

Community Health Needs Assessment

2020-2022



Contents

Executive Summary.....	4
Community Health Needs Assessment Overview.....	5
CHNA Planning, Structure, and Membership	5
Process and Methods	5
Boulder Community Health Entity Overview.....	7
Prior Community Health Needs Assessment - Evaluation of Impact.....	10
Partnering with Our Community	10
Chronic Disease Management	10
Mental Health	11
Dementia	11
Chronic Pain Management and Substance Abuse	12
Opioid Grant	12
Wellness and Preventative Health (including aging of the population and access to care).....	13
Home Medication Take-Back Program	14
Flu Vaccination Campaign.....	14
Our Community	15
Service Area	15
Demographics	15
Population Growth	15
Population Trends – Cities At-A-Glance.....	16
Gender	17
Age	17
Diversity	18
Employment/Income	18
Summary of the Community’s Input.....	19
Summary of the Community’s Health	19
2020-2022 Implementation Strategy.....	20
Chronic Disease Management	20
High Risk Patient Care Management and Registries	20
Readmission Avoidance/Transitional Care Team	21
Mental Health (including chronic pain management and substance abuse)	21
Integrating Behavioral Health into Primary Care	21
Community Mental Health Initiative	22
Della Cava Family Medical Pavilion.....	22
Anchor Point Mental Health Endowment	23

Community Support through BCH Foundation.....	23
Chronic Pain Management and Substance Abuse.....	23
Opioid Reduction Programs.....	23
Wellness and Preventative Health (including aging of the population and access to care).....	24
Population Outreach for Preventative Care Services	24
Employee Wellness.....	24
Community Wellness Programs.....	24
Aging of the Population	25
Access to Health Care	26
Collaborative Programs	27
Community Education	27
General Health Education.....	27
Childbirth and Parenting Education.....	27
Injury Prevention Education	27
Life-Saver Education	28
Partnership Programs	28
Sponsorships.....	28
Implementation Strategy Summary.....	28
Appendices.....	29
Appendix One - Community Input Report.....	29
Appendix Two: The State of the Community’s Health.....	33
Overview	33
Leading Causes of Morbidity	34
Aging and Health.....	36
Appendix Three: Boulder Community Health Primary Service Area by City and Zip Code	47
Appendix Four: Community Health Partners.....	48
Appendix Five: Information Sources.....	49

Executive Summary

Summary of Community Health Needs Assessment

A community health needs assessment (CHNA) is defined as a systematic process involving the community to identify and analyze community health needs and assets in order to develop strategies that address these needs. This CHNA addresses requirements of the Internal Revenue Service code sections 501c3 and 501r2. It is performed in accordance with the codes and is approved by the Board of Directors of Boulder Community Health (BCH) for a three year period.

During the prior CHNA period (2017-2019), Boulder Community Health made significant progress in addressing the needs of the community it serves particularly in the area of mental health care. A detailed report of all of the activities is included within this document.

The population served by Boulder Community Health faces both acute and chronic disease management challenges. Through the assessment process, Boulder Community Health noted the following:

- Chronic disease management including the care of diabetes, coronary artery disease, cerebrovascular disease, cancer care, and preventive care account for roughly 50% of health care spending in Boulder County.
- Traumatic and other acute care services make up 40% of health care spending.
- Behavioral Health (including mental health and substance use disorders) impacts both acute and chronic care and also significantly impacts the management of chronic disease management of those with comorbid medical conditions.
- Negative progress in some community health indicators may benefit from focused community education.
- Boulder Community Health recognizes the broader social determinants of health and the role they play in influencing the overall health of individuals, as well as our community. BCH recognizes that it has limited ability to influence or change all social factors and believes that maximizing the comprehensive assets within the BCH health care system is the best way to serve the community. BCH is committed to partnering with community agencies to play an expanded role in collaborating to invest in improving the social determinants that are impacting health and within BCH's control to influence. In addition, great strides are being made in assessing social determinants through screening and navigating patients to the appropriate resources.
- Boulder Community Health expanded the number of Community input sessions and invitees and these sessions were invaluable in gathering feedback and validating process results.

