COLORADO
Colorado Healthcare Affordability & Sustainability Enterprise

HOSPITAL TRANSFORMATION PROGRAM COMMUNITY AND HEALTH NEIGHBORHOOD ENGAGEMENT

MIDPOINT REPORT

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Instructions and Timeline

Via the Midpoint Report, program participants will report on Community and Health Neighborhood Engagement (CHNE) work over the first half of the pre-waiver process. Specifically, hospitals will use this report to update the State regarding efforts to engage community partners in completing an evidence-based environmental scan to identify community needs and resources and the hospital's plans going forward.

The State will be reviewing Midpoint Reports to ensure:

- The process has been adequately inclusive of organizations that serve and represent the broad interests of the community and that no key stakeholders are excluded;
- A diverse and regular enough range of venues, locations, times and manners for engagement are being provided to allow for a meaningful opportunity for participation;
- Needed adjustments were made to the Action Plan and any divergence from the Action Plan is justified;
- The environmental scan assessment is complete, sufficiently detailed, and evidence-based, and was informed by community input; and
- Over the remainder of the pre-waiver CHNE process, community organizations will have meaningful opportunities to inform the hospital's planning of its Hospital Transformation Program (HTP) participation.

Please note that the word limits included are guidelines. You may exceed them as necessary to fully respond to the question or information request.

Midpoint Reports must be submitted in .pdf form with all supporting documentation included in one document via e-mail by April 19, 2019 at 5pm to the Colorado HTP email address COHTP@state.co.us. Reports received after this deadline will not be considered.

Following the submission date, the State will review the reports. The reports will not be scored; however, the State will work collaboratively with participants to seek clarifications as needed and to ensure that there is agreement between the hospital and the State as to the plan for the remainder of the process, including plans to address any needed changes to the hospital's CHNE process based on the review of the Midpoint Report.

Contact Information

Please provide the legal name and Medicaid ID for the hospital for which this Midpoint Report is being submitted.

Hospital Name: Swedish Medical Center

Hospital Medicaid ID Number: 5034004

Please provide any updates to the hospital address as well as to the names, titles, addresses and contact information for the hospital executive with signatory authority to whom official correspondence should be addressed and for the primary and secondary points of contact if that information has changed since submitting your CHNE Action Plan. If this information has not changed, this section can be left blank.

Hospital Address: _____

Hospital Executive Name: _____

Hospital Executive Title: _____

Hospital Executive Address: _____

Hospital Executive Phone number: _____

Hospital Executive Email Address: _____

Primary Contact Name: _____

Primary Contact Title: _____

Primary Contact Address: _____

Primary Contact Phone Number: _____

Primary Contact Email Address: _____

Secondary Contact Name: _____

Secondary Contact Title: _____

Secondary Contact Address: _____

Secondary Contact Phone Number: _____

Secondary Contact Email Address: _____

Engagement Update

III.a. Please respond to the following questions to provide us with an update of the hospital's engagement activities. Please note that the word limits are guidelines. You may exceed them as necessary to fully respond to the question or information request.

Please use the following grid to provide a list of external organizations that the hospital has engaged, including the organizational contact, the type of organization, and the organization-specific engagement activities undertaken with this organization. Please also note any specific connection of the organization to HTP priority populations and / or project topics.

Organization Name	Organizational Contact	Organization Type	Engagement Activity	Connection to any specific HTP priority populations and /or project topics, as applicable
Denver DPHE Office of Behavioral Health Strategies	Jeffrey Holliday	Behavioral health organization	Key informant interview	Behavioral health, Substance Use
Denver Regional Council of Governments	Ron Papsdorf	Community organizations addressing social determinants of health	Key informant interview	Social determinants of health, long-term services and supports
Colorado Children's Campaign	Erin Miller	Consumer advocate	Key informant interview	Maternal child health, social supports
Colorado Criminal Justice Reform Coalition	Terri Hurst	Consumer advocate	Key informant interview	High utilizers, care transitions, behavioral health, social supports, disconnected from system
Colorado Cross-Disability Coalition	Julie Reiskin, Dawn Howard, Kim Jackson	Consumer advocate	Key informant interview	Consumer advocacy, long-term services and supports, access, care transitions, high utilizers
Colorado Coalition for the Homeless	Brian Hill, Andrew Grimm	Federally Qualified Health Centers	Key informant interview, focus group	Access, primary care, social determinants, behavioral health, mothers and infants, care coordination
InnovAge	Beverley Dahan	Long Term Services and Supports Provider	Key informant interview	Older adults/end of life, care transitions, primary care
Every Child Pediatrics	Jessica Dunbar	Primary care medical provider/ organization	Key informant interview	Access, primary care, social determinants, behavioral health, mothers and infants (indirectly), care coordination
Denver Human Services	Don Mares, Joe Hamlar	Primary care medical provider/ organization	Key informant interview	Access, primary care, social determinants, behavioral health, care coordination
Doctors Care	Bebe Kleinman	Primary care medical provider/ organization	Key informant interview	Access, primary care, social determinants, behavioral health, care coordination
Colorado Access	Daniel Obarski, Kim Nordstrom	RAE	Key informant interview, focus group	High Utilizers, Total Cost of Care, coordination, service availability, social determinants of health, behavioral health
CORHIO	Morgan Honea, Kate Horle	Regional Health Information Exchange	Key informant interview	Health data exchange infrastructure

Mile High & Foothills RETAC	Bill Clark	RETACs	Key informant interview	High Utilizers
AllHealth Network	Cynthia Grant	Community Mental Health Center	Focus Group	Behavioral health, Substance Use
Jefferson Center for Mental Health	Don Bechtold	Community Mental Health Center	Focus Group	Behavioral health, Substance Use
Broomfield FISH	Dayna Scott	Community organizations addressing social determinants of health	Focus Group	Social supports
Center for African American Health	Deidre Johnson	Community organizations addressing social determinants of health	Focus Group	Social supports
Center for Health Progress	Joe Sammen, Christopher Klene	Community organizations addressing social determinants of health	Focus Group	Social supports
Families Forward Family Resource Center	Ron Allen, Shawn Taylor, Felicia Allen	Community organizations addressing social determinants of health	Focus Group	Social supports
Family Resource Center Association	Mark Kling, Mandy Watrous-Gale	Community organizations addressing social determinants of health	Focus Group	Social supports
Focus Points Family Resource Center	Mayra Ramirez, Jeanette Martinez	Community organizations addressing social determinants of health	Focus Group	Social supports
Hunger Free Colorado	Sandy Nagler, Brett Reeder	Community organizations addressing social determinants of health	Focus Group	Social supports
Project Angel Heart	Jennifer Lackey, Leslie Scotland-Stewart	Community organizations addressing social determinants of health	Focus Group	Social supports
Rocky Mountain Children's Foundation	Luanne Williams, Lee Shaughnessy	Community organizations addressing social determinants of health	Focus Group	Social supports
The Family Tree	Scott Shields, Cassie Ratliff	Community organizations addressing social determinants of health	Focus Group	Social supports
Colorado Center on Law and Policy	Bethany Pray, Allison Neswood	Consumer advocate	Focus Group	Consumer advocacy, social supports, access
Colorado Mental Wellness Network	Hope Hyatt	Consumer advocate	Focus Group	Consumer advocacy, behavioral health, social supports, access
Healthy Learning Paths	Chris Marchioni	Consumer advocate	Focus Group	Consumer advocacy, social supports, families and children

Clinica Family Health	Simon Smith	Federally Qualified Health Centers	Focus Group	Access, primary care, social determinants, behavioral health, mothers and infants, care coordination
Clinica Tepeyac	Jim Garcia	Federally Qualified Health Centers	Focus Group	Access, primary care, social determinants, behavioral health, mothers and infants, care coordination
Denver Health and Hospital Authority	Simon Hambidge	Federally Qualified Health Centers	Focus Group	Access, primary care, social determinants, behavioral health, mothers and infants, care coordination
High Plains Community Health Center	Eric Niedermeyer	Federally Qualified Health Centers	Focus Group	Access, primary care, social determinants, behavioral health, mothers and infants, care coordination
Marillac Clinic	Kay Ramachandran	Federally Qualified Health Centers	Focus Group	Access, primary care, social determinants, behavioral health, mothers and infants, care coordination
Mountain Family Community Health Center	Ross Brooks	Federally Qualified Health Centers	Focus Group	Access, primary care, social determinants, behavioral health, mothers and infants, care coordination
Peak Vista Community Health Center	Pam McManus	Federally Qualified Health Centers	Focus Group	Access, primary care, social determinants, behavioral health, mothers and infants, care coordination
Sheridan Health Services	Erica Sherer	Federally Qualified Health Centers	Focus Group	Access, primary care, social determinants, behavioral health, mothers and infants, care coordination
STRIDE Community Health Center	Ben Niederman	Federally Qualified Health Centers	Focus Group	Access, primary care, social determinants, behavioral health, mothers and infants, care coordination
Sunrise Community Health Center	Mitzi Moran	Federally Qualified Health Centers	Focus Group	Access, primary care, social determinants, behavioral health, mothers and infants, care coordination
Adams County Health Alliance	Meghan Prentiss	Health Alliance	Focus Group, Facilitated Discussion	Social supports, care transitions, health data infrastructure, advocacy
Aurora Health Alliance	Mandy Ashley	Health Alliance	Focus Group	Social supports, care transitions, health data infrastructure, advocacy
Boulder County Health Improvement Collaborative	Morgan McMillan	Health Alliance	Focus Group	Social supports, care transitions, health data infrastructure, advocacy
Douglas County Health Alliance	Wendy Nading	Health Alliance	Focus Group, Facilitated Discussion	Social supports, care transitions, health data infrastructure, advocacy
Jefferson County Health Alliance		Health Alliance	Facilitated Discussion	Social supports, care transitions, health data infrastructure, advocacy
Mile High Health Alliance	Dede de Percin, Karen Trautman, Alyssa Harrington	Health Alliance	Focus Group	Social supports, care transitions, health data infrastructure, advocacy
City and County of Denver	Tristan Sanders	Local Public Health Agency	Focus Group	Population health, maternal child health, social determinants of health, behavioral health
Denver Public Health	Jessica Forsyth, Kellie Teter	Local Public Health Agency	Focus Group	Population health, maternal child health, social determinants of health, behavioral health
Jefferson County Public Health	Mark Johnson, Kelly Kast, Melissa Palay	Local Public Health Agency	Focus Group	Population health, maternal child health, social determinants of health, behavioral health
Tri-County Health Department	Emma Goforth, Heather Baumgartner	Local Public Health Agency	Focus Group	Population health, maternal child health, social determinants of health, behavioral health
Mission Health Care Services	Demetrea Kinnermon	Long term services and supports provider	Focus Group	Older adults/end of life, care transitions, primary care

Sava Senior Care	Michelle Cassidy, Jennifer Hines	Long term services and supports provider	Focus Group	Older adults/end of life, care transitions, primary care
South Denver Care Continuum	Maria Oren (SCL)	Long term services and supports provider	Focus Group	Older adults/end of life, care transitions, primary care
St Paul Health Center	David Adams, Rosette Subia	Long term services and supports provider	Focus Group	Older adults/end of life, care transitions, primary care
The Denver Hospice	Melinda Egging, Dennis Rodriguez	Long term services and supports provider	Focus Group	Older adults/end of life, care transitions, primary care
Vibra	Michelle Drahota	Long term services and supports provider	Focus Group	Older adults/end of life, care transitions, primary care
Signal Behavioral Health	Heather Dolan	Managed Service Organization	Focus Group	Behavioral health, Substance Use
Colorado Community Health Alliance	Hanna Thomas, Jessica Rink	RAE	Focus Group	High Utilizers, Total Cost of Care, coordination, service availability, social determinants of health, behavioral health

In addition, the following internal contacts were engaged in order to inform HTP planning regarding priority populations and project topics:

Organization Name	Organizational Contact	Engagement Activity	Connection to any specific HTP priority populations and/or project topics, as applicable
HealthONE Spalding Rehab Hospital	Anne Comeau	Focus Group	Older adults/end of life, care transitions, primary care
HealthONE Crisis Assessment Team	Cynthia Meyer, Christine Lanham	Key Informant Interview	High utilizers, care transitions, behavioral health / SUD
HealthONE Care Alert Program	Colleen Decker	Key Informant Interview	High utilizers, care transitions, behavioral health / SUD
Swedish Medical Center Patient and Family Advisory Council	Kara Kohn	Key Informant Interview	Consumer advocacy, social supports, access, multiple populations

Please use the following grid to provide a list of engagement activities, (e.g. workgroups, committees, meetings, discussion groups, public forums, etc.) that the hospital has undertaken, including the locations and manners for participation (e.g. in-person, by phone, in writing, etc; please also indicate if the participants facilitated or provided data analysis), frequency of the activity, the partners included, how notice was provided, and the key deliverables for each activity (e.g. action items, high-level decisions, documents drafted / finalized, data reports, etc).

