2019 Community Health Needs Assessment

Kaiser Permanente Colorado

Approved by Kaiser Foundation Hospitals Board of Director's Community Health Committee

September 16, 2019

KAISER PERMANENTE®

Kaiser Permanente Colorado Region Community Benefit

CHNA Report for Kaiser Permanente Colorado

Contents

I. Introduction/background

A. About Kaiser Permanente (KP)

Founded in 1942 to serve employees of Kaiser Industries and opened to the public in 1945, Kaiser Permanente is recognized as one of America's leading health care providers and nonprofit health plans. We were created to meet the challenge of providing American workers with medical care during the Great Depression and World War II, when most people could not afford to go to a doctor. Since our beginnings, we have been committed to helping shape the future of health care. Among the innovations Kaiser Permanente has brought to U.S. health care are:

- Prepaid health plans, which spread the cost to make it more affordable
- A focus on preventing illness and disease as much as on caring for the sick
- An organized, coordinated system that puts as many services as possible under one roof—all connected by an electronic medical record

Kaiser Permanente is an integrated health care delivery system comprised of Kaiser Foundation Hospitals (KFH), Kaiser Foundation Health Plan (KFHP), and physicians in the Permanente Medical Groups. Today we serve more than 12 million members in nine states and the District of Columbia. Our mission is to provide high-quality, affordable health care services and to improve the health of our members and the communities we serve.

Care for members and patients is focused on their Total Health and guided by their personal physicians, specialists, and team of caregivers. Our expert and caring medical teams are empowered and supported by industry-leading technology advances and tools for health promotion, disease prevention, state-of-the-art care delivery, and world-class chronic disease management. Kaiser Permanente is dedicated to care innovations, clinical research, health education, and the support of community health.

B. About Kaiser Permanente Community Health

For more than 70 years, Kaiser Permanente has been dedicated to providing high-quality, affordable health care services and to improving the health of our members and the communities we serve. We believe good health is a fundamental right shared by all and we recognize that good health extends beyond the doctor's office and the hospital. It begins with healthy environments: fresh fruits and vegetables in neighborhood stores, successful schools, clean air, accessible parks, and safe playgrounds. Good health for the entire community requires equity and social and economic well-being. These are the vital signs of healthy communities.

Better health outcomes begin where health starts, in our communities. Like our approach to medicine, our work in the community takes a prevention-focused, evidence-based approach. We go beyond traditional corporate philanthropy or grantmaking to pair financial resources with medical research, physician expertise, and clinical practices. Our community health strategy focuses on three areas:

- Ensuring health access by providing individuals served at KP or by our safety net partners with integrated clinical and social services;

- Improving conditions for health and equity by engaging members, communities, and Kaiser Permanente's workforce and assets; and
- Advancing the future of community health by innovating with technology and social solutions.

For many years, we've worked side-by-side with other organizations to address serious public health issues such as obesity, access to care, and violence. And we've conducted Community Health Needs Assessments to better understand each community's unique needs and resources. The CHNA process informs our community investments and helps us develop strategies aimed at making long-term, sustainable change—and it allows us to deepen the strong relationships we have with other organizations that are working to improve community health.

C. Purpose of the Community Health Needs Assessment (CHNA) Report

The Patient Protection and Affordable Care Act (ACA), enacted on March 23, 2010, included new requirements for nonprofit hospitals in order to maintain their tax-exempt status. The provision was the subject of final regulations providing guidance on the requirements of section 501(r) of the Internal Revenue Code. Included in the new regulations is a requirement that all nonprofit hospitals must conduct a community health needs assessment (CHNA) and develop an implementation strategy (IS) every three years (http://www.gpo.gov/fdsys/pkg/FR-2014-12-31/pdf/2014-30525.pdf). The required written IS plan is set forth in a separate written document. Both the CHNA Report and the IS for each Kaiser Foundation Hospital facility are available publicly at https://www.kp.org/chna.

D. Kaiser Permanente's approach to Community Health Needs Assessment

Kaiser Permanente has conducted CHNAs for many years, often as part of long standing community collaboratives. The new federal CHNA requirements have provided an opportunity to revisit our needs assessment and strategic planning processes with an eye toward enhanced compliance and transparency and leveraging emerging technologies. Our intention is to develop and implement a transparent, rigorous, and whenever possible, collaborative approach to understanding the needs and assets in our communities. From data collection and analysis to the identification of prioritized needs and the development of an implementation strategy, the intent was to develop a rigorous process that would yield meaningful results.

Kaiser Permanente's innovative approach to CHNAs include the development of a free, web-based CHNA data platform that is available to the public. The data platform provides access to a core set of approximately 120 publicly available indicators to understand health through a framework that includes social and economic factors, health behaviors, physical environment, clinical care, and health outcomes.

In addition to reviewing the secondary data available through the CHNA data platform, and in some cases other local sources, each KFH facility, individually or with a collaborative, collected primary data through key informant interviews, focus groups, and surveys. Primary data collection consisted of reaching out to local public health experts, community leaders, and residents to identify issues that most impacted the health of the community. The CHNA process also included an identification of existing community assets and resources to address the health needs.

Each hospital/collaborative developed a set of criteria to determine what constitutes a health need in their community. Once all the community health needs were identified, they were prioritized, based on identified criteria. This process resulted in a complete list of prioritized community health needs. The process and the outcome of the CHNA are described in this report.

In conjunction with this report, Kaiser Permanente Colorado (KPCO) will develop an implementation strategy for the priority health needs the region will address. These strategies will build on Kaiser Permanente's assets and resources, as well as evidence-based strategies, wherever possible. As a non-hospital region, KPCO voluntarily complied with federal requirements. The Implementation Strategy will be filed with the Internal Revenue Service using Form 990 Schedule H. Both the CHNA and the Implementation Strategy, once they are finalized, will be posted publicly on our website, https://www.kp.org/chna.

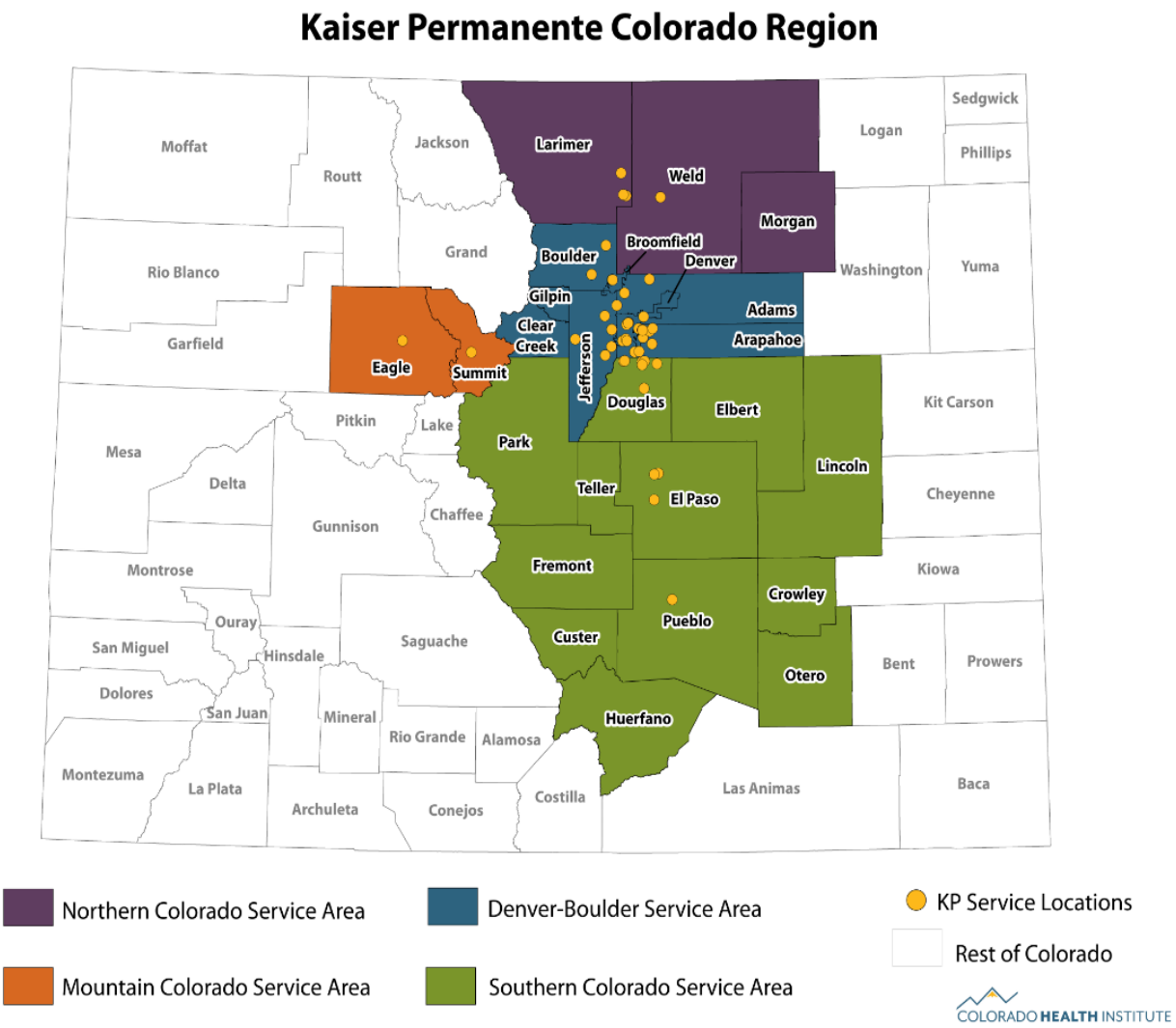
II. Community Served

A. Kaiser Permanente's definition of community served

Kaiser Permanente defines the community served as those individuals residing within its service area. A service area includes all residents in a defined geographic area surrounding its medical facilities and does not exclude low-income or underserved populations.

B. Map and description of community served

i. Map of Kaiser Permanente Colorado region



ii. Geographic description of the community served

KPCO's community is made up of 25 counties encompassing four service areas, including *Northern Colorado* (Larimer, Morgan, and Weld counties), *Southern Colorado* (Crowley, Custer, El Paso, Elbert, Fremont, Huerfano, Lincoln, Otero, Park, Pueblo, and Teller counties), *Mountain Colorado* (Eagle and Summit counties) and *Denver-Boulder* (Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, and Jefferson counties). Note: Some census tracts in Douglas County are in the Southern Colorado service area, some are in the Denver-Boulder service area. See Appendix G for a list of all KPCO office/service locations.

KPCO serves a geographically diverse area, including the state's most populous urban counties along the Front Range, the mountain rural communities southwest of Denver, the alpine counties west of the Continental Divide, and the plains to the east.

According to the Colorado Department of Public Health and Environment, 16 counties in KPCO's community are classified as urban, six as rural, and three as frontier. The rural counties are on the western slope of the Continental Divide and on the Eastern Plains. Two counties, Custer and Lincoln, are classified as frontier, with a population density of six or fewer persons per square mile. Urban counties fall along the urban Front Range corridor.

Major cities in the region include Aurora, Boulder, Colorado Springs, Denver, Fort Collins, Frisco, Greeley, Loveland, Longmont, and Vail.

KPCO's community includes approximately 87 percent of the population of Colorado. As seen in the demographic profile table below, a majority of residents within the KPCO region (83 percent) identify primarily as White. Nearly 11% of residents identify as Hispanic or Latino; most of these residents live in Adams, Crowley, Denver, Eagle, Otero, Pueblo, and Weld counties.

Other racial and ethnic groups, such as Black and Asian residents, make up less than one to five percent of the remaining population respectively. The majority of the population identifying as people of color or "multiple races" reside in Adams, Arapahoe, Denver, El Paso, Pueblo, and Summit counties.

Approximately 23.5 percent of the population is under 18 years of age, and 12 percent are 65 years of age and older. The county with the youngest median age is Adams, at 32.6 years. The oldest median age is in Custer County, at 54.6 years.

iii. Demographic profile of the community served

Demographic profile: Kaiser Permanente Colorado

Race/ethnicity		**Socioeconomic data**	
Total Population	4,633,008	Living in poverty (<100% federal poverty level)	11.8%
Race		Children in poverty	15.1%
Asian	3.3%	Unemployment	2.9%
Black	4.6%	Adults with no high school diploma	8.8%
Native American/Alaska Native	0.8%		
Pacific Islander/Native Hawaiian	0.1%		
Some other race	4.4%		
Multiple races	3.6%		
White	83.2%		
Ethnicity			
Hispanic	10.9%		
Non-Hispanic	89.1%		

III. Who was involved in the assessment?

A. Identity of hospitals, other partner organizations that collaborated on the assessment

A team of KPCO Community Benefit staff – the CHNA Core Team – worked closely with the Colorado Health Institute (CHI) to review initial health needs, identify and recruit CHNA Leadership Group members, and recommend health needs identification and prioritization criteria to the CHNA Leadership Group. The Core Team included:

- **Caila Aubé,** CHNA Coordinator, Senior Community Health Specialist
- **Michelle Donahue,** Project Coordinator
- **Cheryl Kelly, PhD,** Evaluation Investigator
- **Carmen Martin,** Senior Community Health Specialist
- **Amy Pulver,** Senior Manager, Community Health

KPCO engaged with non-profit hospitals and local public health agency directors serving the Denver/Boulder service area– KPCO's largest service area – to discuss CHNA activities and health needs that emerged from the findings. Hospital partners included Children's Hospital Colorado; Centura Health including Avista Adventist Hospital, St. Anthony North, Longmont United Hospital, and St. Anthony North Health Campus; SCL Health including St. Joseph Hospital, Lutheran Medical Center, Good Samaritan Hospital, and Platte Valley Medical Center; and UC Health. Public health directors with the Metro Denver Partnership for Health representing Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, and Jefferson counties also participated.

