

UCHealth  
Community Health Improvement  
**Care Coordination Programs & Outcomes**

Medicaid Accountable Care Collaborative (MACC)  
Healthy Harbors  
Post-Partum Nurse Home Visit

presented by  
Stephen R. Thompson, LCSW  
November 6, 2019

**Thank you to all  
event organizers &  
community partners!**

**2019 THRIVING  
NOCO SUMMIT** 

*Stimulating Health Care Transformation in Northern Colorado*

---

**MEETING HOST:** North Colorado Health Alliance

**SPONSORS:** North Colorado Health Alliance, Sunrise Community Health, North Range Behavioral Health, Northern Colorado Medical Society, The Colorado Health Foundation, UHealth, Bank of Colorado, BBVA Compass Bank, NCMC, Inc., Northeast Health Partners, Pathways, Playcore, Roche Constructors, Inc., Summitstone, United Way of Weld County, Anderson & Whitney

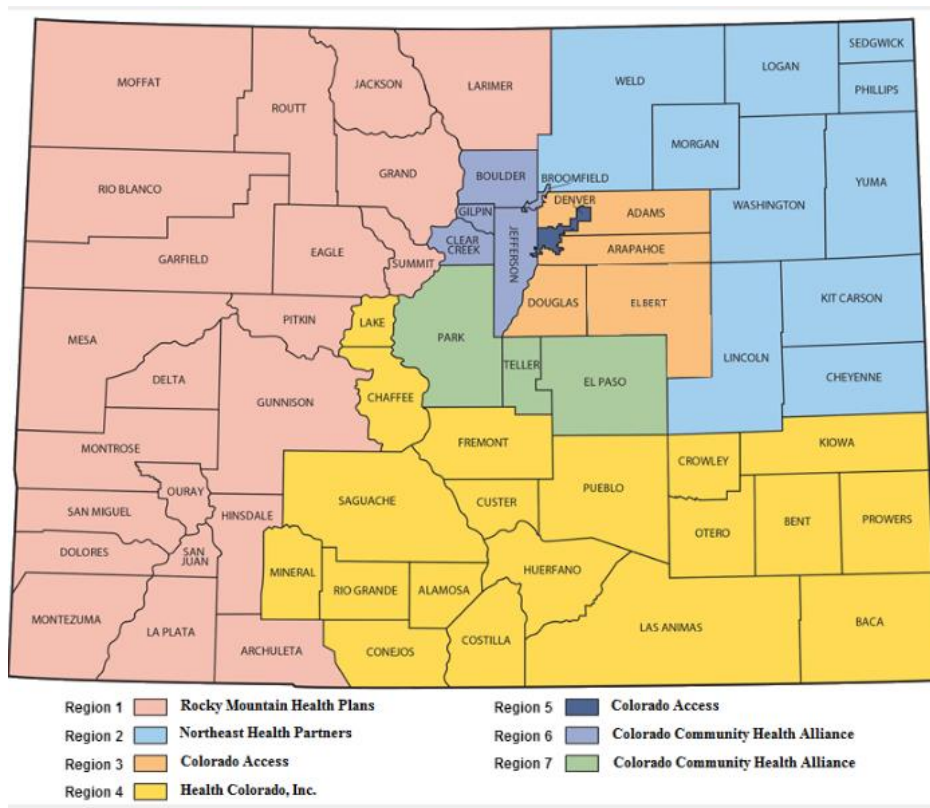
---

# Agenda for 2019 Thriving NOCO Healthcare Summit:

- Current state and brief history of the **Accountable Care Collaborative**, implemented by the CO Dept. of HCPF in 2011: from RCCO's to RAE's
- Regional overview of **community- and clinic-based care management resources**, programs, & teams (in Larimer County)
- **UCHealth care coordination programs**: MACC (Medicaid Accountable Care Collaborative), Healthy Harbors, and Post-Partum Nurse Home Visit programs
- **MACC & Healthy Harbors program outcomes**: quantitative and qualitative outcomes from a 3<sup>rd</sup> party program evaluation (conducted by TriWest, 2017-2019)
- Next steps (discussion): how are we collaborating effectively as community partners to improve health outcomes and stimulate healthcare transformation in northern CO?