Engagement Activity	Location and Manners for Participation	Frequency of Activity	Partners Included	How Activity Was Noticed	Key Deliverables

Key Informant Interviews	Phone and In-Person	14	Colorado Access	Email	Discussion around the health care challenges, gaps, and opportunities in the metro Denver community
			Colorado Children's Campaign		
			Colorado Coalition for the Homeless		
			Colorado Criminal Justice Reform Coalition		
			Colorado Cross-Disability Coalition (two interviews)		
			CORHIO		
			Denver DPHE Office of Behavioral Health Strategies		
			Denver Human Services		
			Denver Regional Council of Governments		
			Doctors Care		
			Every Child Pediatrics		
			InnovAge		
			Mile High & Foothills RETAC		
Focus Groups	Location: offices of the Colorado Health Institute. Attendees participated either in-person or by webinar/ phone.	10	Adams County Health Alliance	Email	Discussion around the health care challenges, gaps, and opportunities in the metro Denver community
			AllHealth Network		
			Aurora Health Alliance		
			Boulder County Health Improvement Collaborative		
			Broomfield FISH		
			Center for African American Health		
			Center for Health Progress		
			City and County of Denver		
			Clinica Family Health		
			Clinica Tepeyac		
			Colorado Access		
			Colorado Center on Law and Policy		
			Colorado Coalition for the Homeless		
			Colorado Community Health Alliance		
			Colorado Mental Wellness Network		
			Denver Health and Hospital Authority		
			Denver Public Health		
			Douglas County Health Alliance		
			Families Forward Family Resource Center		
			Family Resource Center Association		
			Focus Points Family Resource Center		
			Healthy Learning Paths		
			High Plains Community Health Center		
			Hunger Free Colorado		
			Jefferson Center for Mental Health		
			Jefferson County Public Health		
			Marillac Clinic		
			Mile High Health Alliance		
			Mission Health Care Services		
			Mountain Family Community Health Center		
			Peak Vista Community Health Center		
			Project Angel Heart		

			Rocky Mountain Children's Foundation		
			Sava Senior Care		
			Sheridan Health Services		
			Signal Behavioral Health		
			South Denver Care Continuum		
			St Paul Health Center		
			STRIDE Community Health Center		
			Sunrise Community Health Center		
			The Denver Hospice		
			The Family Tree		
			Tri-County Health Department		
			Vibra		
Partner Survey	Online	Survey link was emailed once through Partners' existing email distribution lists	Adams County Health Alliance	Email	Insights around the health care challenges, gaps, and opportunities in the metro Denver community
			Aurora Health Alliance		
			Douglas County Health Alliance		
			Jefferson County Health Alliance		
			Mile High Regional Emergency Medical and Trauma Advisory Council		
Facilitated Discussions	In-person	3	Adams County Health Alliance	Meeting agenda	Discussion around the health care challenges, gaps, and opportunities in the metro Denver community
			Douglas County Health Alliance		
			Jefferson County Health Alliance		

III.b. Please respond to the following questions to tell us about your experiences of executing your Action Plan, including the challenges you have faced and how, if at all, you have had to adjust in light of those challenges.

1. **Please use the space below to describe:**
   - **Any organizations that you expected to engage but were unable to or that are no longer engaged and your understanding of why; and**
   - **How you have attempted to address these gaps in engagement**

This scan was conducted of the metro Denver region with a specific focus on populations served by Swedish Medical Center.

Multiple providers serving the metro Denver area were invited to participate in focus groups, including family resource centers, community mental health centers, managed service organizations, and consumer advocacy organizations. These organizations received an email invitation and one follow-up email request. The organizations and individuals listed in III.a. represent those who were able to attend in-person or via webinar. Some were unavailable for a key informant interview or focus group, because of scheduling conflicts and the compressed timeline for completing the environmental scan.

We engaged three of the seven health alliances in the metro Denver region through in-person facilitated discussions. The other alliances — Aurora Health Alliance, Boulder County Health Improvement Collaborative, Mile High Health Alliance, and South Metro Health Alliance — were unable to accommodate an in-person engagement due to the timing required for this report.

We attempted to address this gap by developing an online anonymous survey soliciting feedback on HTP priority populations, gaps in services, opportunities to address health needs, and interest in future engagement.

CHI sent the survey to all community partners who were invited to engage or participate in this process through a focus group. This included individuals who attended a focus group as well as those who were unable to attend in-person. Because survey recipients were able to forward the link to other staff, and the survey links were often distributed by other partners through existing email networks, we were only able to track the number of respondents (approximately 120 as of April 4, 2019), not the number of survey recipients.

Health alliance leaders from Aurora Health Alliance, Boulder County Health Improvement Collaborative and Mile High Health Alliance participated in a focus group with the other alliance leaders. The Aurora Health Alliance distributed the online survey to its email distribution list. The South Metro Health Alliance — which is in a transition state and not meeting on a regular basis — was going to have members participate in the Douglas County Health Alliance meeting. And hospital partners were scheduled to meet in person with the Mile High Health Alliance on April 16.

We also experienced inclement weather during a behavioral health focus group, which required us to change the meeting format to webinar only. We were unable to reschedule due to time constraints in completing the report. All invited participants received and were invited to complete the online survey.

This process engaged all the HTP-required categories of community organizations. And we were successful in engaging as intended most of the list of community partners provided by the hospital.

That said, there are some areas that were less successful despite repeated attempts at engagement. We expect that those partners are interested in engaging in this process, but were busy, out of town, or simply unavailable in the tight timeline required of this environmental scan.

In the next phase, Swedish Medical Center should consider engaging the Arapahoe County Senior Resources Division, as well as Encompass Rehab and Lutheran Hospice as long-term care service provider partners. Despite multiple attempts at engaging different members of staff at these partner organizations, we were unable to gather input from them to inform this environmental scan.

2. Please use the space below to describe any challenges you faced in implementing planned activities as described in the Action Plan and the cause of the challenges.

The main challenges faced while implementing planned community engagement activities were related to the short timeframe in which all data were collected. All focus groups, interviews, and survey results were administered, collected, and analyzed within the span of about three weeks — a process that normally can take close to six weeks. As a result, some partners were unable to participate at a time convenient to their work and travel schedule.

However, as stated above, this environmental scan included input from all HTP-required categories of community partners, and most of the partners identified specifically by the HealthONE team.

3. Please use the space below to describe any divergences from your final Action Plan made in order to successfully conduct your Community and Health Neighborhood Engagement, including those made to address the challenges described above.

The engagement process included inputs from all HTP-required community organizations. In addition, HealthONE staff provided other insights “from the inside” to clarify opportunities to strengthen care coordination, and to identify ongoing initiatives to scale up in addressing needs identified in the environmental scan. Examples of internal HealthONE engagements included:

- The HealthONE Crisis Assessment Team, which offers patient risk assessments and connections to behavioral health resources via telehealth for all HealthONE campuses;
- The HealthONE Care Alert Program, which provides a tracking system for better serving narcotic-seeking patients and high utilizers; and
- Advisory groups and committees across multiple HealthONE hospitals (such as the Community Advisory Board at North Suburban Medical Center and the Patient Family Advisory Councils at Swedish and North Suburban), which provided insights into existing community partnerships and initiatives seeking to address community health needs.

Environmental Scan Findings

Please see Appendices I and II for checklists that may be useful in responding to these questions.

Please note that the word limits are guidelines. You may exceed them as necessary to fully respond to the question or information request.

IV.a. Please use the space below to describe how the hospital has defined the community (based on input received).

Swedish Medical Center, headquartered in Englewood in southwest Denver, primarily serves populations from Jefferson, Arapahoe, and Denver counties. Swedish serves all three metro Denver RAE regions.

This environmental scan includes findings from this hospital-specific service region and from the broader Denver metro area.

The broader regional findings are from a collaborative effort supported by the Colorado Health Institute (CHI) to assess health needs on behalf of the Metro Denver Partnership for Health's (MDPH) Public Health-Health Systems Collaboration Work Group, including hospital partners Centura Health, Children's Hospital Colorado, Denver Health, HealthONE, National Jewish Hospital, SCL Health, and UC Health. MDPH is a collective effort led by the six local public health agencies serving the seven-county Denver Metro area, including Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas and Jefferson counties. The environmental scan aligned the data collection and community partner outreach across the metro Denver region.

Data were analyzed at two geographic levels based on data availability. Population-based and workforce data are reported by county and total service area (a weighted multi-county average), except where noted below in question IV.b.

Colorado Department of Health Care Policy and Financing (HCPF) data are reported at the Regional Accountable Entity level (RAE 3 — Adams, Arapahoe, Douglas, Elbert; RAE 5 — Denver; RAE 6 — Boulder, Broomfield, Clear Creek, Gilpin, Jefferson).

IV.b. Please use the space below to identify the sources and information used to identify community health needs and service levels available including specific to the HTP priority populations and project topics.

Quantitative data sources used for this report included:

- American Community Survey, US Census Bureau, 2017
- Behavioral Risk Factor Surveillance System, 2013-2015
- Colorado Department of Education, 2017-2018 School Year
- Colorado Child Health Survey, 2013-2015
- Colorado Health Access Survey, 2015 & 2017. Data are reported by Health Statistics Region (HSR). Each county in this scan has its own HSR, except for Boulder and Broomfield which are combined into a single HSR.
- Colorado Health Observation Regional Data Service, 2016-2017
- Colorado Health Statistics and Vital Records, 2013-2015

- Colorado Health System Directory, 2018
- Department of Health Care Policy and Financing, State Fiscal Year 2017-2018
- Healthy Kids Colorado Survey, 2017. Data are reported by HSR.
- Pregnancy Risk Assessment Monitoring System, 2014-16

Data appendices are referenced throughout the report and included at the end of this document. Additional statewide data sources were included, when available, to provide context for qualitative data. Some data tables are also embedded in the narrative.

The community partners who were engaged in this environmental scan, and the method of engagement, are described in III.a.

IV.c. Please use the space below to describe any data gaps encountered while conducting the environmental scan, and how these were accounted for.

We identified several gaps in quantitative data.

The total number of Medicaid enrollees by service area was not available. To characterize the Medicaid population, we drew from data provided on HCPF's website on demographics (see Appendix A) and HCPF demographic data for enrollees who used hospital services during Fiscal Year 2017/2018.

Limitations associated with this approach include:

- Data describing Medicaid enrollees who are users of hospital services may not be generalizable to the Medicaid population as a whole.
- Discerning average utilization by hospital user is not possible with available data since utilization data did not de-duplicate patients.
- Available hospital utilization data for Medicaid enrollees may not fully describe service utilization, even for hospital services, because of "churn" — Medicaid enrollment status changes as their life circumstances change and eligibility restrictions impact their enrollment status throughout the year.

There was very little information available about the characteristics of the enrolled Medicaid population overall but especially the HTP vulnerable populations. For example, data were unavailable to quantify and describe the characteristics of individuals with mental health and substance use disorder diagnoses or pregnant women.

There is no way to identify the number of providers in Colorado accepting Medicaid, including by specialty type.

Data on length of stay for hospitalizations was not available.

Lastly, we were unable to analyze several data indicators by county and payer (Medicaid/public) due to data availability. County values reflect the entire population, unless otherwise indicated.

Quantitative data describing unique health needs of priority populations were limited. These priority populations include prenatal/pregnant women and those with behavioral health and substance use concerns, non-English speakers, refugees, or individuals with developmental disabilities. Data on these populations were collected through qualitative methods; however, there is little quantitative data available to further illustrate these important, anecdotal observations.

This scan includes insights from community partners and stakeholders representing all HTP priority

populations and identified in the CHNE Guidebook. Multiple providers throughout the metro area were recruited to participate; however, some were unavailable for a key informant interview or focus group due to scheduling conflicts and the compressed timeline for completing the environmental scan. To account for this challenge, an online survey was sent to all community partners who were engaged in this process but unable to provide feedback through an in-person engagement activity.

IV.d. i. Please use the space below to provide an overview of the hospital's service area, including providing basic information about the demographics of the general population and the Medicaid population, including related to:

- **Race;**
- **Ethnicity;**
- **Age;**
- **Income and employment status;**
- **Disability status;**
- **Immigration status;**
- **Housing status;**
- **Education and health literary levels;**
- **Primary languages spoken; and**
- **Other unique characteristics of the community that contribute to health status.**

Swedish Medical Center, headquartered in Englewood in southwest Denver, primarily serves populations from Jefferson, Arapahoe, and Denver counties.

The Swedish service area population is very similar to that of the metro Denver region when looking at factors like diversity, age, income, education, and citizenship.

Populations by race and ethnicity in the Swedish service area are generally reflective of the metro Denver region. About four in five (79.4 percent) Coloradans in the Swedish service area identify as white, against 82.1 percent of Denver metro. Approximately one in five service area residents (22 percent) identify as Hispanic, similar to metro Denver (22.3 percent). Swedish's service area has marginally more individuals who identify as African American (7.3 percent) than in the metro region overall (5.2 percent). And 8.3 percent of individuals identify as two or more races or "other" racial group, about the same as the metro region (7.6 percent) (see Appendix A).

A plurality (42.6 percent) of Medicaid enrollees using hospital services in the metro area identify with two or more races, with white enrollees making up the second highest percentage (26.6 percent). (see Appendix J).

The majority of residents in the Swedish service area are age 44 or under (61.9 percent), similar to 62.6 percent of metro Denver residents the same age.