The Boulder Community Health CHNA process again identified the same three needs from the prior CHNA period and added community education as a fourth as those of the greatest needs within our community. BCH will focus its efforts on specific objectives in the following areas and revise them annually:

1. Chronic disease management and traumatic injury
2. Mental health including chronic pain management and substance abuse
3. Wellness and preventative health including aging of the population and access to care
4. Community education

Community Health Needs Assessment Overview

A community health needs assessment (CHNA) is defined as a systematic process involving the community to identify and analyze community health needs and assets in order to develop strategies that address these issues. Boulder Community Health is committed to studying and responding to health needs in Boulder County through a community-wide partnership approach. The results of the assessment will be used to guide Boulder Community Health's strategies to maximize community health and wellness, population health management, and advance our mission.

In addition to the tri-annual CHNA process, Boulder Community Health has positioned itself through this process to perform annual report and assessments in compliance with the State of Colorado Hospital Community Benefit Law and the Health Transformation Program (HTP).

CHNA Planning, Structure, and Membership

As a starting point in performing this CHNA, an internal CHNA steering committee was formed consisting of the following positions:

- Chair of the Board of Directors
- Directors of the Board
- VP and Chief Legal Counsel
- BCH Foundation President
- Chief Medical Officer
- AVP of Business Development
- Director of Public Relations
- RN Director of Case Management
- RN Director of Integrated Clinical Services

These individuals performed oversight duties and specified the process and methods to be used for obtaining and reviewing information and developing the implementation strategy based upon the current health needs of the community.

Process and Methods

The CHNA steering committee utilized a three-pronged approach of data review, community input, and prioritization to perform the CHNA.

Data Review

The committee began the process by researching, reviewing and referencing data from local, county, regional, national, and internal BCH sources. Data consisted of population statistics, population health statistics, and community health trends.

Community Input

For this CHNA, BCH dramatically expanded its efforts to garner community input by holding multiple listening sessions with community agencies and programs whose primary focus is "traditionally underserved" populations, BCH staff and medical staff, BCH Board of Directors and Foundation Trustees, Boulder educational professionals, and City of Boulder and County of Boulder Services departments.

Five separate focus groups were held to gather feedback on the overall health challenges and needs of the community, BCH services, the ability to access services, technology, safety and quality, and BCH branding and community perception from the perspective of these organizations and the people they

serve. The expansion of focus groups allowed for BCH to gain more information to incorporate not only into the CHNA, but also so that it can be utilized for the Community Health and Neighborhood Engagement Process (CHNE) and serve as a foundation to be updated during the Hospital Community Benefit Law annual Community Meetings. Community feedback is critical in the evaluation of strategies and programs that BCH will work on each year to improve the health of the community.

Boulder County Public Health and the Community Foundation Serving Boulder County are important collaborators for improving the health of our community. We express thanks to them for their cooperation and for the wonderful services they provide to our jointly-served population.

Prioritization

Prioritization of health indicators was completed by the steering committee in October and November of 2019 based upon the trend data, proportion of population at risk/affected, perceived impact to quality of life, economic impact, and the potential for premature death attributable to the problem. The prioritization was then guided by which health needs BCH has the greatest ability to impact and what resources would be required to do so.

Implementation

Senior and Department Leaders within BCH took part in the process of developing the Implementation Strategy based upon the results of the CHNA findings and prioritization, with particular attention to community feedback validated by data review.

Boulder Community Health Entity Overview

Brief History

Boulder Community Health (BCH) has served the citizens of Boulder County as a non-profit, community owned and locally governed hospital since 1922 when it was formed as an independent mission-driven organization. BCH was founded as the Community Hospital Association and Boulder Community Hospital by Boulder citizens interested in creating a community hospital, directed by local citizens, where residents could be cared for within the community. We are dedicated to providing local access to high-quality, comprehensive medical care by offering the latest medical innovations to meet the evolving health care needs of our growing communities.

Boulder Community Health Mission

Providing our community with the highest quality health care in an innovative, patient centered environment.

Boulder Community Health Vision

Partnering to create and care for the healthiest community in the nation.

System Overview

BCH is the largest provider of care in our primary service area which includes the City of Boulder, Lafayette, Louisville, Erie, and the adjacent mountain communities (approximate population 195,000). Our secondary service area includes the remainder of Boulder County and Broomfield County (population 204,000).