KPCO also worked closely with a team of service area representatives. These representatives reviewed service area-level data on health needs and provided insights and community input on how the health needs are reflected in their service areas. The service area representatives included:

- **Amy S. Duggan,** Southern Colorado, Senior Community Health Specialist
- **Susan Fairweather,** Mountain Colorado, Community Relations Senior Specialist
- **Sylvia Kamau,** Northern Colorado, Senior Community Health Specialist
- **Lynnette Namba,** Mountain Colorado, Senior Community Health Specialist
- **Dawn Paepke,** Northern Colorado, Community Relations Senior Specialist
- **Michele Wolfe,** Southern Colorado, Community Relations Specialist

Seventeen KPCO employees from across the organization served as the CHNA Leadership Group to identify and prioritize community health needs. Representatives from each of the major departments were selected by members of KPCO Health Plan Leadership Team (HPLT) to bring diverse perspectives to the process. CHNA participation from across KPCO's departments also increased awareness of the process and its relevance to the entire organization.

The Leadership Group met twice to determine community health needs, establish the process and criteria for prioritization, and rank the identified health needs according to agreed-upon criteria. Members of the Leadership Group included:

- **Kristin Banks,** Medical Office Director, East Denver Medical Office Building
- **Brian Crandall,** Senior Manager, Purchasing and Transportation
- **Susan Fairweather,** Mountain Colorado, Community Relations Senior Specialist
- **Sheri Filak-Taylor,** Regional Administrator, Department of Population Health
- **Dale Hamlin,** Director, IT Business Operations
- **Eileen Heronema,** Executive Consultant, HPSA
- **Evan Hyatt,** Executive Director Operations, Northern Colorado & Mountain Service Areas
- **Robert King,** Director, Office of Equity, Inclusion & Diversity
- **Jessica Kroll,** Institutional Review Board Specialist
- **Kristi LaBarge,** Senior Project Manager, Hospital Quality, IQM
- **Bernadette O'Doherty,** Senior Manager, Strategy Management
- **Stacey Silva-Wann,** Operations Specialist II, National Facility Services

- **Wes Skiles,** Government Relations Director
- **Claudia Steiner, MD,** Executive Director, Institute for Health Research
- **Laura Thomas,** Director, APN/PA Clinical Practice, Nursing Administration
- **Kathleen Westcoat,** Senior Director, Medicaid
- **Michele Wolfe,** Southern Colorado, Community Relations Specialist

B. Identity and qualifications of consultants used to conduct the assessment

The Colorado Health Institute (CHI) conducted the assessment on behalf of and in collaboration with KPCO. CHI also conducted Kaiser Permanente Colorado's 2013 and 2016 assessments. CHI is a nonprofit health policy research institute created in 2002 by Colorado's health conversion foundations to address a statewide need for independent and impartial health care data, information, and analysis.

CHI serves as a trusted, nonpartisan advisor to a wide range of decision-makers. Staff participating in the CHNA included Sara Schmitt, Director of Community Health Policy, and Karam Ahmad, Policy Analyst.

IV. Process and methods used to conduct the CHNA

A. Secondary data

i. Sources and dates of secondary data used in the assessment
KPCO used the Kaiser Permanente CHNA Data Platform (http://www.chna.org/kp) to review over 120 indicators from publicly available data sources. KPCO also used additional data sources beyond those included in the CHNA Data Platform.

For details on specific sources and dates of the data used, please see Appendix A.

ii. Methodology for collection, interpretation, and analysis of secondary data
Kaiser Permanente's CHNA Data Platform is a web-based resource to support community health needs assessments and community collaboration. This platform includes a focused set of community health indicators that allow users to understand what is driving health outcomes in particular neighborhoods. The platform provides the capacity to view, map and analyze these indicators as well as understand racial/ethnic disparities and compare local indicators with state and national benchmarks. If individual KPCO region or county-level data were not available for any indicator, state level values were used.

As described in section IV.A.i above, KPCO also used additional data sources beyond those included in the CHNA Data Platform. For example, CHI included additional indicators from the National Survey on Drug Use and Health, a nationwide study sponsored by the Substance Abuse and Mental Health Services Administration, to gain greater insights on youth and adult substance use. Data from the Healthy Kids Colorado Survey, a statewide survey of high schoolers supported by the Colorado Department of Public Health and Environment, Colorado

Department of Education, and Colorado Department of Human Services.were used to examine on Colorado high schoolers' social-emotional health and healthy eating active living behaviors. To understand barriers to accessing health services for all Coloradans, CHI also used data from the Colorado Health Access Survey, a statewide survey measuring Coloradans' access, use and experiences with the health system.

Because KPCO's region includes nearly 90 percent of the state's population, its performance on the indicators was compared to national performance data, instead of Colorado overall. To assess trends over time, CHI also compared current data to data from the 2016 CHNA for indicators that were measured the same in both CHNAs.

Several steps were taken to yield additional insights on geographic, racial, and ethnic disparities within the communities served by KPCO. For example, data on the poorest performing county and service area were identified, when available.

B. Community input

i. Description of who was consulted

KPCO service area representatives spoke with local representatives about the health needs impacting residents in their respective service areas. These individuals included representatives from state, local, tribal, or other regional governmental public health departments (or equivalent department or agency) as well as leaders, representatives, or members of medically under-resourced, low-income, and minority populations. Community input through the service areas was provided primarily through community meetings and focus groups.

For a complete list of individuals who provided input, see Appendix B.

KPCO also considered community health needs prioritized in current health assessments and public health improvement plans from local public health agencies serving the counties in the KPCO community. These reports incorporated secondary data about the health needs of the community, as well as direct input from community members and stakeholders. Specific activities that public health agencies used for collecting primary data from community members included key informant interviews, surveys, town hall and neighborhood meetings, focus groups and coalition outreach. These local public agency prioritizations included 23 of the 24 counties in the KPCO region (all but Huerfano County).

ii. Methodology for collection and interpretation

Service area representatives conducted four community meetings and two focus groups with local partners and housed and organized all of the feedback using an online survey. CHI developed the survey and synthesized responses (See Appendix F, Page 45).

The online survey was distributed to local representatives after the community meeting or focus group. The questions were on whether/how the health need data from the CHNA data platform reflected their understanding of what the local communities were experiencing, to provide examples of how the health needs are reflected in their communities, and to add any health needs not reflected in the data. The data provided qualitative context for the Leadership Group to understand how local representatives viewed the health need data and whether it represented their local experiences.

Information on the health needs prioritized by the 23 local public health agencies in the KPCO community was accessed from the Colorado Department of Public Health and Environment's website and individual public health improvement plans on local public health agency websites.

CHI matched these locally-identified priority health needs with the potential health needs identified on the CHNA Data Platform. Most locally-identified priorities were identical to the potential health needs in the data platform, such as obesity/healthy eating active living, mental health, and access to care. Others required some interpretation to align with potential health needs. For example, the public health priority of clean air and clean water was matched to the potential health need of climate change. Economic security did not align with any of the locally-identified priorities and was not included in this analysis.

CHI tallied the number of local public health agencies that identified each potential health need as a priority. Each priority health need could earn up to 23 points (one for each county). Health needs identified by 33 percent or fewer of the public health agencies earned a zero while those identified by 34-100 percent of public health agencies earned a one. Substance use, mental health and Obesity and Healthy Eating Active Living (HEAL) scored a one, while climate and health and access to care scored a zero.

C. Written comments

KP provided the public an opportunity to submit written comments on the facility's previous CHNA Report through CHNA-communications@kp.org. This email will continue to allow for written community input on the facility's most recently conducted CHNA Report.

As of the time of this CHNA report development, KPCO had not received written comments about previous CHNA Reports. Kaiser Permanente will continue to track any submitted written comments and ensure that relevant submissions will be considered and addressed by the appropriate staff.

D. Data limitations and information gaps

The KP CHNA data platform includes approximately 120 secondary indicators that provide timely, comprehensive data to identify the broad health needs faced by a community. However, there are some limitations associated with these data, as is true with any secondary data. Some data were only available at a county level, making assessment of health needs at a neighborhood level challenging. Furthermore, disaggregated data around age, ethnicity, race, and gender are not available for all indicators, which limited the ability to examine disparities of health within the community. Lastly, data are not always collected on a yearly basis, meaning that some data are several years old.

Members of the KPCO CHNA Leadership Group and the Core Team identified several additional data gaps that limited their understanding of health needs. Gaps included how health needs varied by income and insurance coverage type (public, private, uninsured).

V. Identification and prioritization of the community's health needs

A. Identifying community health needs

i. Definition of "health need"

For the purposes of the CHNA, Kaiser Permanente defines a "health need" as a health outcome and/or the related conditions that contribute to a defined health need. Health needs are identified by the comprehensive identification, interpretation, and analysis of a robust set of primary and secondary data.

ii. Criteria and analytical methods used to identify the community health needs

The KPCO CHNA Leadership Group considered four criteria for identifying the health needs of the communities served by KPCO. These criteria included (1) a *performance benchmark* for the data indicators for each health need, (2) *change* since the 2016 CHNA, (3) *racial and ethnic disparities*, and (4) *service area input*.

1. Performance Benchmark (KPCO compared to national)

Scoring methodology in the CHNA Data Platform provided an initial benchmark score. Poor performance for each potential health need was measured by calculating the percentage of data indicators for which KPCO performed worse than the national value.

For example, of the 13 potential health needs identified in the CHNA Data Platform (Access to Care, Asthma, Cancer, Cardiovascular Disease, Climate and Health, Economic Security, HIV/AIDS/STIs, Maternal and Infant Health, Mental Health, Obesity/HEAL, Oral Health, Substance Use, and Violence and Injury Prevention), KPCO performed worse than the national benchmark in at least one data indicator for ten of the 13 health needs.

Three of the remaining ten potential health needs were removed from consideration (Asthma, Cancers and Maternal/Infant Health). Poorly performing data indicators within these three potential health needs that were represented among data on the other seven potential health needs were flagged for consideration. The three also were closely connected with other health needs that KPCO had prioritized in its 2016 CHNA. For example, poorly performing indicators for Cardiovascular Disease were also present in Obesity/HEAL; therefore, Cardiovascular Disease by itself was not considered a primary health need and is incorporated in the Physical Environment to Promote Healthy Eating and Active Living health need.

The Core Team and Leadership Group worked to prioritize the remaining seven health needs. This included the six health needs that were prioritized in the previous CHNA (Mental Health, Substance Use, Climate and Health, Access to Care, Obesity/HEAL and Economic Security) as well as Violence and Injury Prevention – as this health need had most of its indicators perform worse than the national benchmark.

2. Changes in Trends Since 2016 CHNA

Trended data was the second data-related criterion. CHI collected data for indicators that were available in both the 2016 CHNA and the 2019 CHNA Data Platforms, as well as any 2019 indicators for which KPCO scored worse than the national benchmark. Trends were available for more than 50 indicators for the seven potential health needs.

Among the potential health needs, those with at least 33 percent of indicators trending worse were flagged for the Leadership Group to consider identifying as a health need based on this criterion. For example, three of five trended indicators (60 percent) for Mental Health performed worse since the last CHNA. Access to Care, however, performed worse on only one of eight trended indicators.

3. Racial and Ethnic Disparities

Racial and ethnic disparities served as the third data-related criterion. Potential health needs were considered for identification if at least one data indicator revealed disparities (one racial/ethnic group performing significantly worse than the national average). The Leadership Group also acknowledged that disparities were present in most of the health indicators, regardless of limitations in available data.

4. Kaiser Permanente Colorado Service Area Input

KPCO created health needs profiles for each of the four service areas (Northern Colorado "NoCO," Southern Colorado "SoCO," Mountain Colorado "MtnCO", and Denver-Boulder) (See Appendix F). Potential health needs that resonated with local representatives based on findings from the online survey were flagged for consideration as a health need. For example, among the seven potential health needs, local representatives felt that all had a strong impact in their local communities with the exception of Obesity/HEAL, which local representatives flagged as a health concern more closely related to Economic Security. For example, indicators listed under "Obesity/HEAL" such as food insecurity, households enrolled in SNAP, and presence of grocery stores were seen as closely tied to Economic Security.

During the first of two meetings, the Leadership Group reviewed data based on the four criteria for each potential health need. The following information was provided for each potential health need: descriptions of the data indicators, national benchmark value, KPCO value, the value for the poorest performing county in the community, and whether racial/ethnic disparities were measured for the indicator. The group also reviewed the service area feedback on health needs.

B. Criteria and analytical methods used to prioritize the community health needs

Before beginning the prioritization process, KPCO chose a set of criteria to use for prioritizing health needs. The criteria were:

- **Severity of need:** This refers to the degree of poor performance against the relevant (national) benchmark. To determine severity of need, KPCO looked at how the region compares against the national benchmarks for each health need. A health need with 0 to 33 percent of indicators performing below benchmark was scored as 0, those with 34 to 50 percent of indicators below benchmark scored a 1 and needs with 51 to 100 percent of indicators performing worse scored a 2.
- **Clear disparities or inequities:** This refers to differences in health outcomes by subgroups. KPCO considered differences among the following subgroups: race/ethnicity,

county, service area. If one or more data indicators for an identified health need showed that one or more racial or ethnic group performed significantly worse than the KPCO community average, it would receive a 1. If not, it would receive a 0.

County and service area values were evaluated through a social determinants of health (SDOH) lens. KPCO developed a SDOH index score based on five factors that are powerful predictors of overall health: insurance, employment, income, educational attainment, and English proficiency. Scores were calculated by converting the data indicator values to a scale of 1 to 10 (1 being the worst score, 10 the best). For data indicators within each identified health need that scored worse than the national benchmark, service areas and counties with the worst scores were also identified. Poorest performing counties and service areas with low SDOH scores received higher scores. That is, poorest scoring service areas and counties scored a 2, those in the middle scored a 1 and those with the best SDOH values scored a 0.