Families living in Swedish's service area earn a similar average household income ($93,696) to families across metro Denver ($97,285). Home values are slightly lower in the Swedish service area ($265,952) compared to metro Denver home values ($278,215). About one third of service area residents are living below 200 percent of federal poverty level (33.2 percent). That's compared to 31.9 percent of metro Denver families living under 200 percent of the federal poverty level.

Those income disparities persist despite high levels of employment across the region. About 3.1 percent

of residents in both the Swedish service area and the metro Denver region are unemployed (see Appendix B).

About the same number of service area residents are disabled (9.5 percent) as the metro Denver residents (9.2 percent).

About 141,730 individuals in the Swedish service area population (7.6 percent) are non-US citizens. This is similar when compared to 226,173 non-US citizens living in the metro Denver region (7.4 percent) (see Appendix C).

Like all residents of the Denver metro region, rent is a major expense for families living in Swedish's service area. Almost a quarter (23.6 percent) of service area families are using at least half of their household income to pay for rent. That's similar to the 24.1 percent of metro Denver residents facing the same rent burden.

About 7,394 homeless children and youth are living in the Swedish service area. That's slightly under two thirds of the population of homeless children and youth living in the metro Denver region (see Appendix D).

Residents of Swedish's service area have about the same years of education as the metro Denver population. For example, 8.6 percent of both service area residents and metro Denver residents have no high school diploma or equivalent. And 15.8 percent of service area residents hold a post-graduate degree, compared to 16.0 percent of metro residents.

Data were not available to assess literacy among the Medicaid enrollees specifically. Data assessing individuals' health insurance literacy — their understanding of the terms and conditions of their health insurance plans — suggest that most of the Swedish service area residents are health insurance literate. 70.0 percent indicate they are likely to look into what their plans will and will not cover before getting health care services. Over 86 percent of residents understand what premiums, deductibles, and co-payments mean. There is less confidence in co-insurance — with just 67.0 percent saying they understand this term. That's compared to 65.6 percent of metro Denver residents who say they understand co-insurance (see Appendix E).

A majority of residents in the Swedish service area (79.5 percent) speak English only, with Spanish as the second most common language spoken (13.3 percent of the population). Fewer service area households are "linguistically isolated" (households in which no one age 14 and over speaks English only or speaks a language other than English at home and speaks English well). Linguistic isolation is a barrier to accessing critical services like health care. About 3.9 percent of service area households are linguistically isolated, similar to 3.7 percent of metro Denver households (see Appendix E).

IV.d.ii. Please also provide information about the HTP populations of focus within the hospital's service area, including:

- **Individuals with significant health issues, co-occurring conditions, and / or high health care utilizers;**
- **Vulnerable populations including related to maternal health, perinatal, and improved birth outcomes as well as end of life care;**
- **Individuals with behavioral health and substance use disorders; and**
- **Other populations of need as identified by your landscape assessment. Please consider those at-risk of being high utilizers to whom interventions could be targeted. This should include populations that may not currently receive care in the hospital but are known to community organizations and reflected in the response to IV.d.i.**

35.5 percent of Medicaid enrollees who used hospital services in the metro Denver area were ages 0-17, while 38.5 percent were ages 18-44. Also, Medicaid enrollees who used hospital services were more likely to be individuals of color. For example, 42.6 percent of Medicaid enrollees (RAEs 3, 5, and 6) identified as two or more races, compared with 3.6 percent of the Swedish service area (see Appendix J).

Limited quantitative data were available to describe the Medicaid HTP populations of focus (see response in section IV.c.).

Insights from community partners on priority populations are described below.

- Individuals with significant health needs, co-occurring conditions and/or high utilizers:
  - These individuals may have undiagnosed or untreated behavioral health concerns that are driving their care utilization and poor health.
  - High emergency department utilization, or "mis-utilization" such as using emergency departments for primary care services, may be influenced not by emergent health conditions but by limited access to primary and/or specialty care in outpatient settings. This limited access may be due to providers not accepting Medicaid, individuals disconnected with or unaccustomed to accessing care in a primary care medical home, and/or providers not being available during evenings and weekends. Lastly, the emergency department may be a safe place for individuals experiencing homelessness or other threatening home environments.
  - Individuals with intellectual disabilities or developmental disabilities were identified as being especially at risk of physical and behavioral health needs. There are also limited treatment options for these individuals outside a hospital setting, especially if the individual is unable to go back to a provider due to 'non-compliance' with previous care.
  - These individuals — regardless of their diagnoses — are likely to be trauma survivors.
  - Justice-involved individuals are likely to have significant health needs (physical and behavioral) as well as limited social supports such as housing or employment.
  - Compared to the Denver metro region, Swedish's service area population experiences more hospitalizations related to stroke (253 per 100,000), heart disease (2,328 per 100,000), acute myocardial infarctions (152 per 100,000), and congestive heart failure (736 per 100,000) (see Appendix F).

- Vulnerable populations:
  - Seniors may often be perceived as having their care and social needs met but they are frequently underserved. Frail and elderly seniors have unique medical needs that may be

misunderstood or mistreated. For example, medications may interact differently for these adults. Transportation is difficult for older adults to access. They may also be reluctant to engage with the behavioral health system for ongoing support, or they may not know how to connect with these services. They and their families/caregivers need greater care navigation and supports.
    - Mothers with behavioral health needs — especially when these mothers have newborns or children with an intellectual and/or developmental disability — have significant care and social support needs. They need supportive or sober housing that is family-friendly and accessible, for example. They also need care providers who can treat the whole family — parent and child — in an integrated setting.
    - Some pregnant women are not assigned to or connected with a physician or any prenatal care prior to delivery, or they may not be able to choose the type of provider they prefer. Many pregnant and birthing mothers are not getting their overall health needs met — especially for women of color and low-income women.
    - New moms are also at risk for specific counseling or other health services. Those needs differ by service region. For example, more than two out of five live births (43.3 percent) in the Swedish service region were delivered to overweight or obese mothers. And almost one in twenty pregnant mothers (4.6 percent) smoked during pregnancy (see Appendix G).

- Individuals with behavioral health and substance use disorders:
    - Individuals with behavioral health and substance use disorders experience difficulties with getting and keeping jobs.
    - Similar to individuals with multiple co-occurring conditions, these individuals are often survivors of trauma.
    - Admission rates may reflect the underlying behavioral health and access to care issues in the community. For example, in the Swedish service area, more than one in ten (12.0 percent) care-seeking adults experience depression. Yet 8.7 percent of the population reported needing mental health care in the past 12 months but not being able to receive it (see Appendix H).
    - Smoking, unhealthy weight, and poor nutrition were flagged as especially problematic for individuals with behavioral health (including substance use) concerns, as well as poor oral health. This may be a result of their behavioral health conditions but also due to medications they may be taking to treat their conditions.

- Other populations identified by community partners include:
    - Refugees and recent immigrants.
    - Individuals without documentation.
    - Individuals who have low literacy.
    - Children in foster care.
    - Children with special health care needs — especially children whose parents also have significant unmet physical or mental health concerns.
    - Individuals experiencing homelessness. There are approximately 7,394 children and youth experiencing homelessness in the Swedish service area (see Appendix D). Many of these individuals experience unique health needs related to insecure housing — from increased substance use and co-occurring mental health disorders, to issues such as burns related to tent fires and cooking outdoors.

IV.e.i. Please use the space below to describe the prevalence of significant behavioral and physical health needs generally in your service area, specifically citing the service area's top behavioral health, substance use, and chronic disease burdens for both the Medicaid and the general population. Include rates for:

- **Serious Behavioral Health Disorders;**
- **Substance Use Disorders including alcohol, tobacco and opiate abuse; and**
- **Significant physical chronic conditions.**

Appendices F and H provide descriptive statistics related to this question and following is a summary as it relates to the Denver metro area.

Data on significant behavioral and physical health needs for Medicaid enrollees overall were not available. Applicable data on enrollees who used hospital services has been provided when available.

- **Serious Behavioral Health Disorders;**

In the Swedish service area, nearly one in three high school students (29.4 percent) felt sad or hopeless almost every day for two or more weeks in a row that they stopped doing some usual activities. And 15.1 percent of high school students seriously considered attempting suicide in the past 12 months.

Just 10.2 percent of care-seeking adolescents in the Swedish service area were diagnosed with depression. 12.0 percent of care-seeking adults in the area were diagnosed with depression.

71.3 percent of women in the service area experienced one or more major life stress events 12 months before delivery (Appendix H).

- **Substance Use Disorders including alcohol, tobacco and opiate abuse;**

Nearly one in five (20.6 percent) adults in the Swedish region binge drink and 14.9 percent of high schoolers reporting having five or more drinks within a few hours.

18.2 percent of care-seeking adults in the Swedish region report using tobacco, compared to 16.1 percent in the metro Denver region. The rate of diagnosed opioid use disorder in the service area is 0.9 percent, just over the metro Denver rate of 0.7 percent (Appendix H).

Alcohol abuse is the most common APR DRG diagnosis for Medicaid hospital admissions among enrollees living in RAE 5 and RAE 6 who used hospital services. It is the sixth highest in RAE 3. Alcohol abuse ranks in the top five reasons for an Emergency Department admission among all three RAEs (see Appendix K).

- **Significant physical chronic conditions.**

More than half (64.8 percent) of adults in the Swedish service area are considered overweight or obese (see Appendix F).

15.9 percent of care-seeking adults in the service area have been diagnosed with hypertension.

The prevalence of **significant physical health needs and chronic diseases** in the Swedish service area is listed in Appendix F.

The prevalence of **significant behavioral health and substance use needs** in the service area is listed in Appendix H.

IV.e.ii. Please also specifically address other significant behavioral and physical health needs in your service area that align with the populations and project topics of focus within the HTP, such as:

- **Top chronic conditions accounting for most utilization (include both physical and behavioral health chronic diseases);**
- **Physical health conditions that commonly co-occur with mental health diagnoses;**
- **Related to maternal health, perinatal, and improved birth outcomes; and**
- **Related to end of life care.**

Appendix K includes the reasons for **hospital inpatient admissions, emergency department admissions, and emergency department admission rates** for Medicaid enrollees by RAE.

Partners shared concerns that alcohol was a significant health challenge for many individuals including the HTP priority populations yet felt there is currently little way to monitor or measure its prevalence. They also cautioned that opioid use — while important — may divert attention and funding away from addressing alcohol use. Data show that alcohol abuse is the leading admission cause in RAE 5 and RAE 6 (see Appendix K).

Data were unavailable to quantify or identify physical health conditions that co-occur with mental health diagnoses. Qualitative feedback from community partners regarding these concerns are described in question IV.d.ii.

As previously mentioned, trauma — treated or untreated — was frequently cited as a significant issue experienced by many of the HTP priority populations, especially individuals experiencing homelessness and individuals with behavioral health and substance use concerns. While data were not available to quantify these observations, the impact of adverse childhood experiences (stressful or traumatic events including abuse and neglect) on a range of health, social and behavioral health problems has been demonstrated in the literature and discussed extensively among focus group participants, particularly those addressing social determinants of health. Traumatic experiences not only create some of the physical and behavioral health needs for these populations but also may prevent some individuals from proactively seeking care in lower-acuity settings. As a result, these individuals may have emergent care needs that must be addressed in emergency departments of inpatient units and not outpatient or community-based care.

Personality disorders were mentioned as an underlying, potentially undiagnosed, behavioral health issue influencing high utilization of care. Data were not available to provide any quantitative basis for this anecdotal observation.

Appendix G describes **maternal-perinatal health needs and end of life care** in the Swedish service area.

Maternal/perinatal depression was frequently identified as compromising maternal health and birth outcomes. In Swedish's service area, almost one in ten (8.8 percent) women report perinatal depression symptoms after their new baby was born, with Arapahoe County having the highest rate (11.7 percent) (see Appendix H). The rate of maternal mortality (death during pregnancy or within 1 year postpartum) nearly doubled in Colorado between 2008 and 2013, from 24.3 deaths per 100,000 live births to 46.2 deaths per 100,000 births. In a study of maternal mortality in Colorado from 2004-2012, researchers found that 30 percent of deaths (63 women) were due to "self-harm" — drug overdose or suicide.

IV.f.i. Please use the following response space to describe the delivery system's service capacity within the region and any identified gaps in direct or supporting care services. Assessments should address the state of capacity generally in the community, including community-based social services beyond medical services (i.e. housing and legal assistance, nutrition programs, employment services), as well as information specific to the HTP priority populations and project topics (including services for high utilizers, maternal health and end-of-life services and services for other vulnerable populations, those with behavioral health and substance use disorders, and population health interventions), and should specifically address:

a) Service availability, access, and perceived gaps generally as well as related to HTP priority populations and project topics.

b) Qualified staff recruitment and retention concerns, particularly related to the services listed in (a).

Appendix I describes **access to care** among the population living in the Swedish service area.

Many community partners observed that "access" to care may be influenced by multiple social barriers. Overall, population health and social supports (such as housing, food, transportation), as well as a centralized or aligned system to coordinate care and referrals, are major barriers to access in the metro region.

For example, there may be an adequate supply — or number — of services but, if they are located in an area that is difficult to get to by public transportation and are only available during the week day, they are inaccessible to Medicaid enrollees — especially HTP priority populations.