The Boulder Community Health System includes:

Hospital-Based Services at BCH:

- Boulder Community Health has one acute care hospital, Foothills Hospital, with 149 licensed inpatient beds. The hospital offers unique services including 8 operating rooms, 2 interventional cardiac catheterization laboratories, 2 interventional radiology suites, a level two 25-bed trauma center and emergency department, intensive care, specialized cardiac care, advanced neurosurgical and orthopedic services, a comprehensive cancer program, and a family birth center including a special care nursery for newborns with medical issues, and a unit specializing in orthopedic and neurological services.
- Adjacent to the Foothills Campus is the newly opened Della Cava Family Medical Pavilion which houses the only inpatient behavioral health unit in Boulder County. This new building has 18 inpatient behavioral health beds, outpatient behavioral health services, neurology, and electroconvulsive therapy (ECT).
- Boulder Community Health has the only open heart surgery program and the only cardiac electrophysiology program in Boulder County
- Boulder Community Health is accredited by the State as a Level II Trauma Center, and the Commission on Cancer Center (CoC) as a National Accredited Program for Breast Center (NAPBC). In addition, BCH has two Joint Commission Specialty certifications in Joint Replacement and as a Primary Stroke Center.
- In partnership, Boulder Community Health has opened an 18 bed inpatient rehabilitation unit at UHealth Broomfield Hospital. To offer comprehensive, individualized services for patients

recovering from such conditions as stroke, neurological disorders, brain or spinal cord injuries, amputation, trauma injuries and complex orthopedic cases.

Ambulatory Services at BCH:

- 2 multidisciplinary outpatient facilities: The Community Medical Center in Lafayette and the recently opened Erie Community Medical Center in Erie.
- 6 Family Medicine Clinics (1 in Erie, 1 in Lafayette, 1 in Gunbarrel, 2 in Boulder, and 1 in Superior)
- 6 Internal Medicine Clinics (3 in Boulder, 1 in Lafayette, 1 in Longmont, and 1 in Broomfield)
- 15 Specialty Clinics and Services including OBGYN (Boulder, Erie), Nurse Midwives (Boulder, Erie), Endocrinology (Boulder, Superior), Neurology (Boulder), Cardiology (Boulder, Erie, Longmont, Lafayette), Cardiac Rehab (Boulder), Pulmonary Rehab (Boulder), General Surgery (Boulder), Pulmonology (Boulder), AIDS and Infectious Disease (Boulder), Occupational Health (Lafayette), Sleep Diagnostics (Boulder), Travel Medicine (Boulder), Wound Care (Boulder), Sports Medicine (Boulder), Integrative Complimentary Care (Boulder), and Behavioral Health (Boulder and embedded through Primary Care service line)
- 3 Urgent Care Clinics (1 in Erie, 1 in Gunbarrel, and 1 in Superior)
- 8 Laboratory locations
- 7 Imaging locations, all of which are accredited by the American College of Radiology. The main campus Imaging department is designated as a Diagnostic Center of Excellence through the American College of Radiology.
- Home Care (Boulder)

Our Staff

The Medical Staff of Boulder Community Health includes 305 community physicians and 124 employed physicians with 44 different medical specialties. Our talented team of over 2,400 employees, including over 400 nurses, work diligently to provide our community with the highest quality healthcare.

Emergency Preparedness and Response

BCH has a robust and mature emergency preparedness system that encompasses an “all hazards” response architecture. This system has been engaged multiple times over several years as a means to ensure readiness during threats including flooding, wild fire, active shooter, information system downtime, and bomb threat events. In addition to responding to these real emergencies, our emergency response system is further prepared to respond to a diverse set of scenarios including, but not limited to, chemical, biological and radiological contamination, mass casualty trauma, and pandemic. Continual threat assessment, training, exercising and procedural adjustment is on-going. BCH directly collaborates with our emergency response partners, such as Police, Fire, OEM, and other area hospitals because being prepared for disaster is a direct community benefit.

Care Network

Boulder Community Health invested over \$1 million towards the development of a Boulder Valley Care Network (BVCN), its clinically integrated network (CIN). CINs are strategic partnerships between hospitals and independent healthcare providers to improve alignment of organizations around the concept of Population Health. The goal of the BVCN is to improve quality of care, reduce overall cost of care, and improve health outcomes of the populations it serves. BVCN represents roughly 330

physicians in the Boulder County area in over 40 different specialties with primary care physicians accounting for 30% of membership.