# Past & Current State of Colorado's Accountable Care Collaborative (ACC)

## Regional Accountable Entities (RAE's) - regions as of July 2018



2011: HCPF implements the ACC. Overarching goals: improve health outcomes, access & coordination of care, and reduce potentially avoidable costs.

CO is divided into seven geographic regions, each overseen by a regional entity (initially RCCO's, now RAE's as of 2018).

Medicaid recipients are eligible for care coordination support through regional integrated community care teams (ICCT's), or through the RAE's directly.

2018-present: all Medicaid patients are mandatorily enrolled in the ACC (with no opt-out option), and attributed to a primary care medical home (PCMH).

PCMH's receive per-member, per-month payments from the RAE based on Medicaid enrollment and clinic tiering. PCMH's and the RAE's can receive incentive payments on key performance indicators.

# Regional Accountable Entities (RAE's), July 2018:

- RAE #1: Rocky Mountain Health Plans (western slope of CO + Larimer County, 22 counties total)
- RAE #2: Northeast Health Partners (Weld County, + NE CO counties, 10 counties total)
- RAE #3: Colorado Access (Douglas, Arapaho, Adams, & Elbert County, 4 counties total)
- RAE #4: Health Colorado, Inc. (SE Colorado, 19 counties total)
- RAE #5: Colorado Access (Denver metro area)
- RAE #6: Colorado Community Health Alliance (Boulder, Jefferson, Gilpin, Clear Creek, 4 counties)
- RAE #7: Colorado Community Health Alliance (Park, Teller, El Paso, 3 counties)

*How many Medicaid recipients are there in Colorado?*

*What percent of the statewide population is covered by Medicaid?*

*How many Medicaid recipients live in Larimer County? Weld County?*

## Overarching Goals of the ACC:

improve health outcomes

reduce potentially avoidable, preventable, and duplicative costs

improve member and provider experience

improve access to appropriate care in the right setting, reduce barriers to care

uhealth

# Larimer County Community-Based Care Coordination Programs & Teams

Where a Medicaid patient goes for *primary care* is the main triage point to determine which local care team supports a given patient.

## - UCHealth MACC & Healthy Harbors programs / team:

The MACC & HH programs work with patients who have a PCP at:

- o Associates in Family Medicine (AFM)
- o Family Medicine Center (FMC)
- o Salud Family Health Center (in Fort Collins)
- o UCHealth Medical Group (in Ft. Collins or Loveland)

## - North Colorado Health Alliance team (in Larimer County):

The NCHA team in Larimer County works with patients who have a PCP at:

- o Sunrise / Loveland Comm. Health Clinic (NCHA is based out of this clinic in Loveland)
- o Banner Health

## - Rocky Mountain Health Plans\* Larimer County team: (\*RMHP is also the region#1 RAE)

The RMHP team in Larimer County works with patients who have a PCP at:

- o Miramont Family Medicine, Ft. Collins Primary Care, Rocky Mtn. Family Physicians, etc.
- o Any other PCP clinic in Larimer County that the MACC-HH and NCHA teams do not cover
- o RMHP also works with Medicaid patients who do not have a PCP

# Larimer County Care Coordination / Care Management Resources

<b>UCHealth - MACC, Healthy Harbors, &amp; RN Home Visit programs:</b> (includes five SummitStone positions, eight clinical staff)	<b>17.7 FTE</b>
<b>Rocky Mountain Health Plans 'North Colorado Team', Larimer County:</b> (includes two RN's, one BH staff, & outreach coordinators)	<b>10.0 FTE</b>
<b>North Colorado Health Alliance (in Larimer County):</b> (includes one RN, & community health workers and care coordinators)	<b>9.0 FTE</b>
<b>Salud Family Health Centers (Ft. Collins) Care Managers:</b> (Salud clinic-based care managers)	<b>4.0 FTE</b>
<b>Associates in Family Medicine Care Managers:</b> (AFM clinic-based care managers, primarily LCSW's)	<b>8.0 FTE</b>
<b>Family Medicine Center Care Managers:</b> (FMC clinic-based RN care managers)	<b>2.0 FTE</b>
<hr/> <b>Total county-wide care mgmt. / care coordination resources:</b>	<b>50.7 FTE</b>

# MACC Program Overview

The UHealth **MACC (Medicaid Accountable Care Collaborative) program** provides intensive, community-based care coordination services & support to Medicaid patients who have complex medical, behavioral health, and community resource needs.

The MACC team works closely with primary, specialty, and behavioral health care providers to coordinate the patient's healthcare needs in an outpatient setting. MACC is fully integrated with AFM, FMC, Salud, and UHealth Medical Group in Larimer County, and is contracted with RAE#1 / RMHP.

## Criteria to consider for referring to the MACC program are:

- poorly controlled chronic medical conditions or co-morbidities
- high recidivism to the emergency dept. or hospital, or substantial risk for hospitalization
- barriers to accessing appropriate medical or behavioral health care; extensive resource needs
- complex community resource needs with multi-system involvement (legal, DHS, jail, etc.)

**2019 MACC staffing:** 11.8 FTE (includes 5 full-time SummitStone positions), 100% ACC funded

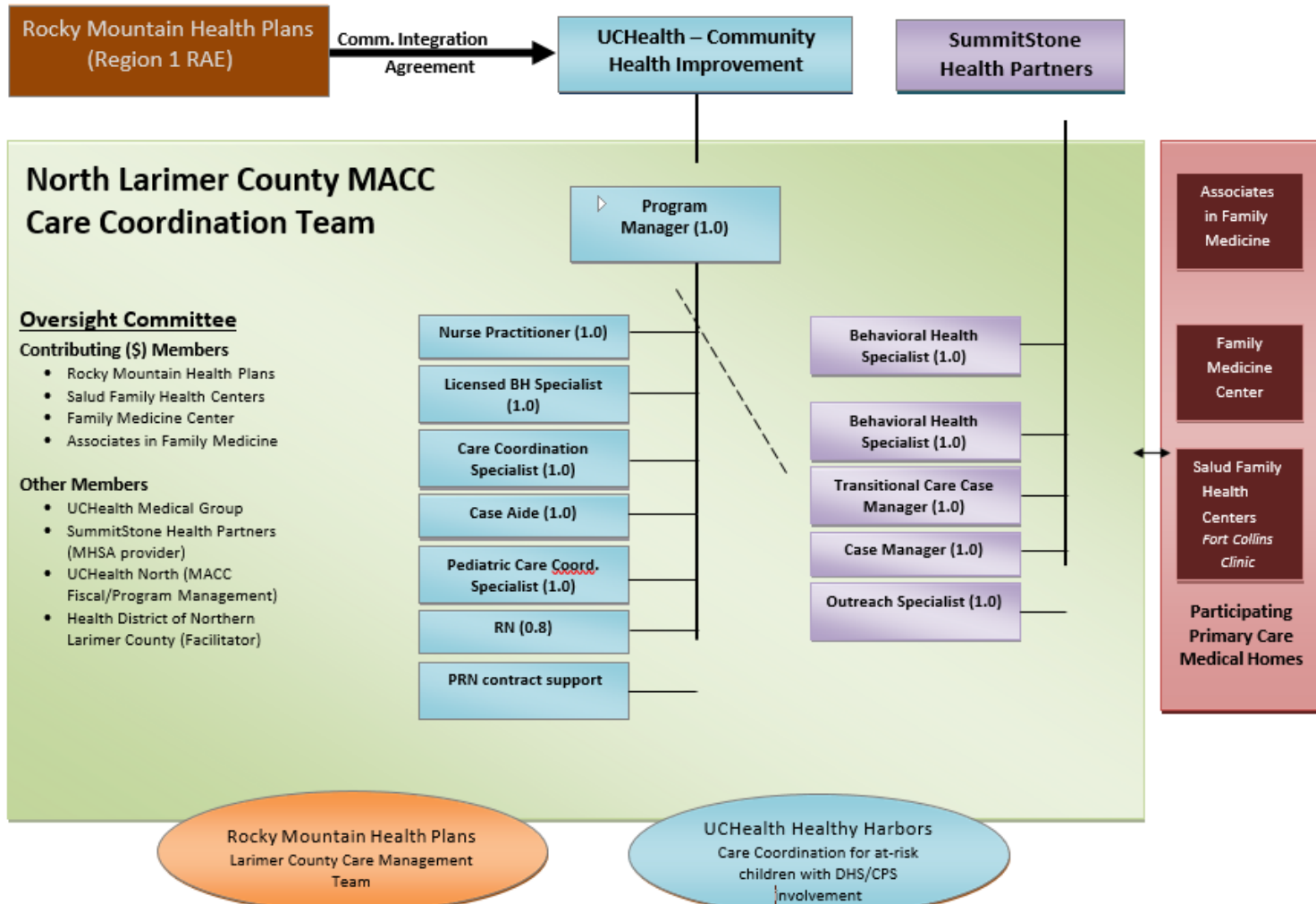
**Affiliate partners & clinics:** RAE#1/RMHP (\$), FMC (\$), AFM (\$), Salud (\$), SummitStone, UCHMG, Health District