In the Swedish service area, 5.8 percent of residents were unable to find transportation to their doctor's office or the office was too far away. This rate increases to 8.6 percent in Denver County and decreases to 3.7 percent in Arapahoe County (see Appendix I).

Partners specifically cited the need for Medicaid to begin or expand reimbursement for telehealth services as one strategy for addressing this access gap.

Partners also identified specific populations for whom most, if not all, of these services are limited: individuals for whom English is not their primary language, individuals who do not identify as white, and/or individuals with developmental and/or intellectual disabilities.

Culturally appropriate, linguistically competent services are especially lacking. A reliable translation line was one proposed solution. For some non-English speaking populations, however, translation services are ineffective at rendering optimal health care services. Patients with complex conditions may need interpretation (as opposed to translation) services. Many stakeholders shared that language training is insufficient and hiring providers who reflect the communities served was also needed.

With Colorado's unemployment rate at historic lows, metro Denver partners described difficulties in recruiting and retaining bilingual or multilingual staff due to general workforce shortages and the limited abilities of some safety net providers to compete with higher salaries offered in other care settings. Partners addressing social determinants of health for vulnerable populations described concerns with provider burnout and the challenges with retaining experienced and qualified staff.

Individuals with developmental and/or intellectual disabilities were frequently identified has having limited access to even "basic" services such as mammograms and having accurate heights/weights measured, in addition to specialty care and other services. These gaps in access to care are driven by limited provider training and competencies in serving these populations but can also be due to equipment that cannot accommodate individuals with wheelchairs, for example.

Lastly, some partners felt that it was difficult to assess access and availability if patients are not fully engaged in seeking the care and supports that may be clinically indicated. Addressing some of the issues above, however, may improve patient engagement. Partners talked about the role of peer navigators and care coordinators to support patient engagement in addressing their care and social needs.

Unique details on specific service availability, access, gaps, and workforce considerations are described below.

Primary Care
The Swedish service area has approximately 82 primary care physicians per 100,000 residents — similar to the metro Denver rate of about 83 primary care physicians. The ratio is highest in Denver County (about 110 physicians) and lowest in Jefferson County (about 65 physicians). The service area also has the same Nurse Practitioner and Physician Assistant ratio at 164 providers per 100,000 residents as the metro Denver region (see Appendix I).

And more than one in 10 service area residents (12.2 percent) reported that those providers are not accepting new patients. Community partners repeated that while primary care providers are needed, there is an especially urgent need for care providers who accept Medicaid.

Partners identified gaps in primary care that can serve as medical homes for high-need patients, including disease management services. Some partners talked about primary care providers' unwillingness or inability to serve individuals who may have a complex care need (such as HIV, cancer, chronic pain, or diabetes). These patients often rely on the specialty care system for primary care services.

Primary care access was considered uneven across the metro area — with greater accessibility in the cities and less in the outlying areas.

Partners identified prenatal care specifically as difficult to access during non-traditional hours, which creates barriers for many lower income pregnant women. Midwifery was also identified as a needed service that was currently limited. Approximately one in three (34.7 percent) prenatal care visits in the Swedish service area were covered by Medicaid (see Appendix G).

School-based and community health centers were identified as "excellent" resources serving youth and families that could be leveraged and expanded, including offering telehealth services. Community health centers also offer integrated, culturally appropriate medical, oral, and behavioral health services as well as support for care transitions. Community health centers may also offer non-traditional (non-workday) hours if approved by their Boards of Directors, which must have majority patient representation.

Specialty Care
The metro Denver area has limited access to specialty care providers for all individuals, according to some community partners. But Medicaid enrollees are especially underserved given the high demand for services. One partner described access to specialty care for Medicaid enrollees as "a nightmare". Unique specialty needs include orthopedics, neurology, gastroenterology, dermatology, oncology, and any surgical care. Geriatric care specialists were also identified as limited in the region.

The Swedish service area has about 342 physician specialists per 100,000 residents, the same rate for the metro Denver region. Denver County has the highest ratio (504 specialists per 100,000 residents) and Jefferson County the lowest (209 specialists) (see Appendix I).

E-consultations were mentioned as a solution for opening access to specialty care. Partners identified a need for Medicaid to cover e-consultations to increase the incentives for providers to offer this service. Several partners talked about the differences in primary care and specialty care environments, with specialty care settings less welcoming to enrollees and inattentive to the social barriers (inadequate food, housing) that may impact their abilities to adhere to a treatment plan. E-consultations that occur in collaboration with primary care providers could address this issue.

Long-Term Care Services
Assisted living was characterized as "available" for Medicaid enrollees, although partners did talk about the challenges in timing for getting patients approved for long term care through Medicaid (three to five day minimum). Also, not all dually-eligible Medicare-Medicaid enrollees are screened for or referred to the long-term services and supports (including PACE) for which they may be eligible. Skilled nursing facilities cited a need for greater access to hospitalists and other clinicians to avoid potential readmissions.

Partners also talked about a need for services that can accommodate more complex individuals, including acute care needs (such as rehabilitation for a broken hip) but also chronic conditions such as diabetes and people with limited social supports (housing, nutritious food, transportation).

The availability of long-term care services, especially home health, was characterized by some partners as limited and of poor quality. The low wages paid to home health staff — and the impact this has on turnover and employee engagement — was cited as one reason quality may be low.

Long-term service providers such as Sava Senior Care, Vibra Hospital, and others reported that data sharing using CORHIO is working well to better serve patients. But those same providers also reported opportunities to better coordinate discharge planning from the hospitals. For example, they called for more consistent "doc to docs" — or "warm handoffs" between the hospital physician and a physician at the long-term care provider. They suggested hospitals maintain clear expectations with long-term care providers who serve Medicaid beneficiaries — from curating a list of long-term care providers who accept Medicaid reimbursement, to tracking how many Medicaid patients those providers will accept and ensuring they can serve the patient regardless of health status changes that could land them back in the hospital.

Long-term service providers reported that hospitals are "discharging increasingly sick people" — meaning that long-term care facilities are required to handle more complex care than anticipated. For example, long-term care facilities are used to treating patients for a broken hip, but an increasing number of patients are showing up with a broken hip plus diabetes, COPD, and no stable housing.

They also recommended hospitals use patient navigators, social workers, and other ancillary staff to support patients as they move into a long-term care environment (e.g., securing oxygen, getting prescriptions filled, ensuring adequate housing).

Oral Health Services
Community partners generally expressed concern that oral health services were limited or not available for adults but that services for children and youth were more available. One partner referenced that many primary care providers were also providing preventive oral health screenings and services (such as fluoride varnish) for children. Cavity Free at Three, a program that teaches medical and dental providers how to deliver and bill Medicaid for preventive oral health services for young child and pregnant women, has trained 5,041 providers and advocates across Colorado from 2008-2018. Most — but not all — partners interviewed were aware of the adult dental benefit.

There was also concern that access may be more limited for individuals with unique needs such as behavioral health issues or developmental or intellectual disabilities. An identified challenge for expanding oral health services, especially in integrated care settings, was securing capital resources needed for equipment, etc.

Maternal Health, Perinatal, And Improved Birth Outcomes
Home visitation programs were frequently cited as a service that could promote maternal health, perinatal, and improved birth outcomes. Many public health agencies, health care providers, and community partners provide these evidence-based programs that include Healthy Steps for Young Children, Home Instruction for Parents of Preschool Youngsters, Nurse-Family Partnership, and Parents as Teachers. Partners felt the supply was limited. Data on home visitation programs availability and staffing is largely unavailable, although the Nurse-Family Partnership cites it has 22 agencies providing this evidence-based practice to all 64 counties.

Kaiser Permanente's required home visit from a nurse after discharge was cited as a positive service. One partner stressed the importance of having a peer navigator available to new moms to feel supported and comfortable sharing their experiences. Denver Health's community doula program was mentioned as a model.

Maternal emergency training for emergency department providers was identified as lacking. This training could help providers recognize signs and symptoms that require immediate attention and transfer to an OB floor instead of remaining in the emergency department. The Colorado Perinatal Care Quality Collaborative was identified by several partners as a valuable resource.

Partners talked about a need for more robust community-based/outpatient lactation services to support new parents — to supplement and continue the support that new parents receive during the delivery stay.

Community partners highlighted the challenges that some new moms face in accessing services. They recommended that HealthONE hospitals could work with local partners to better connect new moms — especially those with limited income — to community organizations for ongoing support after delivery. For example, the Families Forward Resource Center offers a Healthy Babies Strong Families program to educate moms on marijuana use, and to connect new moms to quality postnatal services. Partners also said low-income new moms need access to car seats to ensure babies are safe during transport.

End of life care
Partners focused on the role of advanced directives as a process for accessing end of life care. As described in Appendix G, more than a third (35.7 percent) of Swedish's service area population has an advance directive. That's compared to 38.2 percent of the Denver metro area population who reported having an advance directive.

Partners shared that hospitals were "doing a good job" of asking patients about having an advanced directive but suggested that other providers — including primary care physicians — need to reinforce these messages. Just 40 percent of residents in the metro area report ever having had a serious discussion about their advance directive with a health care provider.

Access and referral to hospice was characterized as being "late" in the care process. One partner shared that some ethnic groups may have lower utilization of end of life care than whites.

Palliative care is medical care for people with serious illness that focuses on symptom relief and pain management. This type of care is often offered as part of end of life care but can be helpful at any stage of treatment.

A 2013 study of palliative care in Colorado (the most recent data available) found that a majority of services are provided in hospital-based settings (58 percent) compared with 42 percent in a hospice. 26 of 99 Colorado hospitals that responded to the survey reported providing palliative care services. Approximately 85 percent of the 99 Colorado hospitals that responded to the survey reported having at least one physician or nurse with Hospice and Palliative Medicine certification.

53 Colorado hospice providers responded to the 2013 survey, and 19 reported providing palliative care services.

Behavioral Health

Most partners shared that behavioral health services are limited — although one partner shared that even when service capacity is increased it is quickly filled, suggesting there may never be enough services to meet demand. The Swedish service region has 454 behavioral health specialists per 100,000 residents. These ratios vary by provider type. For example, there are about 15 Certified Addiction Counselors per 100,000 residents and about 82 licensed psychologists per 100,000 residents.

Most partners reported that detox services are a major gap in metro Denver, especially with the closure of Arapahoe House. They cited recovery housing as a gap, as well as respite care for individuals who are at risk for readmission to the hospital either due to inadequate housing, severe mental illness, or other risk factors.

Behavioral health advocacy groups cited that the crisis centers are not adequately serving the region. They suggested that integrated behavioral health services are a place to start, but that crisis centers need more slots, reimbursement parity, more transparent data sharing, and higher wages for the psychiatric workforce.

Adolescent-friendly services were called out specifically as lacking, as were the number of inpatient psychiatric beds. Behavioral health services that are welcoming to individuals who identify as lesbian, gay, bisexual, transgender, or questioning are limited, especially if these individuals also have a developmental, intellectual, or physical disability.

Another common sentiment was that individuals' behavioral health needs are on a continuum and service availability varies by need. For example, there may be limited services available for relatively low needs — or these may even be addressed in primary care settings. Residential and outpatient substance use treatment services were identified as especially limited, even more so for individuals with both behavioral health (mental health and substance use) and physical health concerns or individuals who also have developmental or intellectual disabilities.

The behavioral health workforce gaps were generally identified as licensed clinical social workers, psychiatrists, and nurses to staff residential or treatment programs. Partners cited the competition in the metro Denver area with for-profit entities offering higher salaries, making recruitment and retention challenging.

Several partners talked about workforce gaps concerning medication assisted treatment (MAT). Permitted, trained MAT prescribers who are comfortable prescribing are in short supply. One partner talked about a need for providers who can work with a patient throughout this process — beginning with withdrawal. There are not established mentor systems currently offered in the region that connect comfortable, experienced providers with ones new to the process.

Colorado had 702 health care professionals (physicians, nurse practitioners, and physician assistants) authorized to prescribe buprenorphine, a medication used in MAT, in 2017. Nearly half of these providers

(46 percent) did not prescribe the medication between 2016 and 2017.

Most partners felt positively about the availability and capacity of the peer workforce. That said, behavioral health advocates suggested that a next step could be to promote peer recovery coaches in emergency departments and other less traditional settings such as libraries and grocery stores.

Lastly, medical staff with interest, experience, and willingness to engage in behavioral health services is needed.

Other Outpatient Services
Partners did not specifically identify other outpatient services needed that have not already been addressed in other areas.

Population Screenings and Population Health Supports
Partners identified a need for developmental screenings for youth. Affordable, high-quality, safe child care was also mentioned.

Partners talked about a need for supporting parents to support their children to make good decisions and develop healthy behaviors, especially early in life (such as developing sleep patterns and choosing water over juice for a bottle).

The MyDenver card was identified as an asset available to youth ages 5-17 living in the City and County of Denver, which serves as a "single pass identification" for city services and public transportation. This pass could be expanded to include other jurisdictions, parents of youth, cultural services, etc.

Data are unavailable to quantify the staffing needs and gaps for these services.