- **Community prioritization**: KPCO tallied the number of local public health agencies (LPHAs) that identified each of KPCO's six proposed health needs as a priority for their county. If 33 percent or more of the 23 counties identified a heath need as a priority it was given a score of 1, if less, the health need was given a score of 0.
- **Opportunity to intervene at the system/policy level**: For data indicators performing worse than the national benchmark, each were scored based on whether the indicator was a measure of a system or policy, health behavior, or health outcome. A systems level indicator included "unemployment" or "limited access to fresh healthy foods;" a health behavior would include measures like tobacco use; and a health outcome would include measures like stroke prevalence. Systems indicators were given a score of 2, health behaviors a 1 and health outcomes a 0.
- **Existing attention/resources dedicated to the issue:** This refers to KPCO assets such as grants and programs, youth leadership development programs in schools; policies and practices, evidence-based disease screening; and partnerships such as staff and volunteers on community health boards.

Based on the criteria described in the previous section, prioritization scores for all health needs identified were tallied and received a total score. The higher scoring health needs reflected higher priority. The table with the prioritization scores for each identified health need is included in Appendix E.

C. Description of the Prioritized Community Health Needs

1. Substance Use

Substance use scored as the highest health need for communities served by KPCO. KPCO performs poorly on the misuse of substances that harm individual and community health, such as alcohol, marijuana, and e-cigarettes. Substance use among individuals of all ages can raise health risks for cancer, damage mental health, and lead to poor decisions with tragic results,

including overdose and motor vehicle crash deaths. Legal marijuana and state alcohol licensure laws make these substances readily available in many KPCO communities, raising concerns about access for underage youth. Excessive drinking for both adults and youth surpassed national benchmarks, as did the rate of beer, wine, and liquor stores – which were more than double the national average at 2.5 per 100,000 population in KPCO compared to 1.09 per 100,000 population nationally. Marijuana use for adults remains higher than the national average with past month use for adults 18 years of age or older at 16.6 percent in Colorado compared to 8.8 percent nationally. While tobacco (cigarette) use among youth 12 to 17 years of age remains low at 4.6 percent, slightly less than the national value of 5.7 percent, electronic cigarette/vapor use among high school youth is more than double the national value at 27 percent reporting current e-vapor product use, compared to 13.1 percent nationally. For opioids, KPCO records a higher percentage of Medicare prescription claims for opioids – a proxy measure for opioid use – at 7.3 percent, compared to 5.8 percent nationally. Substance use is a public health priority identified by a majority of LPHAs.

2. Mental Health

Mental health scored as the second highest priority health need for KPCO communities. Poor mental health impacts all areas of life, including a person's physical well-being, ability to work and perform well in school, and to participate fully in family and community activities. Access to programs and services that promote social and emotional wellness for everyone is an important first step in improving the community's overall mental health, as are addressing access to mental health services and barriers to treatment. Suicide deaths remain significantly higher at 18.5 deaths per 100,000 population for communities served by KPCO compared to the national rate of 12.8 per 100,000 population. The Southern Colorado service area has nearly double the national rate at 22.8 deaths per 100,000 population. Teller County (39.5 deaths per 100,000 population) and surrounding southern counties have upwards of triple the national suicide rate. Feedback from all KPCO service area representatives emphasized the need to address access to mental health services and treatment.

3. Economic Security

Economic security ranked as the third highest priority health need for communities served by KPCO. Individuals and families need a strong economic foundation upon which to build healthy lives and healthy communities. Essential ingredients for a stable and vital economy include livable wages, educational achievement, and safe places to live, work, and play. Educational attainment has continued to drop among residents in the KPCO region and remains significantly below the national average for on-time high school graduation rates. Only 77.1 percent of residents in the KPCO region report graduating high school on time – 11 percentage points less than the national rate of 88.2 percent.

Housing insecurity fared better for KPCO compared to the national average, but the Mountain Colorado service area recorded a significantly higher percentage of residents reporting housing problems (38.1 percent) than the rest of the region (33.1 percent). Feedback from most service area representatives emphasized the need to address housing insecurity, especially in the Mountain Colorado service area.

Income disparities remain, with Blacks, Hispanics and Native Americans all recording nearly double the rate of poverty compared to the rest of the KPCO region. Economic security is also closely connected to other identified health needs, with the Leadership Group acknowledging the connection between the social determinants of health and overall health. Economic security was also voiced as a concern by partners in Southern Colorado, Denver-Boulder and Mountain Colorado – with an emphasis on housing, food insecurity and health insurance costs.

4. Access to Primary and Specialty Care

Access to Care was identified as the fourth highest health need for communities served by KPCO. Access to primary and specialty care helps individuals manage health issues and learn behaviors and skills necessary for healthier living. While access to primary care physicians, dentists, and mental health providers increased since the 2016 CHNA, and KPCO rates are better than national averages for each, certain pockets of the region fare worse.

The Southern Colorado service area reported lower access to primary care physicians than the national average with 60 primary care physicians per 100,000 population compared to 76 per 100,000 population nationally. Park County reported KPCO's lowest rate — more than four times worse than the national average at 18.4 physicians per 100,000 people.

Disparities remain as well, with only 69.3 percent of Black Coloradans reporting recent visits to a primary care physician compared to 77.2 percent of the KPCO region overall.

Access to mental health providers is an issue that was voiced by service area representatives in Mountain Colorado, and this observation aligned with the data. Mountain Colorado reported only 171.7 mental health providers per 100,000 population – significantly lower than the KPCO average of 295 per 100,000 population and the national average of 201 per 100,000 population. This service area also reports the state's highest health insurance premiums, presenting another barrier to accessing care.

5. Physical Environment to Promote Healthy Eating and Active Living

Elements of the physical environment, whether built (like grocery stores) or natural (like poor ozone levels) can have a significant effect on the building blocks of healthy eating and active living including nutrition, cardiovascular and respiratory health. An ideal physical environment fosters active living through exercise and physical activity and is key for promoting good health.

The percentage of youth ages 10 to 17 who are obese, or overweight is relatively high, at nearly one in three (27.2 percent), close to the national average. Rates of grocery stores/produce vendors fall short of the national average for KPCO at 1.71 per 100,000 population, compared to 2.4 per 100,000 population nationally. Southern Colorado service area scored even worse at 1.3 per 100,000 population, with Elbert County scoring the worst in the entire region at 0.87 per 100,000 population. A lack of access to stores selling healthy food can affect eating behaviors; healthy eating habits support overall health and lower risk for obesity and related chronic diseases like stroke. While stroke death rates were overall lower for KPCO compared to the rest of the country, Black Coloradans had significantly higher rates (43.4 stroke deaths per 100,000 population) than the KPCO region (32.9 per 100,000 population) – highlighting a disparity. This disparity is mirrored nationally. According to the Centers for Disease Control and Prevention, black Americans have the highest rate of death from stroke.

Natural elements of the physical environment such as drought, poor ozone levels, low levels of tree canopy cover and a poor score on the respiratory hazard index continue to score worse in KPCO than their respective national averages. These measures of poor air quality and drought also have the potential to harm the respiratory and cardiovascular health of Coloradans.

D. Community resources potentially available to respond to the identified health needs

KPCO's region contains community-based organizations, government departments and agencies, hospital and clinic partners, and other community members and organizations engaged in addressing many of the health needs identified by this assessment.

Key resources available to respond to the identified health needs of the community are listed in Appendix D Community Resources.

VI. KP Colorado 2016 Implementation Strategy evaluation of impact

A. Purpose of 2016 Implementation Strategy evaluation of impact

Kaiser Permanente Colorado's 2016 Implementation Strategy Report was developed to identify activities to address health needs identified in the 2016 CHNA. This section of the CHNA Report describes and assesses the impact of these activities. For more information on Kaiser Permanente Colorado's Implementation Strategy Report, including the health needs identified in the facility's 2016 service area, the health needs the facility chose to address, and the process and criteria used for developing Implementation Strategies, please visit (https://www.kp.org/chna). For reference, the list below includes the 2016 CHNA health needs that were prioritized to be addressed by Kaiser Permanente Colorado in the 2016 Implementation Strategy Report.

Copy and paste the complete list of prioritized health needs from Section VIII of the facility's 2016 IS Report

1. Economic Stability and Vitality
2. Healthy Eating and Active Living
3. Mental Health
4. Access to Primary and Specialty Care
5. Climate Change
6. Substance Use

Kaiser Permanente Colorado is monitoring and evaluating progress to date on its 2016 Implementation Strategies for the purpose of tracking the implementation and documenting the impact of those strategies in addressing selected CHNA health needs. Tracking metrics for each prioritized health need include the number of grants made, dollars spent, the number of people reached/served, collaborations and partnerships, and KFH in-kind resources. In addition, Kaiser Permanente Colorado tracks outcomes, including behavior and health outcomes, as appropriate and where available.

The impacts detailed below are part of a comprehensive measurement strategy for Community Health. KP's measurement framework provides a way to 1) represent our collective work, 2) monitor the health status of our communities and track the impact of our work, and 3) facilitate

shared accountability. We seek to empirically understand two questions 1) how healthy are Kaiser Permanente communities, and 2) how does Kaiser Permanente contribute to community health? The Community Health Needs Assessment can help inform our comprehensive community health strategy and can help highlight areas where a particular focus is needed and support discussions about strategies aimed at addressing those health needs.

As of the documentation of this CHNA Report in March 2019, Kaiser Permanente Colorado had evaluation of impact information on activities from 2017 and 2018. These data help us monitor progress toward improving the health of the communities we serve. While not reflected in this report, Kaiser Permanente Colorado will continue to monitor impact for strategies implemented in 2019.

B. 2016 Implementation Strategy evaluation of impact overview

In the 2016 IS process, all KFH hospital facilities planned for and drew on a broad array of resources and strategies to improve the health of our communities and vulnerable populations, such as grantmaking, in-kind resources, collaborations and partnerships, as well as several internal KFH programs including, charitable health coverage programs, future health professional training programs, and research. Based on years 2017 and 2018, an overall summary of these strategies is below, followed by tables highlighting a subset of activities used to address each prioritized health need.

KFH programs: From 2017-2018, KFH supported several health care and coverage, workforce training, and research programs to increase access to appropriate and effective health care services and address a wide range of specific community health needs, particularly impacting vulnerable populations. These programs included:

- Medicaid: Medicaid is a federal and state health coverage program for families and individuals with low incomes and limited financial resources. KFH provided services for Medicaid beneficiaries, both members and non-members.
- Medical Financial Assistance: The Medical Financial Assistance (MFA) program provides financial assistance for emergency and medically necessary services, medications, and supplies to patients with a demonstrated financial need. Eligibility is based on prescribed levels of income and expenses.
- Charitable Health Coverage: Charitable Health Coverage (CHC) programs provide health care coverage to low-income individuals and families who have no access to public or private health coverage programs.
- Workforce Training: Supporting a well-trained, culturally competent, and diverse health care workforce helps ensure access to high-quality care. This activity is also essential to making progress in the reduction of health care disparities that persist in most of our communities.
- Research: Deploying a wide range of research methods contributes to building general knowledge for improving health and health care services, including clinical research, health care services research, and epidemiological and translational studies on health care that are generalizable and broadly shared. Conducting high-quality health research and disseminating its findings increases awareness of the changing health needs of

diverse communities, addresses health disparities, and improves effective health care delivery and health outcomes

Grantmaking: For 70 years, Kaiser Permanente has shown its commitment to improving community health through a variety of grants for charitable and community-based organizations. Successful grant applicants fit within funding priorities with work that examines social determinants of health and/or addresses the elimination of health disparities and inequities. From 2017-2018, Kaiser Permanente Colorado awarded 78 charitable grants/donations totaling $10,522,125. Eleven grants and donations made directly from KP, totaling $3,313,735, supported 2016 health needs. During 2017-2018, a portion of Kaiser Permanente funds managed by The Denver Foundation was used to award 67 grants totaling $7,208,390 in service of 2016 health needs (not including a contract for Weigh & Win).

In-kind resources: In addition to our significant community health investments, Kaiser Permanente is aware of the significant impact that our organization has on the economic vitality of our communities as a consequence of our business practices including hiring, purchasing, building or improving facilities and environmental stewardship. We will continue to explore opportunities to align our hiring practices, our purchasing, our building design and services and our environmental stewardship efforts with the goal of improving the conditions that contribute to health in our communities. From 2017-2018, Kaiser Permanente Colorado leveraged significant organizational assets in service of 2016 Implementation Strategies and health needs, including KP specialty care providers and physicians provided consultations or services annually to uninsured patients at Colorado Safety Net clinics, and evaluators provided technical assistance and support to St. Joseph Hospital on evaluating a screening and referral process to increase enrollment in food service programs.

Collaborations and partnerships: Kaiser Permanente has a long legacy of sharing its most valuable resources: its knowledge and talented professionals. By working together with partners (including non-profit organizations, government entities, and academic institutions), these collaborations and partnerships can make a difference in promoting thriving communities that produce healthier, happier, more productive people. From 2017-2018, KFH Facility Name engaged in several partnerships and collaborations in service of 2016 Implementation Strategies and health needs, including participating in a number of regional and statewide committees (e.g., Maternal Mental Health, Colorado Blueprint to End Hunger, Healthy Schools Collective Impact).

C. 2016 Implementation Strategy evaluation of impact by health need

KFH Colorado Priority Health Needs

Need	Summary of impact	Top 3-5 Examples of most impactful efforts
Economic Stability & Vitality	*From 2016-2018, Kaiser Permanente Colorado provided six grants and ten donations totaling* $690,000 *to support financial literacy, mentoring, job training, and other resources/programs/services for school-aged youth and adults of all ages and to help organizations and residents increase their capacity to address community needs (e.g., food, transportation, employment).*	**Sustainable HEAL Communities:** The 7 communities funded through the Colorado's Community Health Initiative are focused on economic stability and vitality and healthy eating and physical activity strategies. Grantees are increasing consumption of fruits and vegetables, ensuring access to food, changing school food policies and practices, improving access to healthy food at restaurants, providing physical activity programming, implementing changes to the built environment to support physical activity and facilitating resident capacity building. • Over 200,000 lbs. of food rescued and distributed to families • 188% increase in produce donations to food pantries in one community • Almost 400 residents have been trained in advocacy or leadership in 2017, with at least half of those trained engaged in advocacy efforts in their neighborhood • 17 built environment changes implemented as a result of resident advocacy efforts • 18 policies passed/adopted as a result of resident advocacy efforts
		Financial literacy: $240,000 in general operating funds was awarded to support six community-based organizations that provide financial literacy services, education, resources, and advocacy to low-income communities of color.

Need	Summary of impact	Top 3-5 Examples of most impactful efforts
		Career Pathways: From 2016-2018, KPCO managed a grant to Denver Public Schools to continue its support of the implementation of CareerConnect, which offers students relevant courses while connecting them with partner companies and higher education institutions for hands-on workplace experiences and mentoring in the fields of engineering, finance, advanced manufacturing, bioscience and technology. The program equips graduates with high-demand skills and leads to opportunities for continued education and careers in Colorado's highest-growth, highest-opportunity industries. All of the schools receiving support from KPCO had over 75 percent of the population eligible for free or reduced lunch and have over 50 percent minority students. Outcomes include: • 48 students successfully completed the Certified Nurse Assistant (CNA) program and passed both the written and skills test to become a CNA • 125 students learned about careers in the medical field • 103 students engaged in job shadow excursions with professionals in medical careers • 30% higher graduation rates among participants KPCO contributed to the overall CareerConnect impacts of: • 17,000 students in CareerConnect and STEMConnect programs • 140 CareerConnect teachers
Healthy Eating & Active Living	*From 2016-2018, Kaiser Permanente Colorado provided 23 donations and 28 grants, totaling $9.0M to help organizations and residents increase their capacity to address community needs and increase opportunities for healthy eating and active living (food insecurity programs, built environment changes and policy adoption and implementation)*	**Sustainable HEAL Communities:** The 7 communities funded through Colorado's Community Health Initiative are focused on economic stability and vitality and healthy eating and physical activity strategies. Grantees are increasing consumption of fruits and vegetables, ensuring access to food, changing school food policies and practices, improving access to healthy food at restaurants, providing physical activity programming, implementing changes to the built environment to support physical activity and facilitating resident capacity building. • 5 healthy food school policies passed, impacting over 500 students • 28% increase in students purchasing school lunches • 544 pounds of school garden produce added to school lunch • Nearly 20 built environment changes to support healthy eating and physical activity (e.g., fruit trees, bike lanes, improved pedestrian crossings and lighting, new recreation center)

Need	Summary of impact	Top 3-5 Examples of most impactful efforts
		Weigh and Win: Weigh and Win by Kaiser Permanente™ is a community-focused, free weight loss intervention for Colorado adults (18 years of age and older) that includes weigh-ins at community-located, private kiosks; daily wellness coaching; planning for physical activity and healthy eating; and cash incentives for achieving BMI reduction and weight-loss maintenance. The program has been implemented in Colorado communities since 2011, and 80,000 participants are currently enrolled. A recent RE-AIM evaluation showed that 71% of participants lost weight, and the average starting BMI is 34. Nearly 50% of engaged patients experienced a 5% or better weight improvement, with the average weight improvement being 8.5%.
		Healthy Eating Active Living Policies: KPCO continued its investment in the HEAL Cities and Towns Campaign by funding LiveWell Colorado to coordinate the statewide HEAL Cities and Towns Campaign and align with Kaiser Permanente's national efforts to provide training and technical assistance to help city/town officials adopt policies that improve their communities' opportunities to be physically active, to access healthy food, and to implement worksite wellness plans and activities. Active campaigns continue to grow in number, currently reaching 55 cities committed to passing and implementing policies spanning over 15 policy areas including Complete Streets, Comprehensive Plans and Worksite Wellness to improve community conditions to promote healthy eating and active living across Colorado.
		Active Living Community Grants and Partnerships: KPCO Granted $1M to community organizations with the aim to improve safe access to necessary resources and increase physical activity for residents living in low-income neighborhoods. Results include over 576 diverse, multi-sector, community partners/residents participating in the development of Active Living Plans that will lead to changing the built environment to improve pedestrian/wheeled access in the funded communities. To date, 2,286 sites, settings and routes have been assessed to highlight opportunities or challenges to being physically active in these communities. 100% of funded communities engaged in demonstration projects to illustrate and measure impact of activating the built environment to improve safety and access.

Need	Summary of impact	Top 3-5 Examples of most impactful efforts
		Food Insecurity: KPCO invested $1M over two years to support a cohort of 13 nonprofit organizations to decrease food insecurity with the intention of impacting two core outcomes: increase enrollment in Supplemental Nutrition Assistance Program (SNAP) and increase participation in the Summer Food Service Program. **The Summer Food Service Program (SFSP)** ensures that low-income children continue to receive nutritious meals when school is not in session. KPCO Summer Food Program grantees served a total of 87,399 meals during the summers of 2016 and 2017. Specifically, the three grantees served a total of 40,396 meals during the summer of 2016 at 14 different sites and 47,003 meals at 26 different sites during the summer of 2017. Additionally, several grantees offered a free Never Play Hungry program in conjunction with the Summer Lunch Program to encourage all children to eat healthy as they stay active. This strategy also reduced the stigma of receiving a free meal as the meal service was offered at local recreation centers where children could attend activities as the primary event while the meal was served. **Supplemental Nutrition Assistance Program (SNAP):** Compared to other states, Colorado ranks 46th in federal food stamp participation or SNAP (Calculating the Supplemental Nutrition Assistance Program Access Index: A Step-by-Step Guide, 2015). KPCO invested in 10 community-based organizations to increase the enrollment in SNAP benefits. Additionally, KPCO deepened its investment by supporting the cohort of grantees through in-person, quarterly gatherings and ongoing technical assistance throughout the grant period. Outcomes included: • 16,856 unique individuals were screened for food insecurity during the 2-year initiative. • Of those who were screened for food insecurity, 35% screened positive. This percentage of positive screens is higher than Colorado's statewide prevalence of 14% of the population being food insecure, indicating grantees were reaching the right populations who were more likely to need food resources. • Of those who were food insecure, 35% received SNAP application assistance from grantees. • Of those who received SNAP application assistance, 80% applied for SNAP. Of those who applied for SNAP, grantees were able to verify that 42% enrolled in SNAP.

Leveraging Assets:
Research & Evaluation

A special issue in American Journal of Preventive Medicine was published in early 2018 to disseminate the work and findings from the Community Health Initiative in several regions. Five articles were published representing Colorado-specific work. The papers highlighted results of a playground intervention that increased physical activity, an approach to reducing food waste and decreasing food insecurity, results of a school intervention that increased access to healthier food in the cafeteria, approaches for sustaining this work beyond the funding period other than additional funding, and the role of cities and towns in promoting healthy eating and active living.

The Thriving Schools physical activity initiative in 9 Colorado school districts showed an increase in number of minutes offered to students, with 100% of schools offering at least 30 minutes of physical activity per day by year 3 and 86% of schools providing at least 60 minutes of physical activity per day. Additionally, reading and math scores significantly improved between year 1 and year 2 of the initiative.

In collaboration with our Institute for Health Research, we provided in-kind technical assistance to St. Joseph Hospital's food insecurity screening program. Through this work, St. Joseph was able to document that 68% all patients identified as food insecure who were referred to Hunger Free Colorado within 15 days. 72% of all patients identified as food insecure and referred to Hunger Free Colorado enrolled in a program to help reduce their food insecurity.

Evaluation of KP programs to address food insecurity and other basic resource needs is ongoing. Recent findings include:

- In a study of over 50,000 elderly KPCO members, 5.6% identified food insecurity as a concern. A statistical prediction rule identified a high-risk subgroup (top 25% of risk) with a 14.3% prevalence of food insecurity.
- A small follow-up survey of 110 elderly KPCO members found that food insecurity was associated with several other basic resource needs (difficulty paying for housing, medical care costs, transportation and utilities). These members also reported that they "juggled" competing financial priorities by selectively paying for some of their basic resource needs in preference to others.
- A survey of KPCO members with Medicaid insurance under age 65 who had been contacted by Hunger Free Colorado following referral from KPCO found that only half remembered having been contacted, and over 80% continued to experience food insecurity.
- Referrals from KPCO to Hunger Free Colorado have increased annually since 2012, to 1,586 referrals in 2017. 80% of these individuals identified with food insecurity agreed to be referred to Hunger Free Colorado, and among those who accepted referral, 203 SNAP applications were completed with 100 new households receiving SNAP benefits.

Need	Summary of impact	Top 3-5 Examples of most impactful efforts
		Leveraging Assets: KPCO staff provided subject matter expertise and co-led a statewide initiative that resulted in the five-year Colorado Blueprint to End Hunger, launched by Colorado Governor John Hickenlooper in January, 2018. KPCO subject matter experts also provide technical assistance to other health care systems on implementing food insecurity screening and referral to food assistance programs, based on KPCO's own internal practices for addressing food insecurity within our membership.
Mental Health	*From 2016-2018, Kaiser Permanente Colorado provided one donation and five grants totaling* $1.4M *to organizations that help individuals access mental health services and decrease stigma around mental health issues.*	**Thriving Schools: Advancing social/emotional wellness and behavioral health:** Starting in 2017, KPCO invested in 5 school districts representing all 4 services areas to support teachers and staff to promote social/emotional wellness within school districts to improve learning outcomes for every student. In addition to funding, the grant provides technical assistance and evaluation support to use data-based decision making to ensure school practices and policies are trauma-informed and culturally responsive. Moreover, grantees are required to participate in professional learning convenings where coaching and trainings are provided regarding the signs of symptoms of trauma, how to provide culturally-responsive and trauma-informed care at the school level, and how to use KPCO's assets to effectively address trauma in both students and staff. All KPCO supported target schools had over 50 percent of the population eligible for free or reduced lunch and the districts have over 40 percent minority students. Outcomes of all 15 target schools include: • 79% matched or exceeded the Smart Source threshold for providing appropriate counseling, psychological, and social services • 83% matched or exceeded the Smart Source threshold for creating a healthy and safe school environment • 93% matched or exceeded the Smart Source threshold for engaging family, community, and student involvement • 65% matched or exceeded the Smart Source threshold for staff health promotion KPCO contributed to the overall Thriving Schools impacts of: • 79% of teachers participating in professional development focused on trauma-informed teaching practices in schools. • 57% of teachers participating in professional development focused on teacher self-care and how to avoid burnout. • 100% of grantees were able to demonstrate how data are being used to inform the Multi-Tiered System of Supports School Behavioral Health framework

Need	Summary of impact	Top 3-5 Examples of most impactful efforts
		Arts Integrated Resources: In collaboration with the Center for Community Health and Evaluation, Confronting Conflict, a 3-part experiential learning series for middle students on conflict resolution has been able to demonstrate sustained behavior change. Before the workshop, only 59% of students reported using positive behavior strategies to address conflict (e.g., walk away, deflect, calm down, talk/listen). Four to six weeks after the workshop, 94% of students reported using a positive conflict resolution strategy. In partnership with Educational Theatre interns from Metro State University of Denver, KPCO's Arts Integrated Resources presented "When You're Seeing STARs," an interactive social emotional program for 2nd-6th graders. The program models a resilience skill model for young people to employ when faced with stressful situations at school, with peers, and at home. Recent evaluation of the program had the following results: 96% of student audiences reported an increase in knowledge and retain the main learning content of the program, 72% of student audiences reported an increase in confidence in their ability to handle stressful situations.
Access to Primary & Specialty Care	*From 2016-2018, Kaiser Permanente Colorado provided 18 donations and four grants totaling* $5.4M *to support organizations that ensure specialty care is accessible to all Coloradans who need it.* *During 2017 and 2018, Kaiser Permanente Colorado provided $225M in medical care services for vulnerable patients through our charity care programs (Medicaid, MFA & CHC) and provided services for 114,032 Medicaid members.*	**KP Medicaid and Charity Care:** Over the course of 2017 and 2018, KP provided care to 114,032 Medicaid members, approved 78,886 applications for Medical Financial Assistance (MFA) - totaling $54.9M - and provided Charitable Health Coverage (CHC) to 961 members. **Safety Net Specialty Care Program:** KPCO's Safety Net Specialty Care Program allows safety net primary care providers to electronically request advice (e-consult) with select Kaiser Permanente specialists regarding their uninsured adult patients. The program also provides specific face to face specialty care visits for safety net patients in some cases and offers opportunities for medical education to safety net providers. The program celebrated its 5th anniversary in March 2018. The following are program highlights from 2016-2018: • 8 Health Care Safety Net Partners (Clinica Family Health Services, Clinica Tepeyac, Inner City Health Center, Metro Community Provider Network, Mission Medical Clinic, Mountain Family Health Centers, Salud Family Health Centers, Summit Community Care Clinic) • 240 Primary Care Providers • 1,471 E-consults (1,265 unique patients) • 424 Face to Face Visits (409 unique patients) • 8 Medical Education Opportunities • 9 Specialty Care Departments (Allergy, Cardiology, Dermatology, Endocrinology, Gastroenterology, Neurology, Ophthalmology, Pulmonology, Rheumatology) • 100 KPCO Specialists

Need	Summary of impact	Top 3-5 Examples of most impactful efforts
		Specialty Care Stewardship Council: KPCO and the Colorado Health Institute initiated the development of the Specialty Care Stewardship Council comprised of leaders and strategists from across Colorado who believe that a statewide solution to the challenge of providing specialty care access to the most vulnerable Coloradans is possible. The Stewardship Council began meeting February 2017 to discuss how to identify and initiate a statewide solution, with the vision to create and support an integrated statewide model in which specialty care is accessible to all Coloradans who need it.
		Specialty Care Cohort: In 2017, KPCO invested $1 million over three years to support a cohort of 4 nonprofit organizations to increase/improve access to specialty care for adults 18 years of age and older who receive Medicaid assistance and/or are low-income uninsured (including undocumented individuals). **Volunteer medical services:** In 2017-2018, 30 KPCO providers participated in the Long-Term Physician Volunteer program where KP physicians and clinicians volunteered over 3,000 hours to provide comprehensive primary care services to 10 community health clinics serving low-income, uninsured individuals.