# MACC Organizational Structure

Organizational Structure – November 2019

North Larimer County Medicaid Accountable Care Collaborative



# Healthy Harbors Program Overview

The **Healthy Harbors** program provides intensive, community-based care coordination services to at-risk children & families who are impacted by child welfare concerns. Larimer County DHS/CPS is a collaborative partner with Healthy Harbors.

Children with a history of formally reported welfare concerns are shown to have higher rates of chronic health conditions, hospital admissions, developmental delays, learning disorders, and behavioral health needs. Healthy Harbors care coordinators are able to...:

- attend primary care and specialty care medical appointments
- provide care management support & facilitate access to community resources
- obtain prior medical records, complete intake assessments for coordination with PCP
- create Health Passport documents for children with multiple out-of-home placements
- act as a liaison between medical & behavioral health providers and DHS / CPS caseworkers

**2019 Healthy Harbors staffing:** 4.3 FTE (1.4 FTE are ACC-funded)

**Affiliate partners & clinics:** RAE#1/RMHP (\$), FMC (\$), AFM (\$), Salud (\$), SummitStone, UCHMG, Health District, Larimer County Dept. of Human Services (CPS)

# Post-Partum Nurse Home Visit Program Overview

**Community Health** RN's make a one-time home visit to Medicaid infants & families discharged from PVH and MCR. If the infant and/or family is anticipated to have ongoing complex care needs, these RN's case easily refer internally to the MACC or Healthy Harbors programs.

- post-partum nurse home visits are offered to Medicaid infants and families
- nurses assess the newborn, provide lactation support, & communicate w/ the PCP
- community resource referrals are made or discussed for families as needed
- Referrals for ongoing care coordination can be made to MACC or HH *prn*

The **Larimer County Dept. of Health** is a collaborative partner of the program.

FY18-19 RN home visits: 700 home visits scheduled; 575 home visits completed

**Current staffing:** 1.6 FTE RN's, UCHealth-funded

**Affiliate partners:** Larimer County Dept. of Health, AFM, FMC, Salud, UCHMG

# MACC Team – Staffing and Historical Growth

- **October 2011:** **3.8 FTE** on original MACC team  
(Program Coordinator, Case Aide, Behavioral Health Specialist, Nurse Practitioner)
- **July 2013:** **5.8 FTE**  
(Two new Care Coordination Specialist positions added in July 2013)
- **July 2015:** **10.3 FTE**  
(FY14-15: ACC enrollment increases steadily, 4.5 FTE new expansion positions hired)
  - Full-time UHealth Pediatric Care Coordination Specialist
  - Full-time SSHP Case Manager, SSHP Licensed BH Specialist, SSHP Outreach Specialist
  - Half-time UHealth Community Health RN
- **July 2016:** **11.3 FTE**
  - Full-time SummitStone Transitional Care Case Manager position added
- **July 2018:** **11.8 FTE**
  - MACC NP and RN positions increased slightly

**Program funding:** MACC-affiliate clinics of AFM, FMC, and Salud contribute ~60% of total program funding; RAE#1 (Rocky Mountain Health Plans) contributes ~40% (\$1.08M annual budget, FY19-20)

# MACC / Healthy Harbors / RNHV Staffing

(as of November 2019)