BVCN has implemented multiple tactics to improve access to care. It is a participation requirement of all 80 participating entities to be enrolled in Medicaid. This, combined with their efforts with the Boulder County Health Improvement Collaborative (BCHIC) - which streamlines the referral process between PCP and specialist for Medicaid and uninsured, has increased access to specialty services for underinsured populations in Boulder County. BVCN also monitors their network adequacy, meaning they identify what specialty services are underrepresented to focus recruitment efforts on the services that would most improve the care to our population. BVCN has identified primary care medicine and early intervention techniques when health issues arise as a major care gap for our community. There is an adequate supply of primary care providers, but our population is not seeking adequate preventive services, which can lead to future health issues.

Epic Electronic Health Record

In October of 2019 with a \$34 million investment, BCH implemented an entirely new electronic record (EHR) platform for improving access to patient care and the quality of care that is provided. This new electronic health record offers best-in-class tools for BCH caregivers to provide the highest level of care possible to our community. This investment will also allow patients to access BCH services via the MyBCH app or via their computer. These online services include messaging with their provider, scheduling appointments, getting cost estimates for procedures, and even video consultations. BCH plans to further expand these services over time to provide even more value to the community and make it easier to receive high quality care at BCH. This investment will also allow for improved patient record sharing with other healthcare providers to facilitate improved coordination and continuity of care to our community. While this investment will offer great new tools and value to the community, it also will provide efficiencies that ensure BCH can continue to provide care at a competitive cost.

Language Interpretation

In addition to the EHR technology to increase access to services, BCH utilizes onsite language interpreters and two other modalities to interpret in 200 different languages and dialects for our patients.

Prior Community Health Needs Assessment - Evaluation of Impact

The top three priorities under the prior Boulder Community Health CHNA (2017-2019) were:

1. Chronic disease management and traumatic injury
2. Mental health including chronic pain management and substance abuse
3. Wellness and preventative health including aging of the population and access to care

Partnering with Our Community

Since its last Community Health Needs Assessment (CHNA) of 2017-2019, Boulder Community Health has continued to develop new relationships with many community organizations that provide direct health care services or support to the underserved, particularly in the areas of in-kind support and collaboration. As part of our commitment to our community, the BCH Leadership team participates in many community boards and organizations. Donation or sponsorship of local not-for-profits, that provide provision of care or services to the same population served by BCH, approached \$150,000 during the prior assessment period.

Boulder Community Health sponsors activities and care for underserved populations and is committed to sustaining its mission to benefit the population it serves. BCH's total Medicaid gross revenue decreased from 12% in 2017 to 11.7% in 2018. Total charity care/medically indigent/Medicaid gross revenue decreased from 13% in 2017 to 12.6% in 2018. In collaboration with the Boulder County Health Improvement Collaborative, ambulatory care coordinators have processed over 120 specialist referrals for Boulder County residents since September 2018. Working with BCHIC has improved access to 8 specialty areas for this population.

Boulder Community Health began screening all primary care patients over the age of 60 for social determinants of health needs including housing, transportation, food insecurity, financial need, literacy, child care, and safety in the home. Since piloting the screenings, we have expanded to an annual social needs assessment for all primary care patients age 18 years and older. The care coordination team facilitates referrals to community support for all patients who request help with any of these needs.

Chronic Disease Management

Chronic diseases and conditions—such as heart disease, stroke, cancer, type 2 diabetes, obesity, and arthritis—are among the most common, costly, and preventable of all health problems. The goal of the BCH chronic disease management program is to improve health and quality of life while increasing value and decreasing cost. BCH has committed extensive resources to its chronic disease programs in the areas of personnel, supplies, and technology. Chronic disease self-management support groups, high risk patient care management and registries, diabetes and pre-diabetes group classes, and individual support are included within this commitment. Additionally, all of BCH's primary care clinics have an RN Care Manager on site to educate and coach patients to better manage their chronic diseases and to prevent complications. BCH hired its first ambulatory care pharmacist to focus on improving diabetes care and depression care for the community. The pharmacist reviews all prescriptions and works with the clinical team to review current medications and safely optimize new prescribed medications.

To avoid re-admissions into the hospital, BCH has a team of transitional care nurses that provide education and support to our highest risk patients after a hospitalization. Continuous collaboration across BCH departments and providers, community medical partners and agencies, skilled nursing facilities, and social support organizations provide patients with coordinated care when and where they

need it. BCH has continued to enhance the infrastructure of its transitional care program and coordinated patient care material across inpatient stays, specialties, and primary care so that all providers are teaching to the same material. The Boulder Valley Care Network, of which BCH is a collaborator, has recently added BCH transitional care services for its patients.

Mental Health

BCH has continued to expand its integrated behavioral health model into 10 primary care clinics. This model adds social workers to address the behavioral health needs common in primary care, such as insomnia, anxiety, depression, and substance abuse. These licensed clinical social workers or Masters of Social Work provide short term solution-focused counseling, quick interventions for anxiety, depression and stress management, consult with primary care providers for assistance with diagnosis and treatment of mental health conditions, direct patient therapy, and assistance with support and referrals to higher levels of service with community partners. The practitioners also perform depression screening and higher intensity follow-up for newly diagnosed depressed patients. BCH primary care clinics are part of the State Innovation Model that is supporting advanced primary care and behavioral health integration across Colorado. Within this program, 5 primary clinics are in Cohort level 3 and five clinics are in Cohort level 1. Boulder Community Health is an active participant in a “Community Mental Health Initiative” to improve care with Mental Health Partners (MHP), the county’s largest provider of mental health care. This effort includes the development of a “care compact” agreement between MHP and BCH Primary Care to improve communication about shared patients for the purpose of diagnosis, treatment recommendations and care continuity.

Boulder Community Health strengthened its relationship with providers of mental health within the area and continues to enhance the care for patients struggling with mental health issues through new and innovative programs. BCH leadership and staff have served on the board of directors and various committees of Mental Health Partners. BCH has added additional safe areas within its emergency room and a behavioral health nurse and therapist who facilitates mental health care prior to admission or transfer.

BCH is the only comprehensive health system provider of both inpatient and outpatient mental health services within Boulder County. The new 70,000 square foot BCH Riverbend building is now called the Della Cava Family Medical Pavilion. The \$40 million building includes an 18 bed inpatient behavioral health unit and outpatient behavioral therapy clinic in a beautiful new environment. Inpatient behavioral health patients will benefit from earlier access and referral to outpatient therapy in the building, increasing continuity of care from the inpatient to outpatient setting. In addition, Boulder Community Health Foundation has established a \$2 million endowment for mental health which will be used to enhance care. This is in addition to the \$5.5 million raised from over 450 individuals and organizations in support of the new Della Cava Family Medical Pavilion.

Dementia

BCH Primary Care Clinics have identified dementia patients and their caregivers as an important focus population for complex care management. Twice yearly a registry of those patients is created through the EMR for RN Care Managers to reach out, assess the patients for needed medical interventions and resources, and to support the patient and family. Linkages are provided to the Alzheimer’s Association, The Area Agency on Aging, and other community agencies that can provide in home services, respite care, help with Advanced Care planning, transportation and other issues that arise. The RN Care

Managers and Behavioral Health Specialists help provide emotional support and resources to deal with diagnosis acceptance, grief and anger, and at crucial transitions to higher levels of care.

Chronic Pain Management and Substance Abuse

Opioid deaths — meaning deaths from prescription painkillers or illegal opiates like heroin — have been climbing year-over-year in Colorado since at least 2000. BCH now has embedded advanced practice clinicians within all of its 10 primary care clinics and has trained practitioners in medication assisted treatment (MAT) techniques that reduce the use of opioids. In addition to its work within primary care, BCH enrolled in the Colorado Opioid Safety Pilot, a high-profile initiative intended to combat the national opioid epidemic by reducing the administration of opioid medications in emergency departments. Foothills Hospital was one of just 10 emergency departments across the state chosen to participate in a study that ran from June through November 2017. During that time, our ED and Community Medical Center ED staff utilized new treatment guidelines developed by the Colorado Chapter of the American College of Emergency Physicians that included specific recommendations for using alternatives to opioids (ALTOs) as the first option for treating pain rather than opioids with a goal of 15% reduction. BCH achieved a 32.9% reduction during the pilot. In addition, in 2019 BCH began initiating MAT for opioid dependence in the ED, one of the early adopters of this approach in Colorado that has been demonstrated to greatly reduce opioid related morbidity and mortality through eliminating barriers to treatment and capturing patients when they are most motivated and vulnerable.

Opioid Grant

In 2019 BCH received a Health Equity Grant from the City of Boulder that allowed us to launch a Chronic Pain and Opioid Response Program (CPORP). The BCH Foundation offered additional funds to support the development of this program, and BCH has re-applied for additional funding in 2020. Staffed by a Program Coordinator and a Patient Navigator, the CPORP provides education to providers and community members on topics related to substance use and chronic pain and training for providers to allow them to prescribe medication assisted therapy for substance use disorder. The Program Coordinator is also involved in preventive efforts to encourage alternatives to opioids and safe prescribing practices throughout the County, and facilitates discussion between physical health, mental health and substance use providers to improve coordination of care. The navigator is available to all Boulder community members who need assistance linking to services to address chronic pain or substance use treatment. Scholarship dollars are available for Medication Assisted Treatment and Alternatives to Opioid Therapy.

Within the Epic electronic health platform, we will integrate medication information from multiple external sources to ensure that we can see what medications have been prescribed to patients, even if they haven't been seen at BCH before. We are committed to giving care providers the information they need to make informed decisions about the prescribing of opioids and other potentially addictive medications. When providers see a patient, they will be able to check the Prescription Drug Monitoring Program (PDMP) database right from the system, as well as see any medications that have been picked up by the patient from major pharmacies.

Wellness and Preventative Health (including aging of the population and access to care)

The inspirational vision of BCH in partnering to create and care for the healthiest community in the nation is a call to action for BCH and our community. Our population health approach is focusing on our total panel of patients to address patients who have not been seen or have routine screening and preventive care services that need to be addressed. We have specific programs in place to improve Influenza, HPV vaccination rates using data transparency, retina screening to assist in detecting diabetes, and process improvement to increase rates of screening examinations with the goal of beating national benchmarks. BCH is leading various programs such as the Walk with a Doc, which couples a healthy walk around various locations in the community with current health topics, blood pressure screenings, and healthy food. This partnership with the community serves to promote exercise and overall health to community members. Partners include City of Boulder Parks and Recreation, Area Agency on Aging, Boulder County Public Health, and the Boulder Valley School District.

Programs particular to child and teen safety include education partnering with Lake Eldora Ski Race team, Emergency Family Assistance Association (Boulder), Community Cycles Kids and Adult Cycling Programs through RETAC (Regional Trauma Medical Advisory Council), and Boulder Valley School District. New programs include ThinkFirst (concussion awareness and injury prevention), distracted driving awareness and training, and Brain Injury Resource Team (BIRT).

BCH assists adults and seniors through partnership with the City of Boulder Senior Services (Area Agency on Aging), Boulder Fire, and others in fall prevention day and other onsite programs at retirement communities. Specific courses taught by BCH personnel include “matter of balance” and “walk with ease”, which are both aimed at reducing falls. Additionally, a Car Fit program has been designed to fit seniors in their cars as their bodies change. 800 bicycle helmets were fit and donated as well as over 1,200 medical identification tags for bicycle helmets. Regular outreach to patients who have identified gaps in their care are performed electronically via a website portal, by phone call, or mail. During fire and poor air quality seasons, BCH staff reach out to respiratory compromised patients to assess needs for additional care. STOP the Bleed, a National evidence based program, teaches laypersons to initiate lifesaving assistance to injured community members and BCH has led this educational program. BCH personnel consistently volunteer at community events in case a medical emergency arises.

Recognizing the changing demographics within the service area is crucial in providing care to our community. The aging of the population in our community necessitates evolution of our services. The following areas of care within the organization have received significant resources to provide necessary care for our aging population: Heart and Lung Disease, Surgical Services, Joint Replacement, Palliative Care, and Home Visits. BCH has recently added another pulmonologist, a cardiac heart failure specialist, a cardiac structural heart specialist, and a second cardiac surgeon. BCH additionally added programs for TAVR and WATCHMAN implantation to better treat cardiac disease conditions.

The Hospital has invested significant resources into making sure that it is increasing the ability for the community to access its services. BCH has expanded hours of service in all primary care clinics and added Saturday hours in its family practice clinics. BCH has also expanded the number of same day/next day appointments in all of its clinics and added an after-hours nurse triage line which allows 24x7 access to a nurse. Additionally, a major scheduling change within our clinics increased the number of appointments dramatically, which has decreased wait times and allowed greater access to care. BCH opened an urgent care clinic and family practice clinic in Superior and a 40,000 s.f. medical center in Erie

which includes urgent care, primary care, cardiology, obstetrics and gynecology, diagnostic imaging, and laboratory services in Erie.

The hospital is partnering with the Community Foundation and other community partners including other hospitals, Clinica, Salud, Mental Health Partners, and Boulder County Health to improve access to specialists for patients with Medicaid under the Boulder County Health Improvement Collaborative (BCHIC). In addition to providing a significant sponsorship to the initiative, BCH spearheaded a specialty referral project for the Medicaid population which added 100 specialist appointments per month.

BCH added Nurse Care Managers who identify high-risk patients in need of additional support. They provide telephonic and episodic outreach for patients with complex healthcare needs and work with patients to manage chronic conditions, improve health, and make lifestyle changes as well as encourage patient participation in self-management of chronic conditions. BCH also added Care Coordinator(s) who call patients after ER visits and schedule primary care follow-up appointments, review positive social determinants screenings, and connect patients with community resources for support with transportation, finances, housing, childcare, literacy, etc. The Coordinators also forward complex patients to a RN Care Manager or Behavioral Health Specialist, connect population health outreach for patients with chronic conditions, and facilitate Boulder County Medicaid specialist referrals through the Boulder County Health Improvement Collaborative.

Home Medication Take-Back Program

In September 2018, Boulder Community Health Foothills Hospital was enrolled in the Colorado Household Medication Take-Back Program. This program allows BCH to collect patients' home medications for disposal which includes controlled substances. Participation in the Household Medication Take-Back Program decreases the number of medications that end up in our waste water systems and landfills. Bringing these medications to our collection site helps prevent prescription medications from being taken by someone for which they were not prescribed. Prescription medications are highly abused by teens and drug seekers who obtain many of these medications from friends/family. BCH has had a tremendous positive response from the community. In our first 10 months participating in the program, we have collected over 1,000 pounds of medications.

Flu Vaccination Campaign

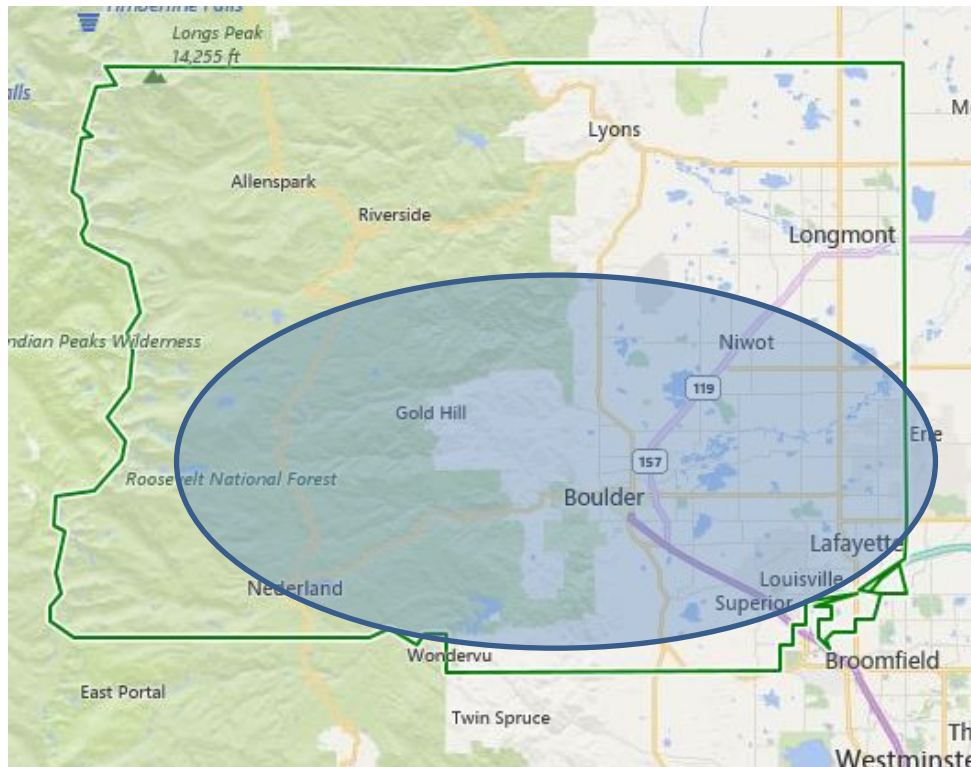
Boulder Community Health organized multiple flu vaccine clinics during the 2018/2019 flu season. BCH teamed up with the community organization, Bridge House, to provide free flu vaccines to members of the community that may not have otherwise sought out an immunization and/or did not have the means to pay for a vaccination. In total, we vaccinated 150 community members and hope to expand the program for the 2019/2020 flu season.

Our Community

Service Area

Boulder Community Health provides services to patients across Boulder County and, due to its excellence in many program areas, the entire Front Range of Colorado. The largest number of patients cared for by BCH originate from its primary service area, which is the City of Boulder, and the communities of Lafayette, Louisville, Erie, Lyons, Jamestown, Nederland, and Ward.

Primary Service Area:



Demographics

Population Growth

Boulder County is the seventh most populous of Colorado's 64 counties, with an estimated 324,073 residents in 2019. The City of Boulder remains the largest municipality in Boulder County and grew by 5.35% from 2012 to 2017. The City of Longmont grew by approximately 30% since 2000, while the cities and towns in East Boulder County and Weld County grew at a much faster rate (Erie grew 323% and Superior grew 40.34%).

The slower growth rate for the City of Boulder can be attributed to several factors, including restricted land use policies that limit development and the high cost of housing.

According to the Colorado State Demography Office, Boulder County’s growth rates will increase slightly in the coming years, bringing the total population to a projected 360,000 by 2025. Most of this growth is anticipated to be in the eastern portion of the county. Preliminary population forecasts for Colorado counties indicate that the population of Boulder County is expected to grow 6.4% between 2016 and 2021. In comparison, the population of adjacent Broomfield County is expected to grow 14% during that same period.

Population Trends – Cities At-A-Glance

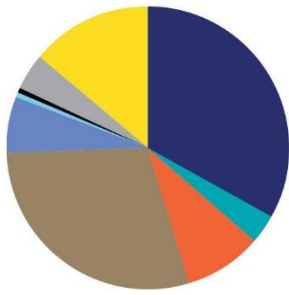
BOULDER COUNTY CITIES AT-A-GLANCE, 2017					
	Boulder	Longmont	Lafayette	Colorado	U.S.
Population	107,128	94,145	27,440	5,607,154	325,719,178
Median Age	27	38	39	37	38
Latino	10%	24%	15%	22%	18%
Speaks a language other than English at home	14%	23%	17%	17%	22%
Median home value, owner-occupied homes	\$919,525	\$440,000	\$598,500	\$286,100	\$193,500
Lived in the same house one year ago	61%	81%	85%	79%	8%
Lived in another county one year ago	8%	4%	9%	5%	3%
Foreign Born	11%	12%	10%	10%	13%
Births per 1,000 women aged 15-50 past 12 mo.	21	54	54	53	52
Population with a disability	6%	9%	10%	11%	13%
Population under 18 with a disability	4%	7%	8%	6%	6%
Population 65 and over with a disability	69%	57%	63%	71%	74%
Population over the age of 3 enrolled in school	45%	28%	25%	26%	26%
High School Graduate (25+)	98%	91%	95%	92%	88%
Bachelor's Degree or Higher (25+)	78%	44%	56%	41%	32%
Living Below Poverty					
• Families	7%	9%	5%	7%	10%
• Families with related kids under 18	7%	17%	9%	10%	15%
• Individuals*	23%	13%	8%	10%	13%
• