach to fostering health patient behaviors.

Coordinating SBIRT Stakeholders:

Prior to the SBIRT survey, Colorado worked on SBIRT for many years and was awarded two separate grants within the last decade that led to the creation of the SBIRT Advisory Council. Although this council was disbanded, SIM reconvened stakeholders for a forum to encourage cross-agency collaboration. The convening included state agencies, community-based organizations and practices with the intention of understanding the SBIRT landscape, facilitating collaboration and avoiding duplication of efforts. In the second quarter of Award Year 4, the Office of Community Engagement out of the Colorado Attorney General's Office and Peer Assistance Services, Inc. reestablished the SBIRT Advisory Council and aligned with other state efforts, such as the Substance Abuse Trends and Response Task Force. Furthermore, the Colorado Department of Health Care Policy and Financing (HCPF) continues to increase the number of providers who use SBIRT protocols in their practices. HCPF spends $1,500,000 annually for provider training conducted by Peer Assistance Services, Inc. In Summer 2019, the SIM Office sent a memo to the Attorney General's Office recommending that the office lead cross-agency collaboration with stakeholders to advance SBIRT work in the future.

Partnership with Metro State University

Colorado SIM worked with the Metropolitan State University (MSU), Department of Social Work to improve workforce capacity. MSU and CSU received funding from Health Resources and Services Administration to provide education to social work students in the field of health care including integration. The SIM Office provided perspectives on integration in Colorado and acted as a spotlight agency in a class on social entrepreneurship. Students studied SIM goals, heard from three members of the SIM team and made recommendations regarding how to continue the work of SIM as part of their final assignment.

ITMATTTRs2

The OBH project manager led the OBH components of ITMATTTRs2. Hosted by the UCDFM, ITMATTRs2 gives incentives to providers to obtain their Drug Enforcement Administration (DEA) X waiver required to prescribe medication assisted treatment. The goal is to expand waiver training in primary care practices across the state with a focus on regions where opioid use and addiction is most burdensome. Given the synergies between ITMATTTRs2 and OBH, the OBH-SIM Project Manager acted as the grant manager for ITMATTTRs2.

The following table described the future vision for the activities described above.

Workforce Training	Future Vision
A Mother's Connection	OBH will continue to maintain A Mother's Connection website and make resources available beyond the end of the SIM initiative.
State Guidelines for Psychotropic Medications	Given the positive feedback around the 2017 guidelines, OBH anticipates updating the guidelines again in 2021.
E-Learning Modules	The Practice Innovation Program will continue to host the 20 e-Learning modules for at least one-year post-SIM funding, from August 2019 through July 2020, at no cost on https://cuelearning.org/.
IBH Training Bundle	The IBH Training Bundle will remain available on the UCDFM platform. Learners who complete all modules can continue to request the Behavioral Health Certificate of Completion from OBH. The training bundle will also continue to be offered through the AHECs. Other agencies interested in offering the bundle can use the handbook to guide training.
Individualized Support for Practices	Practices will continue to use the resources OBH provided to help onboard and train staff beyond the end of the SIM initiative. For example, Doctors Care will continue to use the onboarding video to orient new members of the integrated care team.
SBIRT	The SIM Office sent a memo to the Colorado Attorney General's office requesting that they spearhead future SBIRT activities.
Partnership with Metro State University	This was a one-time partnership and will not continue beyond the term of the SIM initiative.
ITMATTTRs2	ITMATTRs2 will continue beyond the end of SIM.

Next Steps:

A meeting of workforce leaders convened on April 26 to discuss sustainability of SIM work to help address workforce shortages in the state, highlight providers trained to work in integrated settings, and support policy development. A commitment amongst consortium partners to continue to meet on a quarterly basis was obtained to focus on the following:

- Continued review and evaluation of core competencies.
- Evaluation of behavioral health workforce gaps.
- Support for integrated care models across the care continuum.

Status of Workforce Key Activities:

The table on the following page describes the final status of key activities related to workforce listed in the Award Year 4 terms and conditions.

WORKFORCE KEY ACTIVITIES	STATUS	LOOKING AHEAD
 Identify and address key barriers to implementing SBIRT	Colorado SIM collected survey responses from 415 providers regarding barriers to implementing SBIRT. Findings and recommendations were published in a final report.	Recommendations will remain available to organizations and providers engaging in workforce development activities.
 Disseminate resources for Behavioral Health Providers integrating into the primary care setting	Colorado SIM developed and disseminated 21 e-Learning Modules, an IBH Training Bundle, updated Psychotropic Medication Guidelines, and numerous other resources listed above.	Resources will remain free and available to the public via the OBH website. Colorado AHECs will also disseminate resources through the AHEC scholars program. UCDFM will continue to host online training modules.
 Identify and address workforce pipeline issues	The SIM Population Health & Workforce Program Manager participated in the Colorado Workforce Development Council's Healthcare Sector Partnership monthly check in calls, work with Governor's Workforce Cabinet, and collaborated with Department of Regulatory Affairs and the National Governors Association to develop strategies to best address identified issues.	The Polis Administration has created the Behavioral Health Taskforce to evaluate the entire behavioral health system of care. It is anticipated that workforce will be a priority for this task force. The Workforce workgroup members who are consortium partners will continue to assess pipeline opportunities.

Data & Evaluation

Overview

Monitoring and evaluation of initiative progress was a top priority of the SIM Office. Initially, the SIM Office underestimated the degree of coordination and staff support needed to manage clinical and claims data that was submitted by practices, payers and other partners. However, as the initiative progressed, the SIM Office hired dedicated staff who developed strong processes to support monitoring and evaluation as well as to establish a robust data governance process.

The following section provides a brief overview of the overall program monitoring and evaluation processes used by SIM. In particular, the chapter addresses the governance structure used to oversee program monitoring and evaluation. It then discusses the overall approach of monitoring the SIM initiative as well as the respective roles of the state-led evaluator (TriWest), actuarial partner (Milliman), the all-payer claims database (APCD) administered by the Center for Improving Value in Health Care (CIVHC) and the federal evaluator (RTI). Data related to each specific area of work have been included throughout the previous chapters as appropriate.

Due to the short time period in which evaluation and actuarial partners had to analyze the initiative, this report was produced concurrent to final reports from vendors. As a result, vendor will submit final reports separately to the Centers for Medicare & Medicaid Innovation (CMMI).

Data & Evaluation Governance

Evaluation Workgroup:

The SIM Office convened the Evaluation workgroup, which worked with evaluation partners throughout the initiative. Workgroup objectives included:

- Finalizing an external evaluation plan that assesses the effectiveness of SIM interventions outlined in the SIM proposal; and
- Creating a quantifiable set of metrics that measures processes and outcomes on both the individual and population level.

In addition to achieving these objectives, the workgroup also reviewed various pieces of the evaluation, including rapid cycle feedback reports and initial data findings. The group frequently made recommendations to other SIM workgroups based on these findings. As a result, the group played a critical role in guiding decisions across all pillars of SIM.

Colorado Health Evaluation Committee:

The Colorado Health Evaluation Committee (CHEC is an advisory group hosted by the Colorado Department of Healthcare Policy and Financing (HCPF) that, for the purposes of SIM, reviewed potential research focused analyses using SIM data and presented recommendations to the SIM Office or another designee. The committee included evaluation experts from within the state and from external agencies and organizations.

The CHEC review process focused on the following questions:

- Are the research and analysis questions relevant and important?
- Are the SIM program and the data generated appropriate to address the research and analysis questions?
- Are the proposed analytic methods suitable and correctly applied to address the research and analysis questions given the available data?
- Are the implications and conclusions consistent with the analytic results?

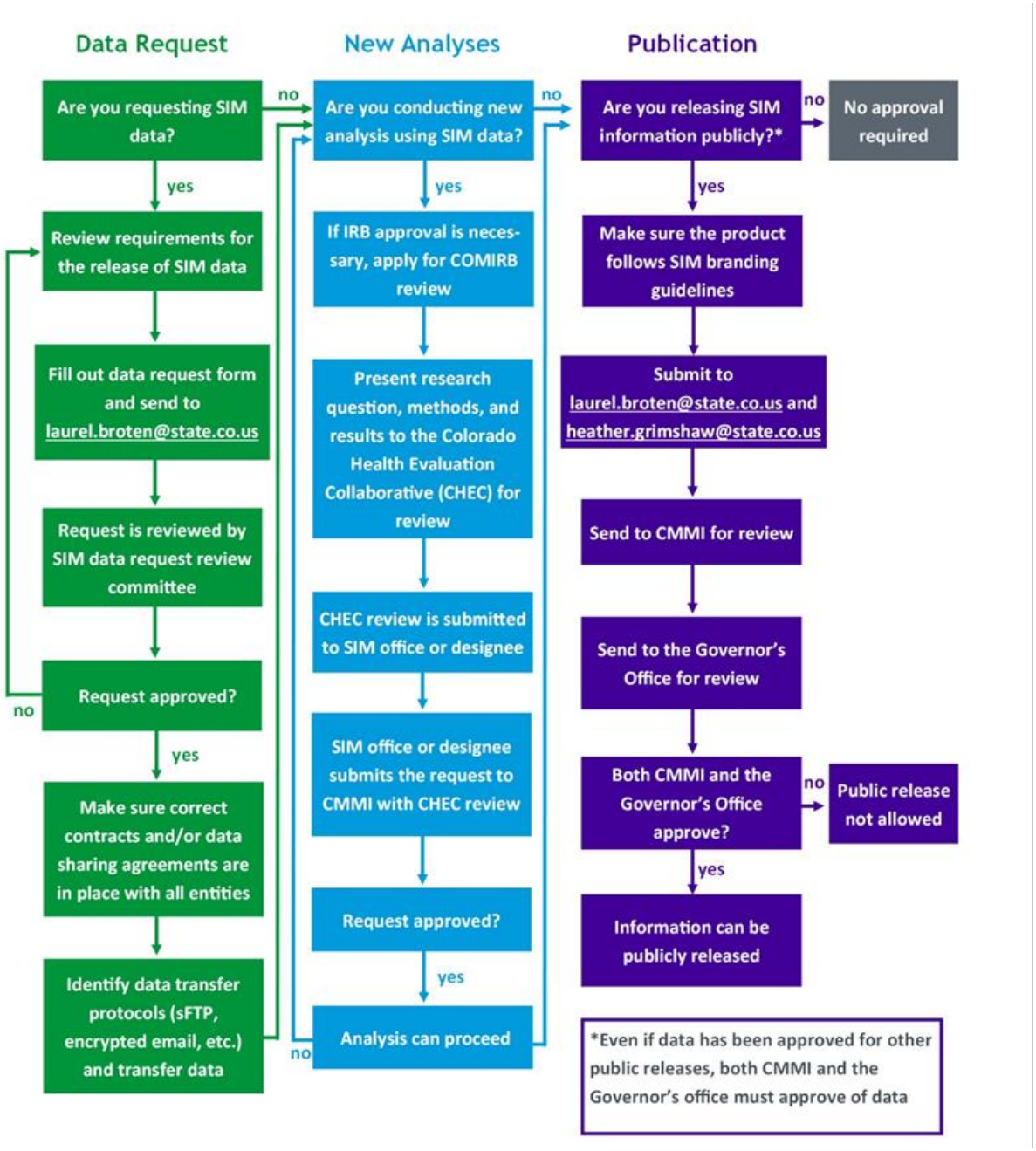
Data Review Process:

In order to preserve the integrity of SIM data and its use, the SIM Office in collaboration with the Evaluation workgroup and CHEC created a data use process (attached as Appendix G1). The process addresses the following data use scenarios:

- The data request review process for when partners request SIM data from the SIM Office;
- The research review process for when partners are planning on conducting research using SIM data and/or presenting SIM data at conferences in the form of posters or presentations; and
- Publication review for when partners are releasing SIM data publicly.

A flow chart of the processes is provided below:

SIM Data Review Process



Looking Ahead:

HCPF will be the owner of data post-SIM and will be responsible for reviewing all future requests. HCPF will continue to convene CHEC for this purpose, as well as to support other initiatives. Publicly-available evaluation data and key findings will be posted to the SIM website. All other data has been provided to HCPF via a shared drive.

Governance Structure	Future Vision
Evaluation Workgroup	CHEC has been identified as the new home for SIM's Evaluation workgroup. All workgroup members have been invited to attend bimonthly meetings and provide feedback on the data products produced with SIM-related data.
Colorado Health Evaluation Committee	HCPF will continue to convene CHEC beyond the conclusion of SIM. The chair of the Evaluation workgroup will continue to serve as the chair of CHEC.

Program Monitoring

To select core metrics that monitored the initiative's participation and outcome progress, the SIM Office engaged a variety of subject matter experts from across the state. This stakeholder-driven process was primarily led by SIM workgroups and was a key responsibility of the SIM Evaluation workgroup. In addition to collaborating with stakeholders, the SIM Office worked with partner agencies like the Department of Public Health and Environment (CDPHE), the Office of Behavioral Health (OBH), and the University of Colorado Department of Family Medicine (UCDFM) to pick valid metrics that accurately reflected the work Colorado undertook with SIM. This process resulted in metrics that used data related to each of the four pillars of SIM. Data was submitted by various partners and SIM participants. The SIM Office regularly met with CMMI program officers to discuss challenges with metrics, the retiring of some metrics and the additions of other metrics. A list of the final core metrics are included as Appendix G2.

Metrics were reported to CMMI quarterly through the Colorado Metric template. Inclusion of updated data in each quarterly metric template was dependent upon availability of the data. In addition to submitting the metric template, Colorado also created a data narrative to accompany each metric template submitted with notes about the specific metrics included, caveats about some data and information on data reporting delays. Both the final data metric template and the data narrative are included as Appendix G3.

The SIM Office prioritized collecting, reporting, and evaluating the core metrics and created the following positions within the SIM Office dedicated to quality control and improvement of all core metric data:

- Data and Evaluation Program Manager;
- Data Management Specialist;
- Data Coordinator/Analyst; and
- Data Strategy Coordinator.

These positions were responsible for coordinating with various data reporting partners to ensure accurate and timely delivery of data for evaluation and monitoring needs.

Claims Data

Administered by CIVHC, the APCD is the state's most comprehensive source of health care insurance claims information representing the majority of covered lives in the state. The APCD works in the following manner:

- A health care provider submits a claim for payment to the health insurance company or other payer (Medicare, Medicaid);
- This claim contains important information including charges, diagnosis, location, and services rendered;
- After processing the payment, the insurance company securely submits the claims information to the APCD; and
- CIVHC processes these claims and turns them into valuable information about how Colorado is paying for and receiving health care.

CIVHC support of SIM:

Throughout the initiative, CIVHC provided the following support related to claims data:

- Submitted quarterly limited APCD data extracts that have served as the core dataset for SIM evaluation by the SIM Office, Milliman and TriWest;
- Provided a limited APCD data extract each year, which has served as the core dataset for SIM's national evaluation partner, RTI (discussed below);
- Developed SIM patient attribution lists, utilizing the SIM Attribution Model. The patient attribution lists enabled comparison of cohorts by the SIM evaluators when the attribution model was applied to the entire APCD data set;
- Supported the Stratus™ Reporting tool through provision of Medicaid, Cigna and Medicare fee-for-service extract files;
- Delivered results for the SIM Claims-based Clinical Proxy Measures listed below:

    - Breast Cancer Screening;
    - Colorectal Cancer Screening;
    - Early Childhood Developmental Screening;
    - Screening for Future Fall Risk at Preventive/ Wellness Encounter;
    - Maternal Depression Screening;
    - Adult Obesity / Post-Diagnosis Follow-Up;
    - New Depression Diagnosis;
    - Substance Use Screening;
    - Tobacco Use Screening; and
    - Medication Management for People with Asthma;
- De-identified Community Mental Health Center patient finder files, enabling SIM partners to evaluate the Bi-Directional Integrated Care Model; and
- De-identified HCPF's Behavioral Health Organization Flat File, enabling SIM evaluators to analyze behavioral health administrative data for Medicaid patients

Data Improvements:

Efforts led by SIM have streamlined and strengthened the quality assurance processes for data feeds leading into the APCD. These improvements in quality assurance have been adopted by the APCD and will continue to better the quality of claims data beyond the life of SIM. In particular, data cleansing and quality checks have been improved through implementation of data quality assurance processes. These processes included: tracking of per member per month by payer code, detailed tracking of status of data files from payers, and completion of a Data Submission Quality Report. These reports were generated for the SIM team on a quarterly basis and submitted alongside the SIM data extract. CIVHC convened monthly meetings with TriWest, Milliman, the SIM Office and the chair of the Evaluation workgroup to discuss any areas of concern.

Data Expansion:

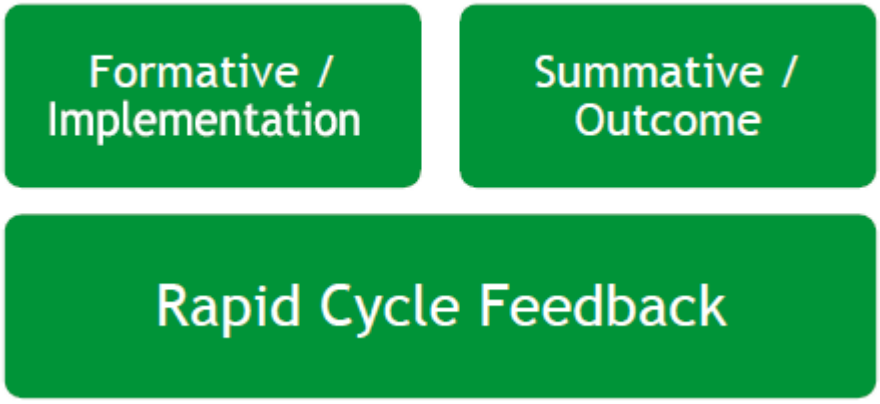
Beyond data quality, SIM has also assisted in the expansion of data included in the APCD. In an effort to provide the most complete set of data flows possible for practices to access in the Stratus™ tool, SIM planned to include Medicare data. As a result, the team began to explore the topic of securing qualified entity (QE) status for the Colorado APCD, which would enable it to receive Medicare claims data under Parts A, B, and D for use in evaluating provider performance. After months of coordination by CIVHC and SIM staff, the APCD was granted QE status and began reporting Medicare data.

Major Accomplishment

Due to achieving QE status, the APCD now includes Medicare data in its data aggregation processes. The APCD will retain this capacity beyond the conclusion of SIM, allowing it to offer more robust insights on cost, quality and utilization for future initiatives and use cases.

State-Led Evaluation

The SIM Office contracted with TriWest Group (TriWest) to oversee the state-led evaluation of the initiative in April 2016. SIM's evaluation approach included three major components: formative/implementation, summative/outcomes, and rapid-cycle feedback. TriWest provided quarterly rapid-cycle feedback reports that contained a progress implementation dashboard, some consistent measures such as clinical quality measures (CQMs), and a special focus each quarter. Quarterly rapid-cycle reports contained key process measures and practice Shared Practice Learning & Improvement Tool (SPLIT) assessment data analysis as available. Many of the reports also included practice vignettes that provided a deeper dive into qualitative data as well as field notes from a sample of practices that highlighted key issues, challenges and best practices. These rapid-cycle reports facilitated a continuous quality improvement process for the SIM Office and partners to identify short-term successes, challenges, opportunities for course correction and continued or additional support.



Recommendation

The SIM Office found the Rapid Cycle Feedback reports to be the most useful element of the state-led evaluation process. The reports regularly revealed opportunities for improvement. The SIM Office was then able to work with partners to address issues in a timely manner. Additionally, the reports allowed stakeholders to review the impressions of the evaluation team and correct any misperceptions. The SIM Office strongly recommends that future initiatives prioritize Rapid Cycle Feedback Reports as part of their evaluation process.

Key Informant Interviews:

In addition to utilizing the streams of data from various partners, practices, and payers listed above, TriWest conducted three rounds of key informant interviews and/or surveys with:

- Practice transformation organizations;
- SIM primary care practice sites;
- Community Mental Health Centers;
- Regional Health Connectors;
- Local Public Health Agency and Behavioral Health Transformation Collaborative grantees; and
- Other key stakeholders and partners.

This qualitative data supplemented the SPLIT assessment data and provided real-time, in-depth insights into SIM implementation. More information about the SIM Evaluation is included in the TriWest Process and Outcomes reports, submitted separately to CMMI.

Actuarial Analysis

The SIM Office contracted with Milliman to serve as its actuarial partner. Milliman calculated various cost and utilization measures on an aggregate basis and regularly reported them to the SIM Office. Milliman also created various other reports, including practice-level reports. However, issues related to data quality and delays limited the utility of these reports for individual practices. Milliman is submitting a final report to CMMI that estimates SIM healthcare cost savings and return-on-investment (ROI). The report addresses caveats and limitations regarding these estimates.

SIM has secured funds for ROI and cost saving/avoidance work to be done in 2020 but beyond this, the work is a one-time investment for the SIM initiative.

Federal Evaluation

The SIM Office helped support RTI, the federal evaluator, in gathering quantitative and qualitative data. The SIM Office facilitated access to data from CIVHC. CIVHC provided annual APCD extracts to the federal evaluation team that included data from all payers who submit data to the APCD, including the private and public payers participating in SIM. Extracts included claims data for all lines of business, age groups, regions, provider types and settings and procedure codes. CIVHC also created a composite person identification to serve as a common identifier across payers.

Additionally, the SIM Office helped to connect the federal evaluation team to key stakeholders. The SIM Office collaborated with HCPF to provide Medicaid client information to the federal evaluation team in order to facilitate consumer focus groups. HCPF's data team pulled data for beneficiaries attributed to SIM Cohort 1 practice sites, stratified by behavioral health organization (BHO) members and "non-BHO" members. The SIM Office also gave RTI access to SIM provider and key stakeholder information in order to facilitate key informant interviews and coordinate outreach to these stakeholders.

Sustainability

Monitoring and evaluation efforts were related specifically to SIM and will not continue beyond July 31, 2019. However, many of the processes related to data collection, attribution and analysis resulted in improvements that will be sustained after the end of the initiative. For example, improvements in data cleansing within the APCD has resulted in more reliable data, which will benefit future initiatives. Furthermore, the rich data set of CQMs and practice assessment data submitted by SIM practices may serve as the basis of future studies that can help inform practice transformation efforts down the road. Finally, the SIM Office anticipates that the estimated ROI published in the final Milliman report will demonstrate value to payers, practices and other partners, further catalyzing efforts that promote integration and movement toward APMs.

Status of Program Monitoring & Reporting Key Activities

The following table describes the final status of the key activity related to program monitoring listed in the SIM Award Year 4 terms and conditions.

MONITORING & REPORTING KEY ACTIVITIES	STATUS	LOOKING AHEAD
 Provide APCD & Medicare data for evaluation and reporting for AY4	The final extract from the APCD has been delivered to the evaluation team.	The APCD will no longer provider data to the SIM Office. However, the APCD now has QE status and will continue to aggregate Medicare, Medicaid, and private payer data in the future.
 Provide APCD cost & utilization data to SIM practice sites	SIM has successfully delivered APCD cost and utilization data to practices. The final reports were delivered on July 31, 2019.	These reports will not be created after SIM due to the coordination, cost and support needed to generate them. Practices will have the option to work directly with Milliman to purchase these reports.
 Conduct actuarial analysis to estimate cost savings/avoidance and Return on Investment	Milliman is submitting a final report to CMMI on July 31, 2019 that includes these estimates. SIM anticipates meeting or exceeding its goal regarding ROI.	SIM has secured funds for ROI and cost saving/avoidance work to be done in 2020 but beyond this, the work is a one-time investment for the SIM initiative.
 Conduct state-led evaluation to continually inform program efforts and estimate impact of Colorado SIM	Rapid cycle feedback reports were generated throughout the initiative. A final evaluation report is being submitted separately to CMMI.	Evaluation results will be available at https://www.colorado.gov/healthinnovation. These results can be used to inform future efforts in Colorado.

Conclusion

The SIM Office is thankful for the opportunity to test its bold vision of health care reform. This report reflects the work of countless stakeholders from across the state who gave their time, passion, and expertise to transforming innovative ideas into concrete progress. While the official initiative may have concluded, the SIM team is confident that the accomplishments, challenges, and lessons learned during implementation of the model provide a strong foundation upon which Colorado can build a healthier and more equitable future.