## MACC (Medicaid Accountable Care Collaborative) program staffing:

Manager of Care Coordination Programs	1.0 FTE	Stephen Thompson, LCSW
SSHP* Licensed Behavioral Health Specialist	1.0 FTE SSHP*	Aaron Hill, LCSW, LAC
SSHP Licensed Behavioral Health Specialist	1.0 FTE SSHP*	Carolyn Wilson, LCSW, LAC
Licensed Behavioral Health Counselor	1.0 FTE	Ariana Iacobucci, DBH, LPC, LAC
Care Coordination Specialist	1.0 FTE	Helene Wurth, BSW, CAC-II
Community Health RN	0.8 FTE	Andrea Hooley RN
SSHP Case Manager	1.0 FTE SSHP*	Brian Adams, BSW
Advance Practice Nurse Practitioner	1.0 FTE	Brittany Sater, APRN, FNP-BC
Pediatric Care Coordination Specialist	1.0 FTE	Jessica Ortler, BA
SSHP Transitional Care Case Manager	1.0 FTE SSHP*	Bruce Hinkley, MACOM
SSHP Outreach Attributions Specialist	1.0 FTE SSHP*	Jordan Mrowinski, BA
Case Aide (supports MACC & Healthy Harbors)	1.0 FTE	Natalie Mirabile
<b>sub-total MACC FTE:</b>	<b>11.8 FTE</b>	all 11.8 FTE are ACC funded, via clinics and RAE#1

## Healthy Harbors program staffing:

Healthy Harbors Program Coordinator	1.0 FTE	Karen Ramirez, BS, CAC-II
HH Care Coordination Specialist	1.0 FTE	Debbie Shaffer, BA
HH Care Coordination Specialist	1.0 FTE	Marisa Martinez, MSW (LCSW track)
HH Care Coordination Specialist	1.0 FTE	Evelyn Perez, BA
HH administrative / data support	0.3 FTE	Lisa Boyd
<b>sub-total Healthy Harbors FTE:</b>	<b>4.3 FTE</b>	1.4 FTE ACC funded, 2.9 FTE UCHealth funded

## Post-Partum Nurse Home Visit program staffing:

Community Health RN II	0.9 FTE	Karen Yost, RN, CLC
Community Health RN II	0.7 FTE	Michele Mayes, RN, CLC
<b>sub-total RN HV FTE:</b>	<b>1.6 FTE</b>	100% UCHealth funded

**TOTAL, Comm. Health Care Coord. Team:** **17.7 FTE** (13.2 FTE are 100% ACC-funded)

\*SSHP = SummitStone Health Partners position



# MACC Oversight / Strategic Planning Committee:

Carol Plock, MSW	Executive Director, Health District of Northern Larimer County
Karen Spink, MPA	Asst. Director of the Health District of Northern Larimer County
Dr. Bruce Cooper, MD	(former) Medical Director, Health District of Northern Larimer County
Dr. James Stewart, DO	current Medical Director, Health District of Northern Larimer County
Patrick Gordon	Associate Vice President, Rocky Mtn. Health Plans (RMHP)
Louisa Wren	Comm. Programs Manager, Rocky Mountain Health Plans
Violet Willett	Manager of Larimer County RMHP care coordination team
Colette Thompson	Director of Community Health Improvement, UCHealth
Grace Taylor, MBA	VP of Administration, UCHealth
DeeAnn Bannister, RN	QI Improvement Manager, UCHealth Medical Group
Dr. James Sprowell, MD	former Chief Executive Officer, Associates in Family Medicine
Craig Luzinski, MSN	CEO, Associates in Family Medicine
Dr. Janell Wozniak, MD	Medical Director, Family Medicine Center
Michael Allen, LCSW	CEO, SummitStone Health Partners
Cyndi Dodds, LMFT	COO (Chief Operations Officer), SummitStone Health Partners
Jennifer Cooper, LPC	Program Supervisor, SummitStone Health Partners
Todd Lessley, MPH, RN	VP of Population Health Services, Salud Family Health Centers
Stephen Thompson, LCSW	Manager of Care Coordination Programs, UCHealth Comm. Health Imp.

*This key stakeholder group meets monthly (and has since 2011) at the Health District to discuss strategic planning and provide administrative oversight for the MACC program.*

# MACC & Healthy Harbors: Workflow with a Patient- & Family-Centered Approach

- The **MACC & Healthy Harbors programs** utilize a caseload model; target caseload is 50 open (high-complexity) clients to one full-time staff
- **Referrals are received** daily from a variety of sources: PVH & MCR hospital & ED's, Mountain Crest, primary care clinics, community partner agencies, RMHP, Larimer County DHS/CPS & OLTC, etc.
- **Outreach & engagement:** staff are diligent and creative with outreach; efforts include phone, text, email, letters, dropping in at appointments, and working collaboratively with other professionals
- **Case opened:** client signs a program consent & ROI; intake and care plan completed and routed to PCP; care plan outlines priority healthcare goals and problems / barriers to be addressed;
- **Care plan reviews** are completed every 6 months to ensure all open clients have active goals & meet intensity of service: minimum of twice-per-month contact (often more) is maintained for all open active cases; some high-acuity clients, or clients in crisis, may have contact with their CC daily
- **Transition of care support:** a 'Daily Report' is run from the UHealth EMR each morning; clients who have been to the ED or who have been admitted receive timely f/u & support
- **Key Performance Indicators, x7:** ED visits; BH engagement; well-person visits; pre-natal engagement; dental visits; health neighborhood; potentially avoidable costs

# MACC & Healthy Harbors – Target Populations

- **MACC core criteria:** active CO Medicaid; PCP at one of four affiliate PCMH's: AFM, FMC, Salud, or UCHealth Medical Group; complex care needs
- **Healthy Harbors core criteria:** current or historical DHS/CPS involvement; PCP at one of four affiliate PCMH's: AFM, FMC, Salud, or UCHMG; complex care needs

## MACC & Healthy Harbors targeted program clientele:

- Patients & families with complex care needs (medical or behavioral health)
- High recidivism to acute care settings (emergency departments, inpatient hospital)
- Extensive community resource needs; social determinants of health impacting care
- Poorly controlled chronic conditions (medical and/or behavioral health diagnoses)
- Multi-system involvement (i.e. court/legal; jail/corrections; Larimer County DHS; etc.)
- Multiple providers involved in managing care needs

**Data-driven innovative approaches:** MACC & HH have been able to use Medicaid claims data from the RAE to intentionally target ('hot-spot') high-utilizer / high-cost patients who may benefit from community-based care management support



# MACC & Healthy Harbors - Common Interventions

- **Outreach and engagement** process – persistent, creative, patient-centered
- Connection to (or establishment with) a **Primary Care Medical Home (PCMH)**
- Comprehensive **Intake Assessment** and client-centered **Care Plan** development
- **Goal setting** re: medical / behavioral health needs, access to care & resources
- **Provider communication**, support, and collaboration
- **Chronic disease education**, coaching, disease management
- **Medications support** with compliance, education, reconciliation across providers
- Reduction of **inappropriate or excessive utilization of local emergency dept's**
- Provision of **mental health / behavioral health treatment** (direct clinical tx)
- Connection to ongoing **behavioral health services**
- **Community resource brokerage and referral**, inc. transportation, housing, food
- Coordination of medical/behavioral **healthcare across providers, agencies, systems**
- **Transitional care support** (through ED visits, inpatient admissions, levels of care)
- Attend medical, specialty, and other agency appointments, assist with follow-up
- **A Care Coordinator's many roles:** *crisis intervention; problem solver; advocate; coach; cross-system coordinator; community resource expert; supportive professional; navigator; clinician; educator*

# MACC Quiz Time!

**The top 25 ED utilizers** on a prior Medicaid claims data file, which includes data for > 20,000 Medicaid patients in Larimer County, account for approximately **how many ED visits** over a 14-month look back period?

- a) 550 ED visits
- b) 750 ED visits
- c) 950 ED visits
- d) 1,350 ED visits
- e) 1,800 ED visits

**The top 100 ED utilizers** on this same claims data file account for approximately how many ED visits (over a 14-month look back period)?

- a) 1,800 ED visits
- b) 2,400 ED visits
- c) 2,800 ED visits
- d) 3,500 ED visits

# MACC & Healthy Harbors Program Outcomes

Comprehensive Program Evaluation & Analysis,  
conducted by TriWest, 2017-2019

final report released October 2019

# MACC / HH Program Evaluation

In mid-2017, the MACC Oversight Committee developed a strategy to conduct a comprehensive 3<sup>rd</sup> party program evaluation for the MACC program.

The Health District of Northern Larimer County contracted with TriWest to evaluate program qualitative and quantitative outcomes. TriWest conducted this analysis between 2017-2019, reviewing program & claims data from Nov. 2011 – Oct. 2016.

TriWest worked with the RAE for region #1 (Rocky Mountain Health Plans) to utilize Medicaid claims data for the program evaluation.

Quantitative metrics such as total cost of care, and ED / inpatient utilization were analyzed for six client cohorts between 2011-2016.

Qualitative analyses included client focus groups, key stakeholder interviews, and staff, provider, and community partner satisfaction surveys.

Recommendations for future evaluations, along with strengths & opportunities, are included in the final report.

# MACC / HH Program Evaluation, Overview, Methodology, & Outcomes:

The full client sample size analyzed (the “treatment group”) was initially >1,450 clients who received intensive, community-based care coordination support through the UCHealth MACC & Health Harbors programs between 2011-2016.

A propensity-matched comparison group was created of Medicaid members who were eligible for program services but did not ultimately receive them.

Due to TriWest’s strict eligibility criteria, only Medicaid patients who had at least 12 months of continuous Medicaid enrollment prior to and after the start of program services were included in the final analysis.

This inclusion criteria reduced the client treatment group sample size down to 280 clients (treatment group = 280 clients).

# MACC / HH Program Evaluation

## Key Components Include:

- Program outcomes & measures
- Overall program impact
- Opportunities for improvement
- Client, provider, community partner satisfaction
- Staff surveys
- Program implementation
- Program planning & governance model
- Recommendations for future evaluations

**Outcome highlights include...:**

# Program Statistics:



**1,450** clients served from Dec. 2011-Feb. 2018

average daily open cases: **353**



**44** average case load per coordinator

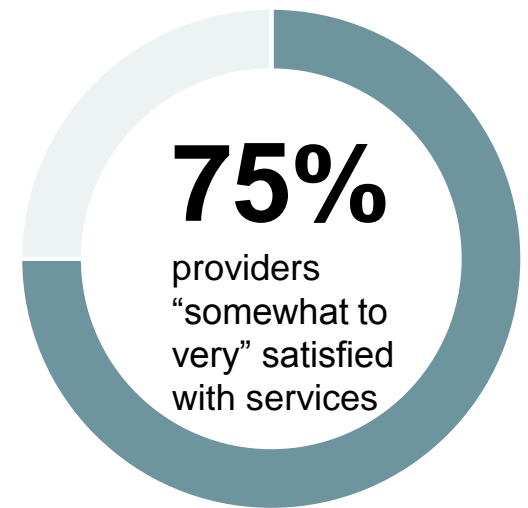
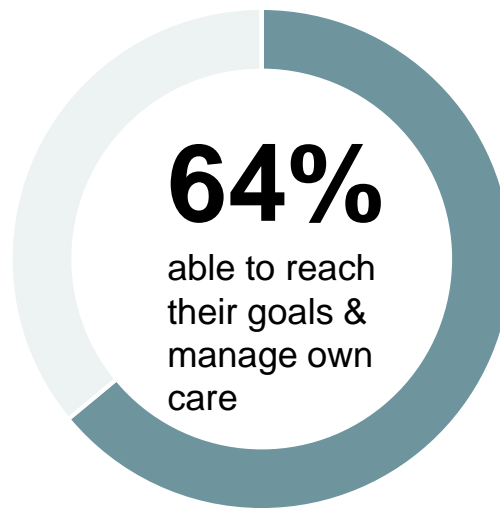


majority of cases were open

**20** months or less



# Key Qualitative Findings



Qualitative analysis results suggest that clients, primary care providers, community partners, MACC staff, and key stakeholders widely view the program as improving clients’ health through coordinated efforts to manage care and connect clients to resources.



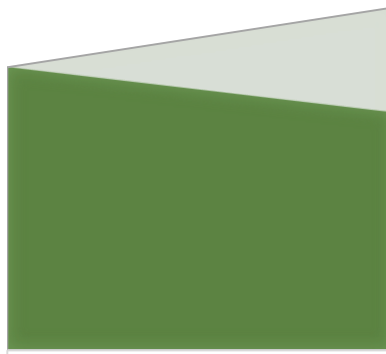
# Key Quantitative Findings

treatment group (n=280) vs. comparison group

green = MACC/HH clients

grey = non-client comparison group

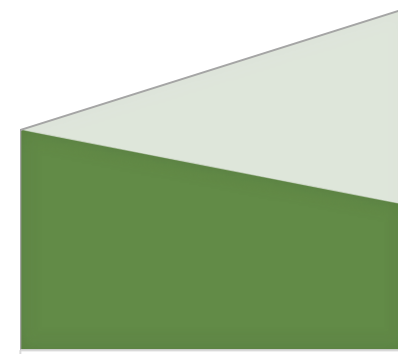
## ED VISITS



12 Months Before MACC

12 Months After MACC

## INPATIENT ADMITS



12 Months Before MACC

12 Months After MACC

**535** avoided ED visits,  
= est. \$574,055 in cost avoidance

**122** avoided inpatient admits,  
= est. \$1.33M in cost avoidance

## Summary & Utilization Comments:

Receipt of care coordination through MACC/HH led to **reduced average monthly ED visits and inpatient hospitalizations, and reduced costs of care** during the period covered by the data (Nov. 2011 – Oct. 2016).

In the 12-month period following receipt of care coordination, the analyzed group of patients who rec'd care coordination program services **avoided an estimated 535 ED visits and 122 inpatient hospitalizations.**

Total costs of care over the 12 months following receipt of care coordination were **lower by an average of \$4,950 per person** for care coordination patients than for the matched comparison group.

# Cost Avoidance Extrapolations:

If these 280 program clients who met TriWest's continuous Medicaid enrollment criteria are representative of all 1,400+ clients who rec'd care coordination over the period analyzed, care coordination potentially resulted in:

- **2,675 avoided ED visits**, and
- **610 avoided inpatient admissions**

These 2,675 potentially-avoided ED visits represent up to **\$2,870,275** in reduced Medicaid payments. (*\*range of savings varies from \$1.5M to \$2.9M*)

These 610 potentially-avoided inpatient admissions represent up to **\$6,656,930** in reduced Medicaid payments. (*\*range of savings varies from \$3.5M to \$6.7M*)

An average savings of \$4,950 per person in the 12 mos. following receipt of care coordination represents **\$6,930,000** in reduced total costs of care for the 1,400+ individuals who received care coordination.

# Program Evaluation Summary, Data Extrapolations:



**\$4,950** savings per patient



**2,675** avoided ED visits



**610** avoided inpatient stays



**\$6.9M** reduced total costs of care

The full **MACC Program Evaluation** report (168 pages), as well as a stand-alone **executive summary** (4 pages), are available as PDF files. Interested parties and stakeholders should refer to the full report for detailed explanations of methodology, assumptions, and limitations of the cost saving analysis.

# MACC Client Story

**2014** PVH ED refers 'MT' to MACC: he is one of highest Medicaid ED utilizers w/ 80+ ED visits in past year, homeless, severe alcohol use disorder

MACC case opened in Nov. 2014. MACC BH CC provided case management and behavioral health / addiction counseling treatment, and started working with multiple systems to address the client's seven trespassing tickets and legal / police issues.

**2016** Aug. 2016: client was accepted into the Circle Program (90-day residential substance-use disorder treatment program in Pueblo, CO); the client thrived with this structure.

MT graduated from Circle "with honors" in Dec. 2016 and returned to Ft. Collins; he resumed weekly treatment and 1:1 sessions with the MACC BHS.

**2017** MT began an internship through LC Workforce Center, & secured a room rental with goal of having his own apartment. He was hired for a f/t job with company he intern'd for, & now has employer benefits (off Medicaid). He has reconnected w/ his estranged adult children.

Client coordinates with MACC manager to recognize the staff who worked with him – brings her a plaque & framed poem, offers to buy lunch for the team, tells his story, shows his one-year of sobriety token; states she saved his life. MACC case closed.



**2018:**

*Sober,  
Healthy,  
Employed,  
Housed,  
Re-engaged w/  
Family,  
Contributing to  
Community,  
**Thriving***

Utilization Comparison:

**Nov 2015-Aug 2016: 80+ ED visits**

*(average cost/ED visit ~ \$1,000)*

**Aug 2016 – Aug. 2017 and beyond: zero ED visits**

*Compilations of MACC client success stories are created annually*

# Thank you for your support!

***Questions? Comments?***

***primary contact:***

**Stephen R. Thompson, LCSW**  
Manager of Care Coordination Programs  
*UHealth Community Health Improvement*

1025 Pennock Place, Suite #107  
Fort Collins, CO 80524

O : 970.495.7185

C : 970.556.8891

F : 970.495.7189

**[stephen.thompson@uhealth.org](mailto:stephen.thompson@uhealth.org)**

uhealth