VII. Appendix

A. Secondary data sources and dates
    i. KP CHNA Data Platform secondary data sources
    ii. Additional data sources
B. Community Input Tracking Form
C. Health Need Profiles
D. Community resources
E. KPCO Health Needs Prioritization Scores
F. KPCO Service Area Health Needs Profiles and Feedback from Service Areas
G. List of Kaiser Permanente Office Locations

Appendix A. Secondary data sources and dates

i. Secondary sources from the KP CHNA Data Platform

	Source	Dates
1.	American Community Survey	2012-2016
2.	American Housing Survey	2011-2013
3.	Area Health Resource File	2006-2016
4.	Behavioral Risk Factor Surveillance System	2006-2015
5.	Bureau of Labor Statistics	2016
6.	Center for Applied Research and Environmental Systems	2012-2015
7.	Centers for Medicare and Medicaid Services	2015
8.	Climate Impact Lab	2016
9.	County Business Patterns	2015
10.	County Health Rankings	2012-2014
11.	Dartmouth Atlas of Health Care	2012-2014
12.	Decennial Census	2010
13.	EPA National Air Toxics Assessment	2011
14.	EPA Smart Location Database	2011-2013
15.	Fatality Analysis Reporting System	2011-2015
16.	FBI Uniform Crime Reports	2012-14
17.	FCC Fixed Broadband Deployment Data	2016
18.	Feeding America	2014
19.	FITNESSGRAM® Physical Fitness Testing	2016-2017
20.	Food Environment Atlas (USDA) & Map the Meal Gap (Feeding America)	2014
21.	Health Resources and Services Administration	2016
22.	Interactive Atlas of Heart Disease and Stroke	2012-2014
23.	Mapping Medicare Disparities Tool	2015
24.	National Center for Chronic Disease Prevention and Health Promotion	2013
25.	National Center for Education Statistics-Common Core of Data	2015-2016
26.	National Center for Education Statistics-EDFacts	2014-2015
27.	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2013-2014
28.	National Environmental Public Health Tracking Network	2014
29.	National Flood Hazard Layer	2011
30.	National Land Cover Database 2011	2011
31.	National Survey of Children's Health	2016
32.	National Vital Statistics System	2004-2015
33.	Nielsen Demographic Data (PopFacts)	2014
34.	North America Land Data Assimilation System	2006-2013
35.	Opportunity Nation	2017
36.	Safe Drinking Water Information System	2015
37.	State Cancer Profiles	2010-2014
38.	US Drought Monitor	2012-2014
39.	USDA - Food Access Research Atlas	2014

ii. Additional sources

	Source	Dates
1.	Colorado Department of Public Health and Environment, Colorado Department of Human Services Office of Behavioral Health, Colorado Department of Education, and University of Colorado Denver. 2017 Healthy Kids Colorado Survey.	2017
2.	Colorado Health Institute, 2017 Colorado Health Access Survey.	2017

3. SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015-2016. 2015-2016

Appendix B. Community Engagement Strategies

Data collection method	Organization/Title/ Name	Number Attending	Target group(s) represented	Date input was gathered
Meeting	Metro Denver Partnership for Health	12	Local public health departments, non-profit hospital systems	5/30/2018
Meeting	Metro Denver Partnership for Health	6	Local public health departments	6/29/2018
Focus Group	El Paso County Community Service Focus Group	5	Local public health department, non-profits, health foundations, medically underserved	6/25/2018
Focus Group	Pueblo County Community Service Focus Group	3	Local public health departments, community health center	6/25/2018
Meeting	Northern Colorado Data Analyst and Planners Meeting	29	Local public health department representatives, university staff	6/13/2018
Meeting	Mountain Colorado Service Area Community Leaders	8	Leaders from local public health departments, community foundation, non-profits that focus on medically underserved.	6/26/2018

Appendix C. Health Need Profiles in order of Priority

<table>
<tr><th colspan="5">Substance Use</th></tr>
<tr><th>Rationale</th><th>Key Health Factors</th><th>KPCO vs National</th><th>Worst Service Area/County</th><th>Racial/Ethnic Disparities</th></tr>
<tr><td rowspan="8">Substance use among individuals of all ages can raise health risks for cancer, damage mental health and lead to poor decisions with tragic results including overdose and motor vehicle crash deaths. Legal marijuana and state alcohol licensure laws make these substances readily available in many KPCO communities, raising concerns about access for underage youth.</td><td rowspan="2">Beer, Wine and Liquor Stores (Rate per 100,000)</td><td>KPCO: 2.5 percent</td><td>Mountain Colorado Service Area: 5.4 percent</td><td rowspan="8">NA</td></tr>
<tr><td>National: 1.1 percent</td><td>Summit County: 6.8 percent</td></tr>
<tr><td rowspan="2">Excessive Drinking
(Percentage reporting last 30 Days)</td><td>KPCO: 19.2 percent</td><td>Mountain Colorado Service Area: 23.9 percent</td></tr>
<tr><td>National: 17.8 percent</td><td>Summit County: 24.2 percent</td></tr>
<tr><td rowspan="2">Past Month Marijuana Use (Percentage 18+ years of age)</td><td>CO: 16.6 percent</td><td rowspan="2">NA</td></tr>
<tr><td>National: 8.8 percent</td></tr>
<tr><td rowspan="2">Current E-Vapor Product Use (Percentage High School students)</td><td>CO: 27.0 percent</td><td rowspan="2">NA</td></tr>
<tr><td>National: 13.1 percent</td></tr>
<tr><td rowspan="2">Any Opioid Overdose Death
(Rate per 100,000)</td><td>CO: 9.1 per 100,000</td><td rowspan="2">Huerfano County: 22.8 per 100,000</td></tr>
<tr><td>National: 13.3 per 100,000</td></tr>
<tr><td>Primary Data</td><td colspan="4">Substance use – particularly alcohol and marijuana use by adults and e-cigarette/vapor product use by youth score poorly in the KPCO region – data that resonated with service area representatives. Service area representatives shared that partying culture in college towns and resort areas in both the Northern Colorado and Mountain Colorado service areas creates a normalization of alcohol and marijuana use. Eight local public health agencies prioritized substance use as a health need.</td></tr>
<tr><td>Geographic Impact</td><td colspan="4">Mountain Colorado– particularly Summit County - scores the worst for both liquor store density and excessive drinking, with liquor store density nearly six times greater in Summit County than the national average and a significantly higher percentage reporting excessive drinking than the national benchmark. Opioid overdose deaths – while slightly lower than the national average for the state as a whole - were especially high in the Southern Colorado county of Huerfano.</td></tr>
</table>

Mental Health

<table>
<tr><th>Rationale</th><th>Key Health Factors</th><th>KPCO vs National</th><th>Worst Service Area/County</th><th>Racial/Ethnic Disparities</th></tr>
<tr><td rowspan="4">Poor mental health impacts all areas of life, including a person's physical well-being, ability to work and perform well in school and to participate fully in family and community activities. Access to programs and services that promote social and emotional wellness for everyone is an important first step in improving the community's overall mental health as are addressing access and barriers to treatment.</td><td rowspan="2">Suicide Deaths (Rate per 100,000)</td><td>KPCO: 18.5 per 100,000</td><td>Southern Colorado Service Area: 22.8 per 100,000</td><td rowspan="3">White Coloradans report a significantly higher Suicide Death rate than the KPCO region overall.
White Coloradans: 21.5 per 100,000</td></tr>
<tr><td>National: 12.8 per 100,000</td><td>Teller County: 39.5 per 100,000</td></tr>
<tr><td rowspan="2">Social Associations Number of Social Associations per 10,000 (civic organizations, clubs, business associations, etc.) a measure of community vitality</td><td>KPCO: 9.8 per 10,000</td><td rowspan="2">Denver-Boulder Service Area 9.3 per 10,000</td></tr>
<tr><td>National: 10.3 per 10,000</td></tr>
<tr><td>Access to Mental Health Providers (Rate per 100,000)</td><td>KPCO: 295.0 per 100,000
National: 201.0 per 100,000</td><td>Mountain Colorado Service Area: 171.7 per 100,000
Custer County: 22.5 per 100,000</td><td></td></tr>
<tr><td>Primary Data</td><td colspan="4">Thirteen local public health agencies in the KPCO region prioritized mental health as a health need. All four service area representatives highlighted this as a top health need, emphasizing the need for better access to mental health treatment services.</td></tr>
<tr><td>Geographic Impact</td><td colspan="4">Suicide deaths remain significantly higher in KPCO compared to the national average – with specific portions of the region, namely Southern Colorado, experiencing the highest rates. Teller County (39.5 deaths per 100,000) and surrounding southern counties have more than triple the national suicide rate.</td></tr>
</table>

Economic Security

Rationale	Key Health Factors	KPCO vs National	Worst Service Area/County	Racial/Ethnic Disparities
Individuals and families need a strong economic foundation upon which to build healthy lives. Economic stability promotes good health and healthy communities. Essential ingredients for a stable and vital economy include livable wages, educational achievement, and safe places to live, work and play.	**Percentage On-time High School Graduation**	**KPCO**: 77.1 percent	**Southern Colorado Service Area:** 75.3 percent	Black, Hispanic and Native American Coloradans report significantly higher rates of poverty than the KPCO average. Hispanic Coloradans report more than double the percentage uninsured compared to the region average. **Uninsured**: **Hispanic**: 20.8 percent **KPCO**: 8.5 percent
		National: 88.2 percent	**Denver-Boulder Service Area:** 60.5 percent	
	Banking Institutions (Rate per 100,000)	**KPCO**: 3.6 percent	**Southern Colorado Service Area:** 3.2 percent	
		National: 3.9 percent	**Gilpin County:** 0 percent	
	Percentage with Housing Problems	**KPCO**: 33.1 percent **National**: 33.7 percent	**Mountain Colorado Service Area:** 38.1 percent	
	Violent Crimes (Rate per 100,000)	**KPCO**: 326.0 per 100,000	**Southern Colorado Service Area:** 398.7 per 100,000	
		National: 378.0 per 100,000	**Denver-Boulder Service Area:** 617.3 per 100,000	
Primary Data	Economic Security was voiced as a concern by partners in Southern Colorado, Denver-Boulder and Mountain Colorado – with an emphasis on housing, food insecurity and health insurance costs. Local public health agencies did not look at Economic Security when prioritizing health needs.			
Geographic Impact	Overall, the region fares well compared to the nation, with employment, insurance rates and poverty rates improving in recent years. However, educational attainment remains an issue – with the percentage of on-time high school graduation remaining significantly below the national average. Southern Colorado was the worst scoring service area; however, Denver County had the region's lowest rate. Housing problems as a region were on par with the national average, however Mountain Colorado – as evidenced in feedback KPCO received from this service area – scored worst among all service areas and the national average on this indicator. In fact, MtnCO scores among the worst in the nation for housing problems.			

Access to Primary and Specialty Care

Rationale	Key Health Factors	KPCO vs National	Worst Service Area/County	Racial/Ethnic Disparities
Primary and specialty care services help individuals manage their diseases and learn the necessary skills for healthier living. While uninsured rates remain low, access to care is a telling factor of whether community members are getting the care they need.	**Percent of Medicare Enrollees Recent Primary Care Visits**	**KPCO**: 77.0 percent	**Mountain Colorado Service Area:** 71.7 percent	Black Coloradans report significantly lower **recent primary care visits** than the KPCO region overall. **Black Coloradans**: 69.3 percent
		National: 78.9 percent	**Lincoln County:** 34.4 percent	
	Percentage Breast Cancer Screening	**KPCO**: 61.2 percent	**Southern Colorado Service Area:** 57.1 percent	
		National: 79.0percent	**Crowley County:** 45.8 percent	
	Access to Primary Care Physicians (PCPs) (Rate per 100,000)	**KPCO**: 81.1 per 100,000 **National**: 75.9 per 100,000	**Southern Colorado Service Area:** 60.0 per 100,000 **Park County:** 18.4 per 100,000	
	Access to Mental Health Providers (Rate per 100,000)	**KPCO**: 295.0 per 100,000 **National**: 201.0 per 100,000	**Mountain Colorado Service Area:** 171.7 per 100,000 **Custer County:** 22.5 per 100,000	
Primary Data	Six local public health agencies in the KPCO region prioritized access to primary and specialty care as a health need, with both Eagle and Summit Counties (Mountain Area Service Area) prioritizing access. Southern Colorado and Mountain Colorado service area representatives highlighted this as a health need.			
Geographic Impact	Overall, the region fares better than the national average for access to primary care providers. However, counties in the Southern Colorado service area have lower rates of access to primary care physicians and breast cancer screenings and, typical for under-resourced populations, have difficulty accessing specialty care. Southern Colorado counties also have more limited access to medical, mental and dental providers. Mountain Colorado reports the lowest access to mental health providers.			

Physical Environment to Promote Healthy Eating Active Living

Rationale	Key Health Factors	KPCO vs National	Worst Service Area/County	Racial/Ethnic Disparities
Elements of the physical environment, whether built (like grocery stores) or natural (like poor ozone level) can have a significant effect on nutrition, cardiovascular and respiratory health. Natural elements of the physical environment such as drought, poor ozone levels, low levels of tree canopy cover and a poor score on the respiratory hazard index continue to score worse than their respective national averages. These measures of poor air quality and drought also have the potential to impact the respiratory and cardiovascular health of Coloradans.	**Grocery Stores and Produce Vendors** (Rate per 100,000)	**KPCO**: 1.7 per 100,000	**Southern Colorado Service Area:** 1.3 per 100,000	Black Coloradans report significantly higher **rates of stroke deaths** than the KPCO region overall. **Black Coloradans**: 43.4 per 100,000 **KPCO:** 33.4 per 100,000
		National: 2.4 per 100,000	**Elbert County**: 0.87 per 100,000	
	Drought Severity (Percentage of weeks in drought annually)	**KPCO**: 52.6 percent	**Southern Colorado Service Area**: 64.9 percent	
		National: 45.9 percent		
	Poor Ozone Levels (Percentage of days annually above attainment levels)	**KPCO**: 44.0 percent	**Mountain Colorado Service Area**: 49.1 percent	
		National: 38.0 percent	**Clear Creek County:** 50.3 percent	
	Obese and Overweight (Percentage Youth 10-17 years old)	**National**: 27.2 percent	**NA**	
		National: 31.2 percent		
Primary Data	Addressing elements of the Physical Environment was voiced as a concern by Southern Colorado, Denver-Boulder and Mountain **Colorado** service area representatives – with an emphasis on access to healthy food and addressing youth obesity. One local public health agency in the KPCO region prioritizes climate change (clean air and water) and twelve prioritized obesity as a health need.			
Geographic Impact	Access to nutritious food was a top concern identified in the data, voiced by the service areas and the Leadership Group. Rates of grocery stores/produce vendors fall short of the national average for KPCO at 1.71 per 100,000 compared to 2.4 per 100,000 nationally. Southern Colorado's service area scored even worse at 1.3 per 100,000, with Elbert County scoring the worst in the entire region at 0.87 per 100,000. Drought Severity and issues with diabetes management also score worst in the Southern Colorado service area, highlighting an area of opportunity.			

Appendix D. Community resources

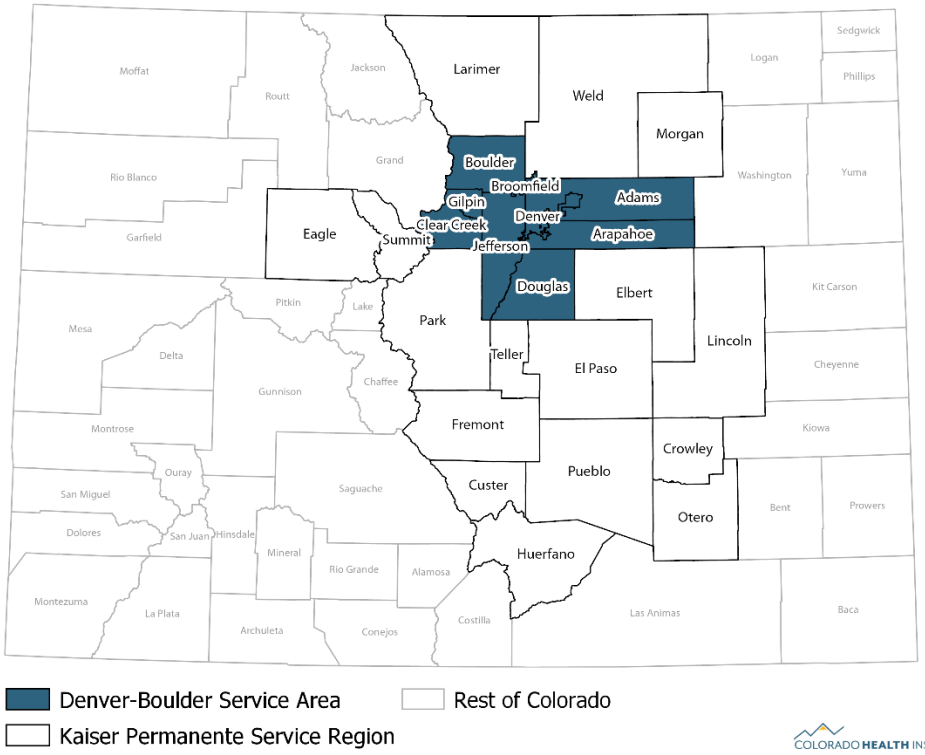
Resource provider name	Summary description
Colorado Blueprint to End Hunger Campaign	Statewide coalition dedicated to ending hunger by making affordable, healthy foods accessible to all Coloradans.
Colorado Center on Law and Policy	Non-profit organization uses research, education, advocacy, and litigation to remove barriers to self-sufficiency and to help Coloradans meet their basic needs.
Colorado State Innovation Model	A statewide, federally-funded initiative that promotes and expands integrated primary care and behavioral health and anti-stigma efforts through community-based providers and local public health agencies.
Communities That Care coalitions	Local coalitions focused on substance use prevention among youth.
Hunger Free Colorado	Organization addressing hunger through advocacy, service provision, and awareness raising.
Live Well Colorado and HEAL Cities and Towns campaign participants	Organization promoting healthy eating and active living; includes more than 45 cities and municipalities adopting HEAL policies.
Mental Health Colorado	Advocacy organization dedicated to the prevention and treatment of mental health and substance use disorder.
Regional Accountability Entities (RAEs)	Companies contracted with the Colorado Department of Health Care Policy and Financing that manage Health First Colorado (Colorado Medicaid) regionally. The RAEs are responsible for ensuring enrollees have access to primary and specialty medical and behavioral health care and health promotion and prevention services.
Safety net partners	Federally Qualified Health Centers, Community Mental Health Centers, and other providers who provide primary care, mental health, and substance use services for Coloradans with public, private, or no insurance.

Appendix E. KPCO Health Needs Prioritization Scores

		Clear Disparities and Inequities						
Health Needs	**Severity of Need Score**	**County SDOH Score**	**Service Area SDOH Score**	**Racial and Ethnic Disparities Score**	**Community Prioritization Score**	**Opportunity to Intervene Score**	**Existing Assets Score**	**Final Score**
Substance Use (1)	2	2	1.3	0	1	0.91	2	9.21
Mental Health (2)	0	1.5	0.8	1	1	0.86	3	8.16
Economic Security (3)	1	1.6	0.5	1	N/A	1.88	2	7.98
Access to Primary and Specialty Care (4)	0	1.6	0.71	1	0	1.14	3	7.45
Climate and Health	2	1.33	0.5	0	0	1.75	1.5	7.08
Obesity /HEAL	0	1.66	0.4	1	1	0.75	2	6.81
Physical Environment (5) Climate and Health + Obesity/HEAL	1	1.5	0.45	0.5	0.5	1.25	1.75	6.95

A Snapshot of Communities and Health
Kaiser Permanente's Denver-Boulder Service Area
2019 Community Health Needs Assessment (CHNA)

Kaiser Permanente Denver-Boulder Service Area

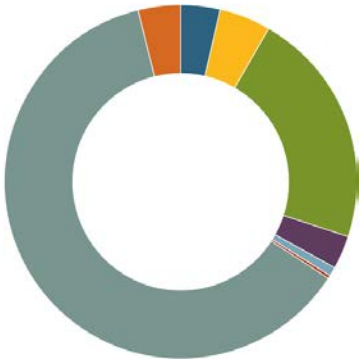


Demographics

- Total population: 3,289,900
- 23.5 percent of residents are younger than 18 years.
- 11.6 percent of residents are age 65+.

Population by Race/Ethnicity

Race by Percent	Denver/ Boulder
Asian	3.7
Black	4.8
Hispanic/Latino (Any Race)	20.8
Multiple Race	3.2
Native American/Alaskan Native	0.7
Native Hawaiian/Pacific Islander	0.1
Non-Hispanic White	62.7
Some Other Race	3.9



Health Needs Summary

KPCO examines the following health needs when preparing its CHNA.
The Denver-Boulder service area performs relatively well on most health needs compared with the rest of the KPCO region. However, this service area performed poorly relative to the rest of the KPCO region on the four health needs listed in red below.

KPCO CHNA Health Needs

Access to Care	Climate and Health	Obesity/HEAL/Diabetes
Asthma	Economic Security	Oral Health
Cancers	HIV/AIDS/STI	Substance Use and Tobacco
Cardiovascular Disease/Stroke	Maternal and Infant Health	Violence and Injury Prevention
	Mental Health	

Table 1. Denver-Boulder Health Needs that Score the Worst Compared to All Service Areas

Health Need	Data Indicators Denver-Boulder Scores Worst Among all Service Areas	Denver Boulder	KPCO Region
Climate and Health	**Long Work Commutes** (Percentage Driving 60+ Minutes One Way)	39.7	35.5
	Particulate Matter 2.5 Levels (Percentage of Days in a Year Levels Too High)	7.6	7.0
	Road Network Density (Index Road Miles per Square Mile, Measure to Show Traffic Density, Air Quality)	3.5	2.0
Mental Health	**Social Associations** (Rate per 10,000, Social Associations include civic organizations, recreation clubs and facilities, this is a measure of community vitality)	9.3	9.8
	Depression Among Medicare Enrollees (Rate per 1,000)	15.9	15.6
Substance Use and Tobacco	**Heart Disease Prevalence** (Percentage of Adults)	18.9	18.5
	Alcohol Expenditures (Percentage of Annual Expenditures)	15.9	15.6
HIV/AIDS/STDs	**Chlamydia Incidence** (Rate per 100,000)	475.0	435.0
	HIV AIDS Prevalence (Rate per 100,000)	380.0	295.0

Social Determinants of Health

KPCO has identified key indicators, often referred to as social determinants of health, that are powerful predictors of overall health.

CHI developed a social determinants of health index score based on the five factors listed in Table 1. A value in red indicates poor performance for the service area relative to the region and a value in green indicates better performance (see Table 1). Scores were calculated by converting the data indicator values to a scale of 1 to 10 (1 being the lowest desired score, 10 the highest). For example, for "Uninsured Population" if the original value was 10 percent, the converted index score would be 9 out of 10, because 90 percent are insured.

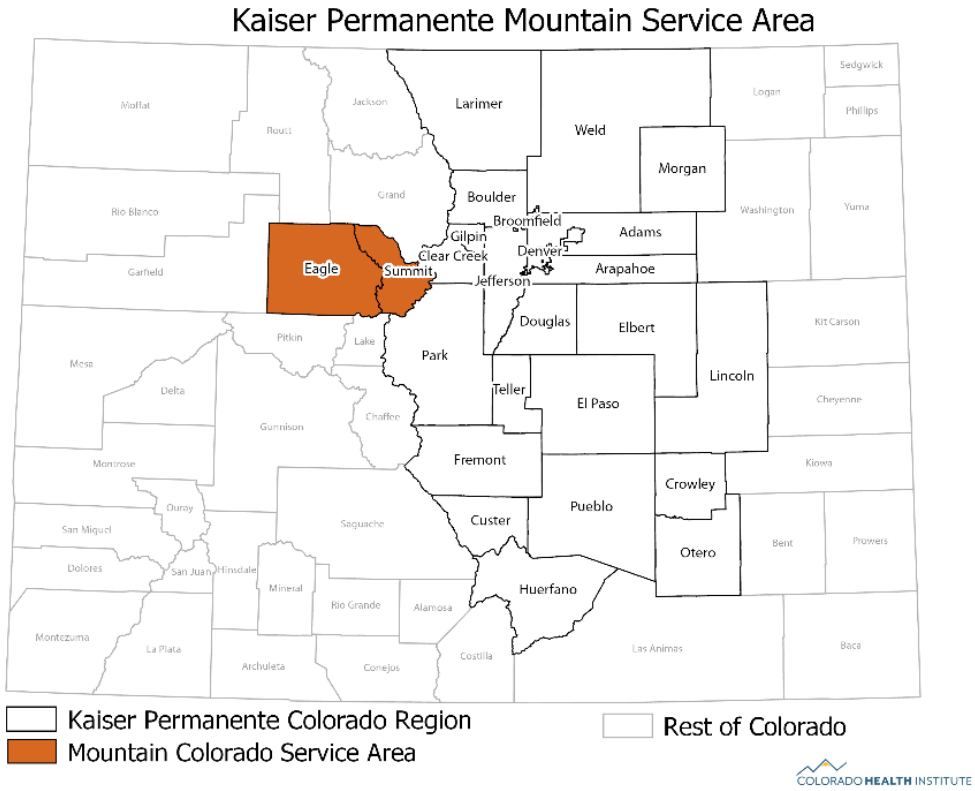
Denver-Boulder's social determinants of health index score is **9.2** of a possible 10, on par with KPCO region's index score of 9.2 and above the U.S. index score of 8.9. This service area has a greater percentage of adults without a high school diploma and residents with limited English proficiency than KPCO's region overall. The service area performs better on employment with lower rates of residents in poverty compared to the KPCO region overall.

Table 2. Denver-Boulder Service Area Social Determinants of Health Data

	Denver-Boulder Service Area	KPCO Region	U.S Overall
Index Score	**9.2**	**9.2**	**8.9**
Uninsured Population (Percentage)	8.3	8.5	10.0
Unemployment (Percentage)	2.8	2.9	4.0
Population Below the Federal Poverty Level (Percentage)	11.1	11.8	15.7
Adults Without a High School Diploma (Percentage)	9.3	8.8	13.4
Limited English Proficiency (Percentage)	7.5	6.4	9.3

Douglas County has the highest index score (9.7) among counties located within the Denver-Boulder Service Area. **Adams County** has the service area's lowest index score (8.9).

A Snapshot of Communities and Health
Kaiser Permanente's Mountain Colorado Service Area (MtnCO)
2019 Community Health Needs Assessment (CHNA)

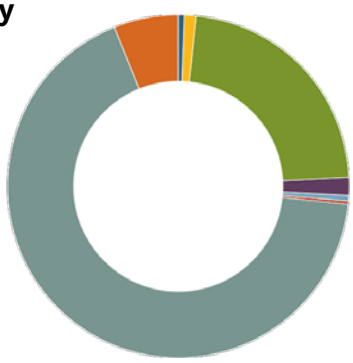


Demographics

- Total population: 79,300
- 20.6 percent of residents are below age 18.
- 8.9 percent of residents are age 65+.

Population by Race/Ethnicity

Race by Percent	Mountain CO
Asian	0.8
Black	0.9
Hispanic/Latino (Any Race)	21.5
Multiple Race	1.7
Native American/Alaskan Native	0.5
Native Hawaiian/Pacific Islander	0.2
Non-Hispanic White	68.3
Some Other Race	6.2



Health Needs Summary

KPCO examines the following health needs when preparing its CHNA. Mountain Colorado service area (Eagle and Summit Counties) performed poorly compared to the rest of the KPCO region on the following eight health needs listed in red below.

KPCO CHNA Health Needs

Access to Care
Asthma
Cancers
Cardiovascular Disease/Stroke
Climate and Health
Economic Security
HIV/AIDS/STI
Maternal and Infant Health
Mental Health
Obesity/HEAL/Diabetes
Oral Health
Substance Use and Tobacco
Violence and Injury Prevention

Mountain CO's poor performance on these eight health needs is being driven by the data indicators in Table 1; these data indicators on which MtnCO performed poorly compared to the rest of the KPCO region.

Table 1. Mountain Colorado Service Area Health Needs Scoring Worse than KPCO

Health Need	Data Indicator Driving Health Need	MtnCO Service Area	KPCO Region
Access to Care	Uninsured Population (Percentage)	17.7	10.3
	Medicare Recent Primary Care Visit (Percentage)	71.7	77.2
Asthma	Ozone Levels (Percentage Days Poor Ozone)	49.1	44.0
Climate and Health			
Economic Security	Beer, Wine and Liquor Stores per 100,000	5.4	2.5
	Uninsured Population (Percentage)	17.7	10.3
	Young People Not in School, Not Working (Percentage)	13.8	6.8
	Severe Housing Problems (Percentage)	22.3	17.5
	High Speed Internet (Percentage)	88.8	98.0
	Housing Problems (Percentage)	38.1	33.0
	Cost Burdened Households (Percentage)	37.0	32.8
Maternal and Infant Health	Low Birth Weight (Percentage)	10.1	8.8
Mental Health	Young People Not in School, Not Working (Percentage)	13.8	6.8
Substance Use and Tobacco	Beer, Wine and Liquor Stores per 100,000	5.4	2.5
	Excessive Drinking (Percentage Adults 18+)	23.9	19.1
	Medicare Opioid Prescription Drug Claims (Percentage)	9.2	6.8
	Low Birth Weight (Percentage)	10.1	8.8
Violence and Injury Prevention	Beer, Wine and Liquor Stores per 100,000	5.4	2.5
	Motor Vehicle Crash Deaths per 100,000	11.6	8.5

Social Determinants of Health

KPCO has identified key indicators, often referred to as social determinants of health, that are powerful predictors of overall health. CHI developed a social determinants of health index score based on five factors. A value in red indicates poor performance relative to the region and a value in green indicates better performance (see Table 2). Scores were calculated by converting the data indicator values to a scale of 1 to 10 (1 being the lowest desired score, 10 the highest). For example, for "Uninsured Population" if the original value was 10 percent, the converted index score would be 9 out of 10, because 90 percent are insured.

Mountain CO's social determinants of health index score is **9.0** of a possible 10, the lowest among KPCO's service areas. The service area has a high percentage of uninsured residents as well as residents with limited English proficiency, and the rate of residents living in poverty is higher than the KPCO region's average. Unemployment

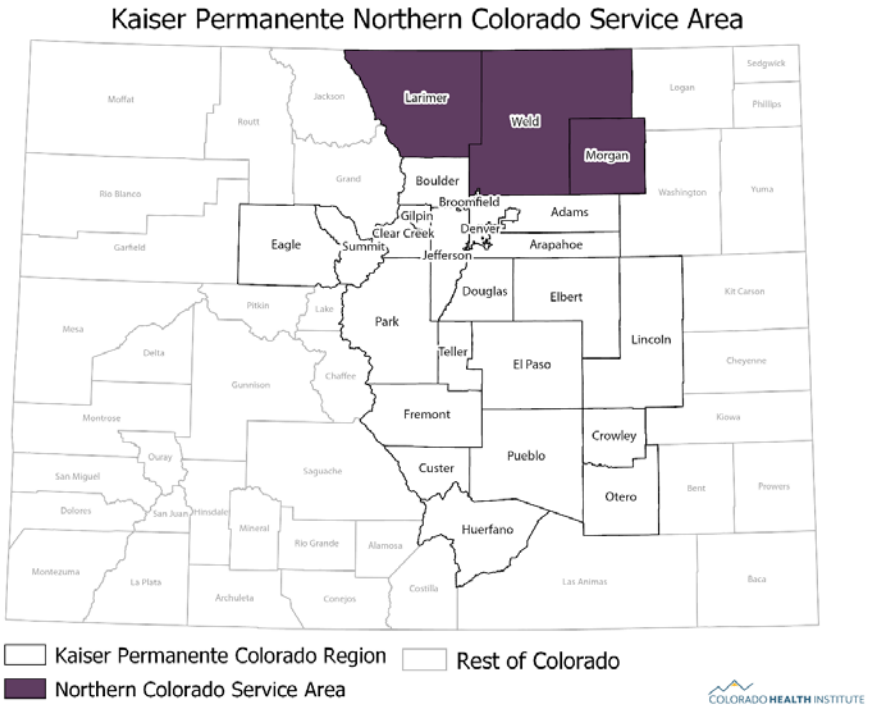
is lower in the service area (however underemployment—people working multiple hourly jobs—is high), and the percentage of adults without a high school diploma is below the KPCO region's average.

Table 2. The KPCO Determinants of Health Data

	MtnCO Service Area	Eagle County	Summit County	KPCO Region	U.S. Overall
Index Score	**9.0**	**8.9**	**9.1**	**9.2**	**8.9**
Uninsured Population (Percentage)	17.7	17.7	17.7	8.5	10.0
Unemployment (Percentage)	2.7	3.1	2.1	2.9	4.0
Population Below the Federal Poverty Level (Percentage)	10.2	8.1	12.1	11.8	15.7
Adults Without a High School Diploma (Percentage)	8.3	11.2	5.3	8.8	13.4
Limited English Proficiency (Percentage)	11.0	12.8	7.7	6.4	9.3

Eagle County's index score is 8.9, on par with the KP national index score, while **Summit County** scores at 9.1. Both counties scored lower than the KPCO region (9.2).

A Snapshot of Communities and Health
Kaiser Permanente's Northern Colorado (NoCO) Service Area
2019 Community Health Needs Assessment (CHNA)

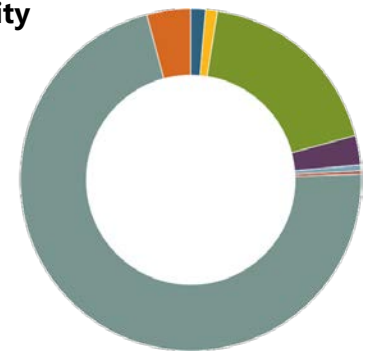


Demographics

- Total population: 561,900
- 22.8 percent of residents are below age 18.
- 12.9 percent of residents are age 65+

Population by Race/Ethnicity

Race by Percent	NoCO
Asian	1.6
Black	1.0
Hispanic/Latino (Any Race)	17.6
Multiple Race	2.9
Native American/Alaskan Native	0.6
Native Hawaiian/Pacific Islander	0.1
Non-Hispanic White	72.3
Some Other Race	3.9



Health Needs Summary

KPCO examines the following health needs when preparing its CHNA.
The NoCO service area performs relatively well on most health needs compared with the rest of the KPCO region. NoCO performed poorly on the health needs listed in red below.

KPCO CHNA Health Needs

Access to Care
Asthma
Cancers
Cardiovascular Disease/Stroke
Climate and Health
Economic Security
HIV/AIDS/STI
Maternal and Infant Health
Mental Health
Obesity/HEAL/Diabetes
Oral Health
Substance Use and Tobacco
Violence and Injury Prevention

NoCO's poor performance on these three health needs is primarily due to its worse performance on heart disease hospitalizations among Medicare enrollees. NoCO has a rate of 10.9 hospitalizations per 1,000 Medicare enrollees compared to 8.5 per 1,000 for the KPCO region. NoCO also has a below average percentage of the population living within walkable destinations and fewer exercise opportunities relative to the rest of the KPCO region. Only 32.8 percent of NoCO's population lives within a walkable destination (like parks) compared to 45.5 percent for the KPCO region.

Social Determinants of Health

KPCO has identified key indicators, often referred to as social determinants of health, that are powerful predictors of overall health.

CHI developed a social determinants of health index score based on the five factors listed in Table 1. A value in red indicates poor performance for the service area relative to the region and a value in green indicates better performance (see Table 1). Scores were calculated by converting the data indicator values to a scale of 1 to 10 (1 being the lowest desired score, 10 the highest). For example, for "Uninsured Population" if the original value was 10 percent, the converted index score would be 9 out of 10, because 90 percent are insured.

NoCO's social determinants of health index score is **9.3** of a possible 10 – higher than KPCO region's score of 9.2. The service area performs poorly on the percentage of uninsured residents and residents living in poverty compared with the region overall.

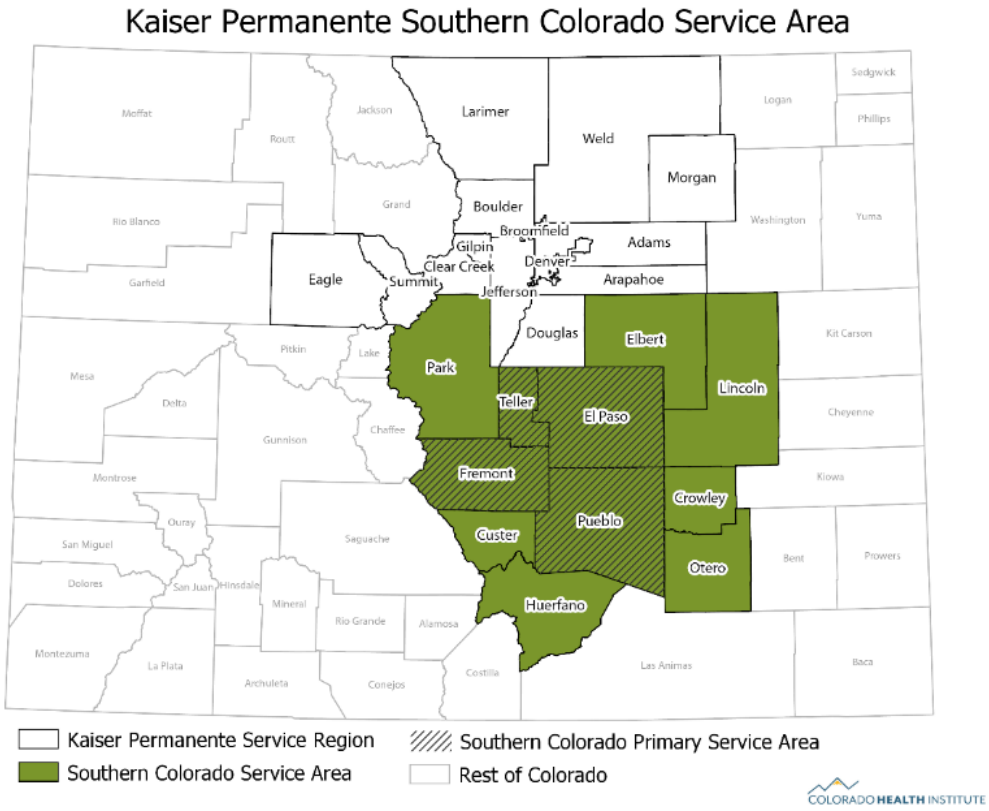
Table 1. NoCO Service Area Social Determinants of Health Data

	NoCO Service Area	Larimer County	Morgan County	Weld County	KPCO Region	U.S. Overall
Index Score	**9.3**	**9.4**	**8.8**	**9.1**	**9.2**	**8.9**
Uninsured Population (Percentage)	8.9	8.0	17.8	9.0	8.5	10.0
Unemployment (Percentage)	2.5	2.5	2.4	2.6	2.9	4.0
Population Below the Federal Poverty Level (Percentage)	13.5	13.2	10.7	12.6	11.8	15.7
Adults Without a High School Diploma (Percentage)	8.0	4.3	19.0	13.0	8.8	13.4

Limited English Proficiency (Percentage)	4.2	2.3	12.5	7.1	6.4	9.3

Larimer County has the highest index score **(9.4)** among counties located within the service area. **Morgan County** has the region's lowest index score of **8.8**.

A Snapshot of Communities and Health
Kaiser Permanente's Southern Colorado Service Area (SoCO)
2019 Community Health Needs Assessment (CHNA)

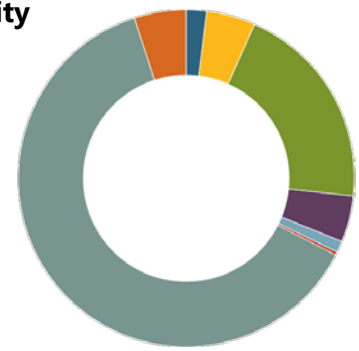


Demographics

- Total population: 984,400
- 24 percent of residents are below age 18.
- 13.2 percent of residents are age 65+.

Population by Race/Ethnicity

Race by Percent	SOCO
Asian	2.0
Black	4.8
Hispanic/Latino (Any Race)	18.8
Multiple Race	4.7
Native American/Alaskan Native	1.0
Native Hawaiian/Pacific Islander	0.3
Non-Hispanic White	63.4
Some Other Race	5.0



Health Needs Summary

KPCO examined the following health needs when preparing its CHNA. The SoCO service area performed poorly compared to the rest of the KPCO region on the following six health needs listed in red below.

KPCO CHNA Health Need

Access to Care
Asthma
Cancers
Cardiovascular
Disease/Stroke

Climate and Health
Economic Security
HIV/AIDS/STI
Maternal and Infant Health

Mental Health
Obesity/HEAL/Diabetes
Oral Health
Substance Use and Tobacco
Violence and Injury
Prevention

SoCO's poor performance on these eight health needs is being driven by the data indicators in Table 1; these data indicators on which SoCO performed poorly compared to the rest of the KPCO region.

Table 1. SoCO Service Area Health Needs Scoring Worse than KPCO

Health Need	Data Indicator Driving Health Need	SoCO Service Area	KPCO Region
Cardiovascular Disease/Stroke	Stroke Hospitalizations per 1,000 Medicare Population	7.7	6.5
	Stroke Deaths per 100,000	38.8	32.9
	Heart Disease Deaths per 100,000	80.8	64.8
Economic Security	Unemployment (Percentage Ages 16+)	3.5	2.9
	Healthy Food Stores (Percentage Near One)	34.6	22.6
Obesity/HEAL/Diabetes	Stroke Hospitalizations per 1,000 Medicare Population	7.7	6.5
	Stroke Deaths per 100,000	38.8	32.9
	Heart Disease Deaths per 100,000	80.8	64.8
	Healthy Food Stores (Percentage Near One)	34.6	22.6
	Food Environment Index (1 to 10)	6.9	7.7
	Diabetes Prevalence (Percentage)	7.4	6.1
Maternal and Infant Health	Pre-Term Births (Percentage)	11.3	10.2
Climate and Health	Drought Severity (Percentage of Weeks in Year)	64.9	53.0
Substance Abuse/Tobacco	Heart Disease Deaths per 100,000	80.8	64.8

Social Determinants of Health

KPCO has identified key indicators, often referred to as social determinants of health, that are powerful predictors of overall health.

CHI developed a social determinants of health index score based on the five factors listed in Table 2. A value in red indicates poor performance for the service area relative to the region and a value in green indicates better performance (see Table 2). Scores were calculated by converting the data indicator values to a scale of 1 to 10 (1 being the lowest desired score, 10 the highest). For example, for "Uninsured Population" if the original value was 10 percent, the converted index score would be 9 out

of 10, because 90 percent are insured. SOCO's social determinants of health index score is **9.3** of a possible 10. SOCO performs better than the region overall with lower rates of uninsured residents and higher rates of educational attainment. The service area performs poorly on unemployment and rates of poverty compared to the KPCO region overall.

Table 2. SoCO Service Area Social Determinants of Health Data

	SoCO Service Area	El Paso County	Fremont County	Pueblo County	Teller County	KPCO Region	U.S Overall
Index Score	**9.3**	**9.4**	**8.9**	**9.0**	**9.6**	**9.2**	**8.9**
Uninsured Population (Percentage)	7.9	6.7	20.6	7.9	4.3	8.5	10.0
Unemployment (Percentage)	3.5	3.3	4.3	4.4	3.1	2.9	4.0
Population Below the Federal Poverty Level (Percentage)	13.0	11.3	16.6	20.2	7.5	11.8	15.7
Adults Without a High School Diploma (Percentage)	7.4	6.1	11.3	11.8	5.6	8.8	13.4
Limited English Proficiency (Percentage)	3.7	3.9	3.9	3.5	0.6	6.4	9.3

Elbert and Teller Counties have the highest index scores (9.6) among counties located within the service area. Among the Southern Colorado primary service area counties, Fremont had the lowest score of 8.9. Among all Southern Colorado service area counties, **Crowley County** has the lowest index score of 8.4.

Service Area Input – Survey Feedback on Service Area Profiles

As a part of Kaiser Permanente Colorado's Community Health Needs Assessment (CHNA), Colorado Health Institute (CHI) developed service area profiles, corresponding to the counties in which we serve our members, to offer a high-level overview of the health needs that rise to the top in each Service Area. Although the CHNA focuses on health needs at the regional level, it is important to understand how health needs vary in each Service Area and how the data reflect the experiences of local communities.

The following are summaries of input and feedback from Kaiser representatives in each of the four service areas in response to their service area profiles. Feedback was collected in the form of focus groups and community meetings in which the service area representatives participated, sharing the service area profiles and summarizing the reactions and responses.

Denver-Boulder Service Area Input

Health Needs Identified in CHNA

- Climate and Health
- HIV/AIDS/STI
- Mental Health
- Substance Use and Tobacco

Do these needs reflect what your community is experiencing?

Yes, but Economic Security issues such as food security and housing are missing.

- **Local Feedback**: Overall, the health needs are an accurate representation of the issues being identified in Local Public Health Assessments and are in good alignment with priority needs identified locally.
    - Access to **mental health** and **substance use** treatment services were emphasized as high needs.

Examples shared of the health needs in the service area:

- **Substance Use:** Tobacco, opioids and alcohol use are ongoing issues, access to substance use treatment services
- **HIV/AIDS/STI:** STIs, gonorrhea in particular
- **Mental Health:** Access to behavioral health services
- **Climate and Health:** Challenges communicating local public health interest in climate issues to county officials.

Are there health needs you feel are not represented and should be?

- Economic Security:
    - Food Insecurity/Access to Healthy, Affordable Foods
    - Housing

Mountain Colorado Service Area Input

Health Needs Identified in CHNA

- Access to Care
- Asthma
- Climate and Health
- Economic Security
- Maternal and Infant Health
- Mental Health
- Substance Use and Tobacco
- Violence and Injury Prevention

Do these needs reflect what your community is experiencing?

Yes.

- **Local Feedback**: Overall, these health needs resonate with what is happening locally in Mountain CO.
    - Youth **mental health** and **economic security** (such as housing and uninsurance) were emphasized as high needs.

Examples shared of the health needs in the service area:

- **Economic Security:** High cost of living/affordable housing, especially among lower income populations in Mountain CO. Having sustainable living is "impossible" for those below FPL. High premiums and uninsurance were mentioned frequently as issues.
- **Substance Use:** Tobacco, opioids and alcohol use are ongoing issues, access to substance use treatment services
- **Mental Health:** Youth mental health – namely suicide rates. Eagle county and Summit county have growing concerns over increasing suicide rates. There is a general need for more mental health treatment services for youth – Eagle county lacks an integrated mental health system.
- **Violence and injury Prevention:** Focus on reducing youth suicides.

Are there health needs you feel are not represented and should be?

- No, but affordable housing is heavily emphasized as a focus

Southern Colorado Service Area Input
Health Needs Identified in CHNA

- Cardiovascular Disease/Stroke
- Climate and Health
- Economic Security
- Maternal and Infant Health
- Obesity/HEAL
- Substance Use and Tobacco

Do these needs reflect what your community is experiencing?

Yes, but Mental Health and Access to Care are missing.

- **Local Feedback**: Yes, overall these capture the big picture of health needs SoCO. Economic security rose to the top – many respondents noted this as a key driver and underlying issue for health in the service area.
- **Economic security, substance use, mental health** and **access to care** were the most heavily emphasized health needs in the service area.

Examples shared of the health needs in the service area:

- **Economic Security:** There are higher levels of poverty, unemployment in Pueblo and Fremont counties especially. Access to affordable housing, healthy food and grocery stores, transportation and safe walkways and high rates of crime are drivers of economic security issues in SoCO.
- **Substance Use:** Youth marijuana use and opioid use (especially heroin) are rising issues. Marijuana use is becoming a social norm in areas like Pueblo. At the same rate, substance use treatment access is an issue in Pueblo.
- **Climate and Health:** Drought severity in southern Colorado was emphasized as an issue as well as dust in the air and asthma.
- **Mental Health (not in profile):** Suicide rates are an issue and access to mental health care emphasized as a need. Reducing wait times for mental health counseling sessions emphasized.
- **Access to Care (not in profile):** Access to both mental health and substance use treatment remains an issue. It's very difficult to find providers for specialty

Are there health needs you feel are not represented and should be?

- Mental health
- Access to care
- Violence and Injury Prevention – high rates of crime, suicide an issue

Northern Colorado Service Area Input
Health Needs Identified in CHNA

- Cardiovascular Disease/Stroke
- Maternal and Infant Health
- Obesity/HEAL
- Substance Use and Tobacco

Do these needs reflect what your community is experiencing?

Yes, but Mental Health is missing and Obesity/HEAL really depends on the county.

- **Local Feedback**: Substance use and cardiovascular disease were called out as health needs, however – the focus from NoCO respondents was on mental health and substance use. Northern Colorado includes three counties with very different demographics and physical environments – so measures related to the built environment that made obesity/HEAL rise as a health need reflects pockets of communities and not the whole.
- **Mental health** and **substance use** (such as excessive alcohol consumption) were emphasized as high needs.

Examples shared of the health needs in the service area:

- **Substance Use:** In Larimer County, excessive drinking is mentioned as a recurring issue among adults. Marijuana use among young adults (18-39) is mentioned as a growing issue as well with increasing percentages of the population reporting use. Substance use treatment is reported as a gap.
- **Mental Health (not in profile):** Those with mental health needs need better assistance in getting access to treatment.

Are there health needs you feel are not represented and should be?

- Mental Health – primarily assisting those in need in getting connected to treatment
- Chronic pain – according to a local survey in Larimer county, nearly one in four adults in that county experienced chronic pain in the last six months.

Appendix G. List of Kaiser Permanente Office Locations

Service Area	Office	Address
DENVER-BOULDER	Arts Integrated Resources	3545 South Platte River Dr., Unit D, Englewood, CO 80110
SOCO	Briargate Medical Offices	4105 Briargate Pkwy., Colorado Springs, CO 80920
SOCO	Parkside Medical Offices	215 Parkside Dr., Colorado Springs, CO 80910
SOCO	Pueblo North Medical Offices	3670 Parker Blvd., Pueblo, CO 81008
SOCO	Southern Colorado Administrative Offices	1975 Research Pkwy., Suite 250, Colorado Springs, CO 80920
DENVER-BOULDER	Lone Tree Medical Offices	10240 Park Meadows Dr., Lone Tree, CO 80124
DENVER-BOULDER	Highlands Ranch Medical Offices	9285 Hepburn St., Highlands Ranch, CO 80129
DENVER-BOULDER	Ken Caryl Medical Offices	7600 Shaffer Pkwy., Littleton, CO 80127
DENVER-BOULDER	Ridgeline Behavioral Health Center	9139 S. Ridgeline Blvd., Highlands Ranch, CO 80129
DENVER-BOULDER	Southwest Medical Offices	5257 S. Wadsworth Blvd., Littleton, CO 80123
DENVER-BOULDER	Englewood Medical Offices	2955 S. Broadway, Englewood, CO 80113
DENVER-BOULDER	Swedish Medical Center	501 E Hampden Ave, Englewood, CO 80113
DENVER-BOULDER	Englewood MSSA Claims	9800 S. Meridian Blvd., Englewood, CO 80112
DENVER-BOULDER	Parker Medical Offices	10168 Parkglenn Way, Parker, CO 80138
DENVER-BOULDER	Sky Ridge Medical Center	10101 RidgeGate Parkway, Lone Tree, CO 80124
DENVER-BOULDER	Castle Rock Medical Offices	4318 Trail Boss Dr., Castle Rock, CO 80104
DENVER-BOULDER	Arapahoe Medical Offices	5555 E. Arapahoe Rd., Centennial, CO 80122
DENVER-BOULDER	Smoky Hill Medical Offices	16290 E. Quincy Ave., Aurora, CO 80015
DENVER-BOULDER	Greenwood KP-IT Center	6560 Greenwood Plaza Blvd., Greenwood Village, CO 80111
DENVER-BOULDER	Water Park 1	2500 S. Havana St., Aurora, CO 80014
DENVER-BOULDER	Water Park 2	2530 S. Parker Rd., Aurora, CO 80014
DENVER-BOULDER	Water Park 3	2550 S. Parker Rd., Aurora, CO 80014
DENVER-BOULDER	Aurora Centrepoint Medical Offices	14701 E. Exposition Ave., Aurora, CO 80012
DENVER-BOULDER	Central Support Services	16601 East Centretech Pkwy., Aurora, CO 80011
DENVER-BOULDER	Consolidated Service Center (CSC) (Lowry Admin)	7901 East Lowry Blvd., Denver, CO 80230
DENVER-BOULDER	Stapleton Support Services	11000 East 45th Ave., Denver, CO 80239
DENVER-BOULDER	East Denver Medical Offices	10400 E. Alameda Ave., Denver, CO 80247

DENVER-BOULDER	Regional Offices	10350 East Dakota Ave., Denver, CO 80247
DENVER-BOULDER	Franklin Medical Offices	2045 Franklin St., Denver, CO 80205
DENVER-BOULDER	Government Relations Office	1410 Grant St., Suite D-315, Denver, CO 80203
DENVER-BOULDER	Skyline Medical Offices	1375 E. 20th Ave., Denver, CO 80205
DENVER-BOULDER	St. Joseph's Hospital	1375 E 19th Ave, Denver, CO 80218
DENVER-BOULDER	Hidden Lake Medical Offices	7701 Sheridan Blvd., Arvada, CO 80003
DENVER-BOULDER	Lakewood Medical Offices	8383 W. Alameda Ave., Lakewood, CO 80226
DENVER-BOULDER	Westminster Medical Offices	11245 Huron St., Westminster, CO 80234
DENVER-BOULDER	Wheat Ridge Medical Offices	4803 Ward Rd., Wheat Ridge, CO 80033
DENVER-BOULDER	Baseline Medical Offices	580 Mohawk Dr., Boulder, CO 80303
DENVER-BOULDER	Brighton Medical Offices	859 S. 4th Ave., Brighton, CO 80601
DENVER-BOULDER	Good Samaritan Medical Center	200 Exempla Cir, Lafayette, CO 80026
DENVER-BOULDER	Longmont Medical Offices	2345 Bent Way, Longmont, CO 80503
DENVER-BOULDER	Rock Creek Medical Offices	280 Exempla Cir., Lafayette, CO 80026
NOCO	Fort Collins Medical Offices	2950 E. Harmony Rd., Suite 190, Fort Collins, CO 80528
NOCO	Greeley Medical Offices	2429 35th Ave. Greeley, CO 80634
NOCO	Loveland Medical Offices	4901 Thompson Pkwy., Loveland, CO 80534-6426
NOCO	Northern Colorado Administrative Offices	4850 Hahns Peak Dr., Loveland, CO 80538
MTNCO	Edwards Medical Offices	56 Edwards Village Blvd., Suite 208, Edwards, CO 81632
DENVER-BOULDER	Evergreen Medical Offices	2942 Evergreen Pkwy., Evergreen, CO 80439
MTNCO	Frisco Medical Offices	226 Lusher Court, Frisco, CO 80443