Complex Care Management, Care Coordination, and Care Transitions
Most community partners identified gaps in the current complex care management and care coordination services.

Most felt that availability of care coordination services was not the issue so much as the over-abundance of care coordinators, especially upon hospital discharge, resulting in confused patients, caregivers, and providers. One partner shared that "everyone is doing it, but very little of it is coordinated." One partner shared that "poor communication with and among health care organizations" was one of the greatest challenges in the metro region.

Transitions between different sites of care were discussed generally, with participants frequently focusing on hospital discharge transitions.

Specific resources and gaps are described below.

- General resources, gaps, and concerns:
    - Co-location of social service providers in health system settings was identified as a best practice that could be expanded. Individuals may be "captive audiences" in a hospital emergency department or inpatient bed. While they may not have all the needed paperwork to complete applications for programs like SNAP or WIC, meeting someone face-to-face to discuss a program, get accurate contact information, and initiate a process was identified as a critical step in connecting people with services. In addition, some individuals may be reticent to visit a county office to enroll. One partner felt that hospital social workers are providing patients with lists of services but not necessarily making connections. Some community-based organizations and safety net providers also offer

culturally and linguistically appropriate services. Embedding these providers into hospital settings is an opportunity to ensure the patient feels comfortable with the next step of care and might make the handoff more likely to succeed, thereby avoiding a repeat admission or emergency department visit.

- One community primary care provider felt that care coordination has been "one-sided" from them, with little participation and support from HealthONE hospital partners.
- They felt that Swedish Medical Center "does not naturally work outside of their doors. The moment they discharge the patient, they leave the patient alone." They acknowledged the medical center's home health aides, transportation home, connections to nutrition and primary care services — but still felt that those efforts could be better coordinated with community partners.
- RAE partners felt if Swedish Medical Center case managers would directly refer high utilizer Medicaid patients or patients needing continued support after discharge, the RAE could improve care coordination and help reduce readmission.

- Population-specific resources, gaps, and concerns:
  - Maternal care transitions are critical for parent and child health. Hospitals were identified as trusted providers with unique connections and opportunities with parents. Hospitals have direct lines of communication to new parents during a very sensitive time (the delivery stay). This is an opportunity to increase awareness of — and screen for — maternal depression and other behavioral health concerns. Many hospitals are promoting and supporting new parents with breastfeeding and can also be discussing immunizations, oral health, and other healthy eating strategies for new parents. New parents could also be screened for other health issues, including substance use, and other social services (such as WIC or SNAP) during this time. This may be important to be done in partnership with trusted community providers, ideally peers, and in a non-judgmental way during this sensitive time period. Partners talked about new parents' concerns and fears that identifying these problems or needs will result in them "losing" their children or may compromise the level of care they or their children may receive in the future. Partners identified that hospitals have little incentive, however, to follow moms after they deliver and that post-partum reimbursement for services may be lacking. However, families are more likely to follow up with well child care; therefore, transitions to community-based pediatrics or family medicine providers (vs the OBGYN) were identified as significant to have in place before discharge. Other unique transition needs are for women in recovery who have children. They need to be connected with community-based care and supports for themselves and their children when they come out of behavioral health treatment.
  - A specific care transition challenge cited by some partners is for individuals coming out of hospital inpatient psychiatric units. Hospital-based liaisons who used to coordinate between community mental health centers and hospitals are no longer in place in some areas.
  - Individuals experiencing homelessness were frequently identified as being difficult to facilitate transitions for, primarily because of the basic need for housing. Some examples to leverage may include the Jefferson County Regional Homeless Navigator model to promote connections across multiple care and social needs in the county's municipalities. The Colorado Coalition for the Homeless has also developed partnerships with area hospitals regarding hospitalizations and discharges to assist individuals without a home.
  - Transitioning care — or any services — for individuals coming out of jails is challenging. Individuals are typically released with a 10 day supply of physical medications and a 30 day supply of psychotropic medications, creating a critical two week window for justice-involved individuals to connect with a provider for continuity of care and to avoid reaching a crisis such as running out of medications, seeking care in an emergency department, returning to misusing drugs or alcohol, risking potential overdose, etc. Data exchange is limited in some

areas (also see IV.g. below). One partner cited CWISE — a system through the Colorado Department of Corrections — that is used by probation and parole officers to facilitate connections for people coming out of jail. Partners had limited contact with it but said it might be a resource that could be improved or leveraged. Colorado Access was cited by community partners for its use of justice-focused case managers and also being proactive in connecting with individuals upon release.

- Structuring a physician-to-physician conversation was identified as especially important to community partners when a patient moves from hospital to long term care or to be admitted to the hospital from a long-term care facility. Since this conversation is a key element of identifying which party is, or will be, accountable for a patient's care, other types of care transitions may also benefit from the physician-to-physician conversation.
- RAE partners reported that one small change could improve the way patients needing transportation are supported: They asked that hospital partner case managers get the Medicaid transportation forms signed by the hospital provider. The RAE partners said that they are not able to sign them to allow for "medically necessary" transportation — and as a result, it "often takes months" to secure transportation services with the primary care provider after the patient is discharged.
- RAE partners also reported that current data sharing allows them to track when a patient is admitted for a behavioral health-related issue — but they are unaware when a Medicaid patient shows up with a behavioral health issues in the emergency department. They suggested that Swedish Medical Center staff call their RAE partners when this happens to better connect patients to outpatient behavioral health services.

Overarching concerns shared by multiple partners was that a transition is only successful if services are available when an individual is ready to access them. Additionally, ensuring a connection — ideally face-to-face — between a patient and a community/external provider or organization that is responsible for providing or coordinating their care before that patient is discharged from the hospital is key to ensuring successful transitions.

Partners described the challenges, difficulties, and time required to connect with — or find — patients with whom they did not meet or speak prior to discharge. They shared this lowers the likelihood that patients will receive the care and supports needed to avoid a readmission or emergency department visit.

Additional information about the data infrastructure for supporting care coordination and transitions is described in Question IV.g.

Social supports

Generally, most community partners felt that access to affordable, culturally relevant social supports are lacking in the metro Denver area given the demand and need.

Other services are underutilized. For example, Denver Human Services is leading a series of initiatives to support the Denver community's health — from an online client portal for accessing resources such as food and cash assistance, to Denver's Road Home which connects people with housing and navigation services. Swedish Medical Center should consider partnering with Denver Human Services to leverage these resources and connect their patients with them.

Details are provided below on needs related to housing and homelessness, legal supports, nutrition, employment and job training, and transportation.

Housing

Nearly all community partners identified housing as one of the most significant gaps in social supports for HTP priority populations. This ranged from safe housing environments, especially for older adults or frail elderly as well as children with special health care needs. Homelessness is a significant issue. There are approximately 7,394 children and youth experiencing homelessness in the Swedish service area (see Appendix D). Key informants with the Colorado Coalition for the Homeless shared they serve approximately 16,000 unique individuals annually. Permanent supportive housing that includes "wraparound" services to address individuals' medical, behavioral health, and social needs is needed — and lacking in supply — for individuals with behavioral health and physical health concerns, many of whom are also experiencing homelessness. Some partners mentioned the sober living homes available in the metro area and cited a need to expand these services.

Medical conditions can exacerbate housing challenges. For example, medical respite care and "step-down" care was cited as important and needed. Denver Health's respite program was mentioned as a useful program that provided shelter but is not staffed with clinicians.

Families with a baby in the neonatal intensive care unit, or situations where a baby is discharged but the caregiver is admitted, may also have limited supports available. The March of Dimes and Ronald McDonald House were identified as important resources but unable to meet all of the needs.

The overall lack of **affordable housing** in the metro area, including limited apartment capacity, was identified as especially acute for low income Medicaid enrollees. Partners see people moving around frequently, which impacts whether and how they access care. This involuntary displacement may also negatively impact behavioral health. Low-income individuals facing chronic and complex health conditions have may fewer resources to devote to other basics like food and housing as they struggle to cover health care costs.

Partners also talked about the impact that affordable housing shortages has on care delivery and workforce — especially for lower-paid employees like nursing aides or home health workers.

Data in Appendix D reinforce the affordable housing concerns, with almost a quarter of residents (24.1 percent) using half or more of their incomes on rent.

Legal, Medical/Legal, and Financial Services

The metro area has had several pilot programs for legal, medical-legal, and financial services that have been valuable for streamlining care and improving health. These may be especially relevant for individuals with significant behavioral health conditions or individuals with dementia who lack a designated power of attorney or caregivers who can or are willing to serve in this capacity when care decisions are needed.

Partners talked about existing programs for medical-legal partnership that had been closed (including Centura and Children's Hospital) and some that are opening soon (with Denver Health and UC Health).

Nutrition

There are some community resources and services available to meet patients' nutritional needs. This may include organizations like Hunger Free Colorado that can enroll patients in SNAP or WIC. Others also referenced home-delivered meals that may be available through non-profit organizations such as Project Angel Heart or Meals on Wheels.

These services are in high demand, however, and have limited capacity — especially Meals on Wheels.

Access to healthful, nutritious food was identified as a need among individuals experiencing homelessness.

For key populations such as new moms and infants, HealthONE hospitals are already using services such as Rocky Mountain Children's Foundation Mother's Milk bank. Project Angel Heart is also serving this population.

Transportation
The Non-Emergency Medical Transportation (NEMT) program was described by one community partner as "untenable". The unreliability and limited availability of this service was cited as a potential driver of hospital and emergency department visits. For example, a patient may miss an outpatient appointment with a specialist due to a late or missed NEMT pick-up, be barred from receiving future appointments, and then visit an emergency room either due to worsening conditions or a perception that the only available specialty care is through an emergency room.

Similar concerns were cited for individuals who rely on public transportation and the difficulty in getting to care appointments in a timely manner. Several partners talked about limited car ownership among low income individuals and the challenges that creates for mobility. Partners talked about the need to support the Regional Transportation District's fare reductions for low income households.

Pilot programs that connect individuals to ride-sharing programs such as Uber or Lyft were mentioned by a few partners as another promising strategy, especially for less-mobile populations.

Employment and Job Training
Other concerns raised regarding employment were related to wages — and a lack of a "liveable minimum wage". Some participants mentioned that home health employees caring for Medicaid patients may also be enrolled in Medicaid themselves.

The 17 community-based reentry organizations that provide social services and peer support for individuals returning to the community from jail were cited as a valuable asset. These organizations provide "on-the-ground case managers providing hands-on support" for services ranging from on-site job skills training, education support, and mentoring. But they have also expanded into housing programs for justice-involved individuals and are exploring stronger linkages with primary care and behavioral health providers.

IV.f.ii. Please use the table below to identify the hospital's facilities and services available in the community as the hospital has defined them.

Facility Type	Facility Name	Facility Address	Services Offered
Hospital	Swedish Medical Center	501 E. Hampden Ave Englewood, CO 80113	Inpatient, observation, medical/surgical admissions. Outpatient clinics, oncology services, specialty surgery services i.e. Burn Clinic, Flaps, AVM's, Regular and some high-risk maternity spine surgery unit, general orthopedics
Outpatient Clinic	Infusion Center and Radiation Oncology	799 E. Hampden Ave #100 Englewood, CO 80113	Infusion services
Outpatient Clinic	Wound Care Clinic and Hyperbaric Medicine	601 E. Hampden Ave #110 Englewood, CO 80113	Advanced treatments and therapy options of wound healing
School-based Clinic	Swedish Family Medicine	191 E. Orchard Road Littleton, CO 80121	Connection to PCP Follow up services
Free-standing Emergency Room	Swedish Southwest ER	6196 S. Ammons Way Littleton, CO 80123	Full Emergency Room services with specialty trained ER Staff/Physicians
Free–standing Emergency Room	Swedish Belmar ER in Lakewood	260 S. Wadsworth Blvd Lakewood, CO 80226	Full Emergency Room services with specialty trained ER Staff/Physicians

IV.g. Please use the space below to describe the current state of protected health data exchange infrastructure and use inside the defined service area (available RHIOs, participation level amongst area providers, primary data exchange capabilities) as well as an assessment of the hospital's current capabilities regarding data exchanges across network providers, external partners and with RHIOs or regional data exchanges. Please speak specifically to how this impacts care, including care transitions and complex care management.

CORHIO has been collecting and storing data since 2009, with more than 16,000 health information exchange (HIE) users and nearly 5.6 million unique patients in the HIE. HIE users in the metro Denver area include most area hospitals (except for Denver Health and National Jewish Health). RAEs also receive data from CORHIO. Primary care providers were identified as more likely to be participating in CORHIO than specialty care providers.

Some partners identified these gaps in service provider participation, especially hospitals, in CORHIO as a barrier to care coordination and transitions, creating a need to establish unique partnerships and data sharing arrangements.

Most HealthONE staff interviewed did use data sharing infrastructure across HealthONE hospitals to better serve patients — such as the Care Alert system to track patients who are seeking narcotics or overusing the emergency room. However, many HealthONE staff did not use CORHIO to ensure data sharing continuity at external service providers. As a result, staff reported they are unable to track whether a patient used an urgent care or followed up with their primary care provider.

Similarly, community partners highlighted that their services could be better tailored to patients if they had access to HealthONE's data. Referral partners including local primary care providers noted that if they were equipped with HealthONE's data through CORHIO, they could "better coordinate patient care, take over care faster after a patient's discharge, reduce the likelihood of readmission and overutilization, and improve overall patient outcomes."

CORHIO participation varies among long-term care facilities including skilled nursing facilities. Those who are connected shared that participating in CORHIO has been helpful in facilitating the hospital-to-long-term care transition.

Behavioral health providers are connected to CORHIO. Because CORHIO is not compliant under 42 CFR Part 2, they use it to view physical health data on their members but do not incorporate their treatment data into the system for other providers to view. Some described CORHIO as "not useful" for substance use treatment providers. Partners shared that 42 CFR does interfere with care coordination and leads to a lack of universal consent forms. CORHIO is establishing a consent database to address the issues in order to be compliant.

There was uncertainty about the availability of behavioral health screening (not treatment) data, especially for maternal and child health. Improved data sharing for maternal and child health was identified by several partners. Allowing a primary care provider to access any maternal and/or newborn screening information — especially depression or mental health screening for parents — that a hospital may have conducted during the birth episode was called out as especially useful for care transitions and complex care management. A partner also talked about one example in Jefferson County where Centura Health and Jefferson County Public Health have a Business Associates Agreement to share data with the home visiting program for new moms and families. These linkages ensure a new family is connected to evidence-based services upon discharge.

Emergency medical services also has access to data through CORHIO, but there are limitations in how it

can currently "digest" and upload these providers' data. Some health systems, including Centura Health, SCL Health, and HealthONE, use separate systems for sharing data with EMS providers and their multiple sites of care.

The region does not have a coordinated system for facilitating referrals between health providers and community partners. Health providers (hospitals, primary care, specialty care, behavioral health) are not uniformly screening for these social supports, if at all, and there is no systematic way to initiate or facilitate referrals electronically. Some community partners receive and share patient referral data with hospitals via Excel sheets or by phone. There is no systematic way for these providers to let a hospital know the referral occurred or the outcome of that referral. This gap limits both hospitals and community providers' abilities to accurately measure and evaluate the impacts of these services on health. One partner shared "we need to close the loop with hospitals, but there is no way to even start a loop, let alone close it."

Participants identified some promising local efforts (Aunt Bertha, Boulder County Connect) and hope these tools will be expanded and used regionally. Many stakeholders expressed desire to align tools and systems and not develop technologies that build, or reinforce, siloes that may ultimately harm patients and providers.

Providers serving justice-involved individuals may lack access to these patients' medical records and care history during incarceration. HCPF and the Department of Corrections (DOC) have agreements for sharing some data, but this connection does not seem to be available through CORHIO and its participating providers. HCPF is able to share a list of attributed patients from the DOC to RAEs but these lists may be inaccurate.

IV.h. Please use the space below to provide information about any other major topics discussed with community stakeholders and input received.

Additional information and topics that were identified by community partners throughout the metro area are described below.

- **Authentic Patient Engagement**: Patients and families were frequently identified as the first solution and opportunity for achieving HTP's goals. This includes creating safe, meaningful opportunities for patients to talk about their experiences and challenges and recommend changes.
- **Bias in Care Delivery**: Disparities among some populations may be driven by biases within care delivery settings. These might include implicit racial and ethnic discrimination, non-welcoming environments to justice-involved populations, a workforce that is not representative of the population served including race/ethnicity as well as disability, limited harm reduction approaches, and lack of trauma-informed care. Developing programs to assess and address these barriers throughout the care delivery system, including hospitals, were identified as an important step.
- **Health and Social Service Literacy**: Many HTP priority populations were identified as having low health literacy — from utilizing health care services to basic health promotion and prevention — raising the risk of unintended health consequences if individuals don't have a basic understanding of their health needs and how to get them met. At the same time, hospitals were characterized as having low social service literacy, awareness, or knowledge of the support system available to address patients' needs.
- **Health Alliance Participation:** Community partners felt that members of leadership from Swedish Medical Center are not always "sitting at the table" at community meetings to address population health. One partner appreciated their ongoing partnership with Swedish's leadership as they participate on their organization's board. However, they also suggested that a member of the "c-suite" should participate in local health alliance meetings — such as the Mile High Health Alliance

or Aurora Health Alliance — to better coordinate care with the local RAEs, community health centers, and other ongoing initiatives.
- **HealthONE's Commitment to Patient Care:** All HealthONE staff interviewed highlighted their commitment to improving the health of their patients. Staff recommended that any HTP initiatives should be tailored to community needs, meaning culturally competent services that are offered in the language spoken by vulnerable community members, and at an education level that meets patients where they are.

IV.i. Please use the space below to provide preliminary thinking regarding the likely focus of HTP initiatives, in particular target populations and target community needs.

This needs assessment revealed several key populations and service needs that Swedish Medical Center should address in the next phase of HTP. Specifically, the assessment suggests that Swedish should:
- Strengthen relationships with community partners that are working to connect **homeless** people — especially new moms — with resources. Most community partners identified inadequate housing as a key gap in the community impacting health outcomes.
- Partner with others to address **transportation** needs for Medicaid patients.
- Partner with community groups to address **behavioral health and substance use treatment and recovery** needs for Medicaid patients.

These needs are broad and cannot be addressed by one hospital or organization alone. Instead, Swedish will identify partnerships to help address some of these needs. For example, Swedish will consider focusing its next phase of HTP on:
- **Partnering more closely with the RAEs.** Division-level initiatives are ongoing to identify which patients are Colorado Access patients, and to automate that process to help Swedish staff members connect more closely to the transition care team at the RAE. Next steps might include establishing clear case management and communication processes between Swedish and the RAE team.
- **Strengthening relationships with community partners** serving the homeless, housing insecure, and transient population — such as Denver Cares Detox, Stout Street Health Center, and Samaritan House — for navigation and housing placement services.
- **Strengthening relationships with long-term care providers** to streamline patient discharges, analyze root causes of readmissions, and improve patient health outcomes.
- **Strengthen relationships with community hospice and palliative care providers** to coordinate care and more clearly share data and information with primary care providers to reduce risk of readmission.

Discussions of future HTP initiatives to address these needs are ongoing. HealthONE division-level discussions are ongoing to potentially strengthen — or create — a Community Relations Manager position that acts as a "connector" to community groups, the health alliances, and other ongoing community initiatives. This individual should have direct accountability to senior leadership.

One participant shared the following quotation that reflects a general sentiment shared by many community partners about the hospitals' regional approach to this process and its potential: "The metro Denver hospitals working together can do groundbreaking work to elevate the social determinants of health if they leverage their collective power and reach."

Planned Future Engagement Activities

V.a. Please use the space below to outline planned future activities for engaging community organizations and processes that will be completed to inform and develop the hospital's HTP application. Please describe how organizations that serve and represent the broad interests of the community will continue to be engaged in the planning and development of the hospital's application, including:

- **Prioritizing community needs;**
- **Selection of target populations;**
- **Selection of initiatives; and**
- **Completion of an HTP application that reflects feedback received.**

In the next phase of community engagement and HTP planning, Swedish will engage with partners who were unable to participate in this environmental scan — including the Arapahoe County Senior Resources Division, as well as Encompass Rehab and Lutheran Hospice as long-term care service provider partners.

Community partners also shared that the Health Alliances — Mile High Health Alliance, Aurora Health Alliance, and others — provide a natural place to convene local partners. Most requested regular communication about HTP and engagement in the work moving forward.

Focus areas may include key populations such as Medicaid member new mothers and people experiencing homelessness. Discussions should focus on how to strengthen or scale up existing initiatives — such as care coordination for key populations. Swedish will also focus on strengthening care coordination with Colorado Access and long-term care providers.

Most — if not all — partners who were engaged in this process requested regular communication about HTP and expressed interest in working together to find solutions, improve care coordination, break down siloes, and engage in the work moving forward.

Additional Information (Optional)

You may use the space below to provide any additional information about your CHNE process. Please note that the word limit is a guideline and you may exceed it as necessary.

Many community partners reported that HealthONE hospitals are not perceived as visible or engaged in the community. They recommended addressing this gap by having executive hospital leadership participate in community groups such as health alliances, the RAEs' Program Improvement Advisory Committee (PIAC), and other community convenings.

HealthONE staff members suggested that future efforts to better coordinate care with external community partners should align with ongoing coordination efforts at HealthONE. Staff suggested that HealthONE care coordinators should provide robust follow-up services to ensure patients receive services outside of the hospital — asking questions such as, "Why couldn't you pick up the wheelchair we ordered for you? Why couldn't you get to your primary care provider's office for your follow-up visit? What barriers are you facing at home — from cost barriers to access to food, transport, adequate housing, or other services?"

They noted that these efforts are already ongoing, but that there are opportunities to strengthen relationships with local service providers such as family resource centers, nutrition supports, transportation services, behavioral health partners, and others.

Appendix I: Community Inventory Tool[1]

Use this tool to inventory clinical, behavioral, and social service resources in the community that could provide timely post-hospital follow-up, monitoring, and assistance. Use this inventory to identify which resources your hospital regularly uses. Also use this inventory as an implicit gap analysis to stimulate a consideration of providers or agencies you may want to more regularly use.

Clinical and Behavioral Health Providers

Provider or Agency	Transitional Care Services [Examples]	Yes	No
Community health centers, federally qualified health centers	[ability to accept new patients; timely posthospital follow-up; co-located social work, nutritional, pharmacy services, etc.]	☒	☐
Accountable care organization with care management or transition care	[high-risk-care management, transitional care to reduce readmissions, etc.]	☒	☐
Medicaid managed care organizations	[high-risk-care management, social work, wraparound services, etc.]	☒	☐
Program of All-inclusive Care for the Elder (PACE), Senior Care Options (SCO), Duals Demonstration providers	[capitated or risk-bearing providers focused on providing whole-person care to improve quality and reduce costs]	☒	☐
Medicaid health homes	[engagement, outreach, tiered care management; eligibility based on chronic and behavioral health conditions]	☒	☐
Multiservice behavioral health centers, including beshavioral health homes	[prioritized posthospital follow-up; availability for new patients; co-located support services, etc.]	☒	☐
Behavioral health providers	[accepting new patients, prioritizing posthospital follow-up, etc.]	☒	☐
Substance use disorder treatment providers	[effective processes for linking patients from acute care to substance use disorder treatment]	☒	☐
Heart failure, chronic obstructive pulmonary disease (COPD), HIV, dialysis, or cancer center clinics	[urgent appointments for symptom recurrence, protocol-driven ambulatory management, social work, education, etc.]	☒	☐
Pain management or palliative care	[symptom management over time, often with behavioral health specialists and social workers, education, etc.]	☒	☐
Physician/provider home visit service	[timely post discharge in home evaluation, coordination with primary care, specialists, pharmacy, home health, etc.]	☒	☐
Skilled nursing facilities	[onsite providers, warm handoffs, joint readmission reviews, INTERACT (Interventions to Reduce Acute Care Transfers) processes, transitional care from skilled nursing facility to home, etc.]	☒	☐

Provider or Agency	Transitional Care Services [Examples]	Yes	No
Home health agencies	[warm handoffs, joint readmission reviews, front-loaded home visits, behavioral health clinical expertise, etc.]	☒	☐
Hospice	[warm handoffs, joint readmission reviews, same-day home visits, etc.]	☒	☐
Adult day health	[daily clinical, nutritional, medication management, socialization, etc.]	☒	☐
Public health nurses	[home visits, outreach, education, clinical coordination, etc.]	☒	☐
Pharmacies	[bedside delivery, home delivery, medication therapy management, affordability counseling, blister packs, etc.]	☒	☐
Durable medical equipment	[same-day delivery; 30-day transitional care monitoring, education services, etc.]	☒	☐
Other		☐	☐

Social Services

Provider or Agency	Transitional Care Services [Examples]	Yes	No
Adult protective services	[safety evaluation, case management]	☒	☐
Area Agency on Aging (AAA)	[self-management coaching, chronic disease self-management, in-home personal support services, etc.]	☐	☒
Aging and Disability Resource Centers	[evaluate for eligibility for benefits and services; link to vetted providers]	☒	☐
Assisted living facilities	[onsite clinical, onsite behavioral, self-management coaching, adherence support, transportation, etc.]	☒	☐
Housing with services	[care management, onsite social work, onsite clinical, nutritional/food support, transportation, etc.]	☒	☐
Housing authority or agencies	[case management, facilitated process of pursuing housing options]	☒	☐
Legal aid	[securing benefits, access to treatment, utilities, rent, etc.]	☒	☐
Faith-based organizations	[personal and social support, transportation, meals, etc.]	☒	☐
Transportation	[transportation to meet basic and clinical needs]	☒	☐
Community corrections system	[case workers, social workers, collaboration on follow-up]	☒	☐
Other		☐	☐

Appendix II: Hospital Care Transitions Activities Inventory Tool[2]

An inventory of readmission reduction efforts will reveal the administrative, clinical, health information technology, and other organizational assets already in place. Once you know what efforts and assets already exist, you can consider whether they are optimally aligned and coordinated. The inventory will also serve as an implicit gap-analysis of activities or assets not currently in place. You may identify the need to implement new practices as part of this process.

Readmission Activities/Assets

ADMINISTRATIVE ACTIVITIES/ASSETS	For Which Patients?
☒ Specified readmission reduction aim	Heart failure, acute myocardial infarction, PNA, COPD, sepsis, joint replacement
☐ Executive/board-level support and champion	
☒ Readmission data analysis (internally derived or externally provided)	ALL
☒ Monthly readmission rate tracking (internally derived or externally provided)	ALL
☒ Periodic readmission case reviews and root cause analysis	High Utilizers
☒ Readmission activity implementation measurement and feedback (PDSA, audits, etc.)	ALL
☒ Provider or unit performance measurement with feedback (audit, bonus, feedback, data, etc.)	ALL
☐ Other:	
HEALTH INFORMATION TECHNOLOGY ASSETS	**For Which Patients?**
☒ Readmission flag	ALL
☒ Automated ID of patients with readmission risk factors/high risk of readmission	ALL
☐ Automated consults for patients with high-risk features (social work, palliative care, etc.)	
☒ Automated notification of admission sent to primary care provider	ALL
☒ Electronic workflow prompts to support multistep transitional care processes over time	ALL
☐ Automated appointment reminders (via phone, email, text, portal, or mail)	
☐ Other:	

TRANSITIONAL CARE DELIVERY IMPROVEMENTS	For Which Patients?
☒ Assess “whole-person” or other clinical readmission risk	ALL
☒ Identify the “learner” or care plan partner to include in education and discharge planning	Stroke patients
☒ Use clinical pharmacists to enhance medication optimization, education, reconciliation	Determined by Pharmacist
☒ Use “teach-back” to improve patient/caregiver understanding of information	ALL
☒ Schedule follow-up appointments prior to discharge	Care assure patients
☒ Conduct warm handoffs to post-acute and/or community “receivers”	ALL
☒ Conduct post discharge follow-up calls (for patient satisfaction or follow-up purposes)	ALL
☐ Other:	
CARE MANAGEMENT ASSETS	**For Which Patients?**
☒ Accountable care organization or other risk-based contract care management	
☐ Bundled payment episode management	
☒ Disease-specific enhanced navigation or care management (heart failure, cancer, HIV, etc.)	Heart failure, sepsis, joint replacement
☐ High-risk transitional care management (30-day transitional care services)	
☐ Other:	
CROSS-CONTINUUM PROCESS IMPROVEMENT COLLABORATIONS WITH:	**FOR WHICH PATIENTS?**
☒ Skilled nursing facilities	
☒ Medicaid managed care plans	
☒ Community support service agencies	
☒ Behavioral health providers	
☒ Other:	South Denver Care Continuum, Colorado Access, County Partners

Data Table Appendices

Appendix A: Population

Data Element	Total Service Area	Arapahoe County	Denver County	Jefferson County
Total Population 2017	**1,869,108**	626,612	678,467	564,029
Population by Age Group:				
Population Age 0-17 2017	**407,207**	152,415	138,624	116,168
Population Age 18-44 2017	**749,990**	237,211	314,824	197,955
Population Age 45-64 2017	**475,429**	161,811	149,060	164,558
Population Age 65+ 2017	**236,482**	75,175	75,959	85,348
Total Population Growth 2010 to 2017	**215,525**	70,878	104,808	39,839
% Population Growth 2010 to 2017	**13%**	13%	18%	8%
Population by Race:				
White Population 2017	**1,484,502**	450,692	521,481	512,329
Black or African American Population 2017	**136,260**	65,566	64,466	6,228
American Indian and Alaska Native Population 2017	**14,616**	3,573	6,537	4,506
Asian Population 2017	**75,549**	35,876	24,433	15,240
Native Hawaiian and Other Pactific Islander Population 2017	**2,692**	1,330	993	369
Some Other Race Population 2017	**88,858**	41,720	37,216	9,922
Two or More Races Population 2017	**66,631**	27,855	23,341	15,435
% White Population 2017	**79.4%**	71.9%	76.9%	90.8%
% Black or African American Population 2017	**7.3%**	10.5%	9.5%	1.1%
% American Indian and Alaska Native Population 2017	**0.8%**	0.6%	1.0%	0.8%
% Asian Population 2017	**4.0%**	5.7%	3.6%	2.7%
% Native Hawaiian and Other Pactific Islander Population 2017	**0.1%**	0.2%	0.1%	0.1%
% Some Other Race Population 2017	**4.8%**	6.7%	5.5%	1.8%
% Two or More Races Population 2017	**3.6%**	4.4%	3.4%	2.7%
Population by Hispanic Ethnicity:				
Hispanic Ethnicity Population 2017	**410,939**	118,350	207,100	85,489
% Hispanic Ethnicity Population 2017	**22.0%**	18.9%	30.5%	15.2%
Medicaid Enrolled Population:				
Average Medicaid Enrolled Population FY 2017/2018	**445,004**	140,440	207,844	96,720
% Medicaid Enrolled Population FY 2017/2018	**23.8%**	22.4%	30.6%	17.1%

***Sources**: American Community Survey, US Census Bureau, 2017; Department of Health Care Policy and Financing, State Fiscal Year 2017-2018*

Appendix B: Income & Work

Data Element	Total Service Area	Arapahoe County	Denver County	Jefferson County
Average Household Income 2017	**$93,696**	$95,851	$88,779	$97,672
Estimates of People with a Disability 2017	**175,313**	55,935	64,433	54,945
% Population with a Disability 2017	**9.5%**	9.0%	9.6%	9.9%
% Population below 100% Federal Poverty Level (FPL) 2016	**16.6%**	15.5%	20.5%	13.0%
% Population below 200% Federal Povery Level (FPL) 2016	**33.2%**	31.9%	38.5%	27.9%
Unemployment rate 2016	**3.1%**	3.1%	3.1%	3.0%

***Sources**: American Community Survey, US Census Bureau, 2017; Colorado Health Institute, 2016*

Appendix C: Immigration

Data Element	Total Service Area	Arapahoe County	Denver County	Jefferson County
Non-US Citizen Population 2017	**141,730**	53,215	69,913	18,602
% Non-US Citizen Population 2017	**7.6%**	8.5%	10.3%	3.3%

***Sources**: American Community Survey, US Census Bureau, 2017*

Appendix D: Housing

Data Element	Total Service Area	Arapahoe County	Denver County	Jefferson County
Median Home Value in US Dollars for Owner-Occupied Housing Units 2011-2015	**$265,952**	$247,600	$271,300	$279,500
% of Renter-Occupied Housing Units w/ Gross Rent 50% or Greater of Household Income in the Past 12 Months 2011-2015	**23.6%**	24.1%	23.3%	23.4%
Homeless Children & Youth, 2017-2018 School Year	**7,394**	2,648	1,688	3,058

***Sources**: American Community Survey, US Census Bureau, 2011-2015; Colorado Department of Education, 2017-2018 School Year*

Appendix E: Education & Literacy

Data Element	Total Service Area	Arapahoe County	Denver County	Jefferson County
Education:				
% of population aged 25+ years that completed a master, professional school or doctorate's degree 2011-2015	**15.8%**	14.1%	17.6%	15.3%
% of population aged 25+ years that completed an associate or bachelor's degree 2011-2015	**33.9%**	34.5%	32.6%	34.8%
% of population aged 25+ years that completed high school graduation, GED or alternative 2011-2015	**19.7%**	20.4%	17.7%	21.3%
% of population aged 25+ years that completed some college (less than one year or more) 2011-2015	**21.1%**	23.0%	18.3%	22.6%
% of population aged 25+ years that completed some level of education in grades K-12, but no high school diploma or equivalent completed 2011-2015	**8.6%**	7.2%	12.4%	5.5%
% of population aged 25+ years with no schooling completed 2011-2015	**1.0%**	0.9%	1.5%	0.5%
% School dropout rate 2016	**2.7%**	2.0%	4.0%	1.8%
Literacy:				
% >5 Years Old Population Speaking Only English 2017	**79.5%**	77.4%	73.3%	89.0%
% >5 Years Old Population Speaking Spanish 2017	**13.3%**	12.2%	20.1%	6.2%
% >5 Years Old Population Speaking Indo-European Language 2017	**2.9%**	3.7%	2.4%	2.5%
% >5 Years Old Population Speaking Asian Language 2017	**2.8%**	4.0%	2.5%	1.8%
% >5 Years Old Population Speaking Other Language 2017	**1.6%**	2.6%	1.7%	0.4%
% of households that are linguistically isolated 2011-2015	**3.9%**	4.7%	5.2%	1.4%
Health Literacy:				
Health Literacy: % Likely to look to member services to tell you what medical services your health plan covers 2015	**64.2%**	63.1%	63.6%	66.0%
Health Literacy: % Likely to look into what your plan will and will not cover before you get health care services 2015	**70.0%**	65.9%	72.9%	71.1%
Health Literacy: % Likely to review the statements you get from your health plan showing what you owe & what they paid 2015	**79.9%**	79.0%	78.0%	83.2%
Health Literacy: % Likely to find out if a doctor is in-network before you see him/her 2015	**75.4%**	77.8%	73.1%	75.3%
Health Literacy: % Confident in Understanding Premium 2015	**86.7%**	87.9%	81.6%	91.4%
Health Literacy: % Confident in Understanding Deductible 2015	**90.5%**	88.9%	88.8%	94.2%
Health Literacy: % Confident in Understanding Copayment 2015	**93.4%**	93.5%	91.9%	94.9%
Health Literacy: % Confident in Understanding Co-insurance 2015	**67.0%**	70.4%	63.4%	67.9%

***Sources**: American Community Survey, US Census Bureau, 2017; CHI CO Health Access Survey 2015*

Appendix F: Significant Health Issues & Physical Chronic Conditions

Data Element	Total Service Area	Arapahoe County	Denver County	Jefferson County
Significant Health Issues:				
Age-adjusted rate for congestive heart failure hospitalizations (per 100,000 population), 2013-2015	**736**	692	893	597
Age-adjusted rate of acute myocardial infarction hospitalizations (per 100,000 population), 2013-2015	**152**	136	177	140
Age-adjusted rate of heart disease hospitalizations (per 100,000 population), 2013-2015	**2,328**	2,366	2,586	1,977
Age-adjusted rate of hospitalizations due to stroke (per 100,000 population), 2013-2015	**253**	253	264	242
Prevalence Childhood Overweight, 2016-2017	**14.2%**	13.9%	15.0%	12.9%
Prevalence Childhood Obese, 2016-2017	**15.0%**	13.3%	17.5%	12.3%
Prevalence Adult Overweight, 2016-2017	**32.9%**	33.4%	32.4%	33.1%
Prevalence Adult Obese, 2016-2017	**31.9%**	33.1%	31.3%	31.7%
Physical Chronic Conditions:				
Prevalence Adolescent Diabetes, 2016-2017	**0.6%**	0.6%	0.7%	0.6%
Prevalence Adult Diabetes, 2016-2017	**7.9%**	7.6%	8.7%	7.0%
Prevalence Adult Hypertension, 2016-2017	**15.9%**	15.9%	15.8%	16.2%

***Sources**: Colorado Health & Hospital Association, 2013-2015; Colorado Health Observation Regional Data Service (CHORDS), 2016-2017*

Appendix G: Vulnerable Populations

Data Element	Total Service Area	Arapahoe County	Denver County	Jefferson County
Maternal Health & Perinatal Health:				
Percent of live births to mothers who were overweight or obese based on BMI before pregnancy, 2013-2015	**43.4%**	46.5%	42.7%	40.6%
Percent of live births with low birth weight, 2013-2015	**9.2%**	9.5%	9.1%	8.8%
Gained an inadequate amount of weight during pregnancy, 2014-2016	**18.7%**	22.6%	19.3%	12.9%
Unintended pregnancy, 2014-2016	**34.6%**	38.2%	29.9%	37.6%
Was covered by Medicaid for prenatal care, 2014-2016	**34.7%**	33.9%	35.0%	35.4%
Participate in WIC during pregnancy, 2014-2016	**23.9%**	23.9%	24.5%	22.9%
Drank alcohol during pregnancy, 2014-2016	**17.8%**	12.2%	23.1%	16.6%
Smoked before pregnancy, 2014-2016	**13.4%**	13.4%	12.9%	14.0%
Smoked during pregnancy, 2014-2016	**4.5%**	4.4%	4.0%	5.4%
Smoked after pregnancy, 2014-2016	**7.7%**	8.5%	5.7%	9.9%
Breastfeeding initiation, 2014-2016	**96.0%**	96.5%	93.5%	99.1%
Infant slept on back, 2014-2016	**89.2%**	87.4%	88.2%	93.1%
End of Life Care:				
Has an advance directive	**35.7%**	38.7%	28.4%	34.4%
Ever had a serious discussion about your advance directive with a health care provider	**39.6%**	37.8%	36.4%	41.1%
Ever had a serious discussion about your advance directive with a family member, friend, or other person you trust	**90.8%**	90.3%	88.6%	91.4%

***Sources**: Pregnancy Risk Assessment Monitoring System (PRAMS), 2014-16; Colorado Health Statistics & Vital Records, 2013-2015; CHI CO Health Access Survey 2017*

Appendix H: Behavioral Health & Substance Use Disorders

Data Element	Total Service Area	Arapahoe County	Denver County	Jefferson County
Behavioral Health:				
Percent of high school students who felt sad or hopeless almost every day for 2 or more weeks in a row so that they stopped doing some usual activities during the past 12 months, 2015	**29.4%**	28.4%	29.7%	30.5%
Percent of high school students who seriously considered attempting suicide during the past 12 months, 2015	**15.1%**	16.3%	13.1%	15.9%
Percent of parents who reported behavioral or mental health problems in children aged 1-14 years, 2013-2015	**21.7%**	21.5%	25.2%	17.7%
Percent of women who experienced 1 or more major life stress events 12 months before delivery, 2012-2014	**71.3%**	70.7%	69.8%	73.8%
Percent of women who often or always felt down, depressed, sad or hopeless since the new baby was born (Postpartum Depressive Symptoms), 2012-2014	**8.8%**	11.7%	8.5%	5.9%
Poor mental health (8 or more days of poor mental health during the past 30 days; ages 5 and older)	**11.6%**	11.8%	12.3%	10.5%
Needed mental health care or counseling services but did not get it at that time during the past 12 months (ages 5 and older)	**8.7%**	7.4%	10.3%	8.3%
Prevalence Adolescent Depression, 2016-2017	**10.2%**	9.0%	10.1%	11.8%
Prevalence Adult Depression, 2016-2017	**12.0%**	10.6%	11.4%	14.4%
Prevalence Adult Depression During Pregnancy, 2016-2017	**10.0%**	9.9%	9.7%	10.6%
Substance Use Disorders:				
Percent of adults aged 18+ years who reported binge drinking in past 30 days, 2013-2015	**20.6%**	17.4%	25.6%	17.9%
Percent of high school students who had five or more drinks of alcohol within a couple of hours, 2015	**14.9%**	12.3%	15.2%	18.1%
Percent of high school students who reported driving a car or other vehicle when they had been drinking alcohol, 2015	**7.6%**	6.1%	8.3%	8.6%
Percent of high school students who used marijuana one or more times during the past 30 days, 2015	**23.0%**	20.2%	26.1%	23.0%
Percent of women who drank alcohol during the last 3 months of pregnancy, 2012-2014	**16.9%**	13.1%	20.0%	17.6%
Prevalence Opioid Use Disorder, All Ages, 2016-2017	**0.9%**	0.5%	1.2%	0.7%
Prevalence Cannabis Abuse and Disorder, All Ages, 2016-2017	**1.0%**	0.4%	1.2%	1.0%
Prevalence Adolescent Tobacco Use, 2016-2017	**2.2%**	1.7%	2.3%	2.6%
Prevalence Adult Tobacco Use, 2016-2017	**18.2%**	14.5%	21.6%	16.4%

***Sources**: Colorado Health Observation Regional Data Service (CHORDS), 2016-2017; Healthy Kids Colorado Survey, 2015; Colorado Child Health Survey, 2013-2015; Pregnancy Risk Assessment Monitoring System (PRAMS), 2014-16; CHI CO Health Access Survey 2017; Behavioral Risk Factor Surveillance System, 2013-2105*

Appendix I: Access to Care

Data Element	Total Service Area	Arapahoe County	Denver County	Jefferson County
Physician Workforce:				
Total Number of Physicians, 2018	**8,204**	**2,296**	**4,314**	**1,594**
PCP Physicians, 2018	**1,535**	427	744	364
Specialist Physicians (excluding Psychiatrists), 2018	**6,394**	1,797	3,418	1,179
Psychiatrists, 2018	**275**	72	152	51
Total Number of Physicians per 100,000 Pop, 2018	**439**	**366**	**636**	**283**
PCP Physicians per 100,000 Pop, 2018	**82.1**	68.1	109.7	64.5
Specialist Physicians (excluding Psychiatrists) per 100,000 Pop, 2018	**342.1**	286.8	503.8	209.0
Psychiatrists per 100,000 Pop, 2018	**14.7**	11.5	22.4	9.0
Behavioral Health Specialist Workforce:				
Total Number of Behavioral Health Specialists	**8,486**	**2,234**	**4,404**	**1,848**
Certified Addiction Counselors, 2018	**272**	64	166	42
Licensed Clinical Social Workers, 2018	**731**	191	362	178
Licensed Psychologists, 2018	**1,528**	403	856	269
Other Behavioral Health Specialists, 2018	**5,955**	1,576	3,020	1,359
Total Number of Behavioral Health Specialists per 100,000 Pop, 2018	**454**	**357**	**649**	**328**
Certified Addiction Counselors per 100,000 Pop, 2018	**14.6**	10.2	24.5	7.4
Licensed Clinical Social Workers per 100,000 Pop, 2018	**39.1**	30.5	53.4	31.6
Licensed Psychologists per 100,000 Pop, 2018	**81.8**	64.3	126.2	47.7
Other Behavioral Health Specialists per 100,000 Pop, 2018	**318.6**	251.5	445.1	240.9
Mid-Level Provider Workforce:				
Total Number of Nurse Practitioners (NP) & Physician Assistants (PA)	**3,064**	**1,029**	**1,316**	**719**
Total Number of NP & PA per 100,000 Pop, 2018	**164**	**164**	**194**	**127**
Access & Affordability:				
You were unable to get an appointment at the doctor's office or clinic as soon as you thought one was needed, 2017	**15.9%**	11.7%	21.7%	13.5%
You were told by a doctor's office or clinic that they weren't accepting patients with your type of health insurance, 2017	**10.6%**	8.9%	12.2%	10.7%
You were told by a doctor's office or clinic that they weren't accepting new patients, 2017	**12.2%**	10.5%	14.9%	10.8%
You were unable to find transportation to the doctor's office or the doctor's office was too far away, 2017	**5.8%**	3.7%	8.6%	4.7%
Did not fill a prescription for medication due to cost, 2017	**10.4%**	9.8%	12.6%	8.3%
Did not get doctor care that you needed due to cost, 2017	**9.1%**	8.2%	12.7%	5.9%
Did not get specialist care that you needed due to cost, 2017	**12.2%**	10.9%	17.2%	7.7%
Data Element	**Total Service Area**	**Arapahoe County**	**Denver County**	**Jefferson County**
Had problems paying or were unable to pay any of your/your family's medical bills, 2017	**13.7%**	12.3%	17.2%	11.3%
Insurance Coverage Mix:				
Insurance Coverage 2017: % Employer-sponsored insurance	**52.4%**	59.0%	44.7%	54.4%
Insurance Coverage 2017: % Individual market (includes "other")	**8.3%**	7.6%	8.3%	9.1%
Insurance Coverage 2017: % Medicare	**14.1%**	13.8%	12.5%	16.5%
Insurance Coverage 2017: % Medicaid/Child Health Plan *Plus* (CHP+)	**19.6%**	16.5%	25.5%	16.0%
Insurance Coverage 2017: % Uninsured	**5.5%**	3.2%	9.0%	4.0%
Insurance Coverage 2017: TOTAL	**100.0%**	**100.0%**	**100.0%**	**100.0%**
***Sources**: CHI Access to Care Index 2018; Colorado Health System Directory, 2018*				
Caveats: PCP Physicians include Family Medicine, Internal Medicine and Pediatric Specialties				

Appendix J: Medicaid Hospital Utilization

Data Element	Total Service Area	RAE 3	RAE 5	RAE 6
Total Hospital Utilization:				
Total Medicaid Hospital Utilization Population, FY 2017/2018	**386,041**	216,454	104,979	64,608
By Gender:				
% Medicaid Hospital Utilization Population Female, FY 2017/2018	**57.5%**	56.4%	58.5%	59.7%
% Medicaid Hospital Utilization Population Male, FY 2017/2018	**42.5%**	43.6%	41.5%	40.3%
By Age Group:				
% Medicaid Hospital Utilization Pop Age 0-17, FY 2017/2018	**35.5%**	47.1%	21.8%	19.0%
% Medicaid Hospital Utilization Pop Age 18-44, FY 2017/2018	**38.5%**	33.8%	42.9%	47.4%
% Medicaid Hospital Utilization Pop Age 45-64, FY 2017/2018	**20.7%**	15.8%	27.1%	27.2%
% Medicaid Hospital Utilization Pop Age 65+, FY 2017/2018	**5.2%**	3.4%	8.3%	6.4%
By Race as Defined by HCPF (Hispanic is a race category)				
% Medicaid Hospital Utilization Population White, FY 2017/2018	**26.6%**	24.8%	23.5%	37.6%
% Medicaid Hospital Utilization Population Black, FY 2017/2018	**6.9%**	7.1%	9.9%	1.5%
% Medicaid Hospital Utilization Population American Indian and Alaska Native, FY 2017/2018	**0.5%**	0.4%	0.6%	0.6%
% Medicaid Hospital Utilization Population Asian, FY 2017/2018	**1.9%**	1.9%	2.1%	1.3%
% Medicaid Hospital Utilization Population Native Hawaiian or Other Pacific Islander, FY 2017/2018	**0.1%**	0.2%	0.1%	0.1%
% Medicaid Hospital Utilization Population Some Other Race or Race Not Provided, FY 2017/2018	**7.7%**	8.6%	6.0%	7.3%
% Medicaid Hospital Utilization Population Two or More Races, FY 2017/2018	**42.6%**	43.2%	43.0%	40.4%
% Medicaid Hospital Utilization Population Hispanic, FY 2017/2018	**13.6%**	13.8%	14.8%	11.1%
Sources: *Department of Health Care Policy and Financing, State Fiscal Year 2017-2018*				
Caveats: *All statistics represent only Medicaid enrollees who visited a hospital at least once during FY 2017/2018*				

Appendix K: Medicaid High Utilizers of Care

Data Element	Total Service Area	RAE 3	RAE 5	RAE 6
Hospital Inpatient Admissions:				
High Medicaid Utilizers: Highest Reason for Hospital Admit	**n/a**	Bronchiolitis	Alcohol abuse	Alcohol abuse
High Medicaid Utilizers: 2nd Highest Reason for Hospital Admit	**n/a**	Seizure	Septicemia	Septicemia
High Medicaid Utilizers: 3rd Highest Reason for Hospital Admit	**n/a**	Vaginal delivery	Electrolyte disorders	Vaginal delivery
High Medicaid Utilizers: 4th Highest Reason for Hospital Admit	**n/a**	Diabetes	Vaginal delivery	Diabetes
High Medicaid Utilizers: 5th Highest Reason for Hospital Admit	**n/a**	Septicemia	Diabetes	Disorders of pancreas
High Medicaid Utilizers: 6th Highest Reason for Hospital Admit	**n/a**	Alcohol abuse	Heart failure	Opioid abuse
High Medicaid Utilizers: 7th Highest Reason for Hospital Admit	**n/a**	Other pneumonia	Seizure	Poisoning
High Medicaid Utilizers: 8th Highest Reason for Hospital Admit	**n/a**	Asthma	Poisoning	Seizure
High Medicaid Utilizers: 9th Highest Reason for Hospital Admit	**n/a**	Malnutrition	Disorders of pancreas	Alcoholic liver
High Medicaid Utilizers: 10th Highest Reason for Hospital Admit	**n/a**	Chemotherapy	Renal failure	Cesarean delivery
Hospital Emergency Department Admissions:				
High Medicaid Utilizers: Highest Reason for ED Admit	**n/a**	Pharmacotherapy	Pharmacotherapy	Pharmacotherapy
High Medicaid Utilizers: 2nd Highest Reason for ED Admit	**n/a**	Infections of	Alcohol abuse	Medical visit
High Medicaid Utilizers: 3rd Highest Reason for ED Admit	**n/a**	Medical visit	Medical visit	Alcohol abuse
High Medicaid Utilizers: 4th Highest Reason for ED Admit	**n/a**	Musculoskeletal	Musculoskeletal	Musculoskeletal
High Medicaid Utilizers: 5th Highest Reason for ED Admit	**n/a**	Alcohol abuse	Infections of upper	Abdominal pain
High Medicaid Utilizers: 6th Highest Reason for ED Admit	**n/a**	Contusion	Abdominal pain	Infections of upper
High Medicaid Utilizers: 7th Highest Reason for ED Admit	**n/a**	Gastroenteritis	Contusion	Chest pain
High Medicaid Utilizers: 8th Highest Reason for ED Admit	**n/a**	Other antepartum	Chest pain	Contusion
High Medicaid Utilizers: 9th Highest Reason for ED Admit	**n/a**	Abdominal pain	Other drug abuse	Back & neck
High Medicaid Utilizers: 10th Highest Reason for ED Admit	**n/a**	Skin diagnoses	Signs, symptoms &	Other respiratory
Hospital Emergency Department Admission Rates:				
High Medicaid Utilizers: Annual ED Visits Per Medicaid Member to Any Hospital within the RAE	**4.11**	4.52	3.67	3.46
Sources: *Department of Health Care Policy and Financing (HCPF), State Fiscal Year 2017-2018*				
Caveats: *The HCPF HTP Vulnerable Populations Data Documentation (page 4) defines high Medicaid Utilizers as individuals who visited an OP ED four (4) or more times to any General Hospital within the state of Colorado during the last fiscal year.*				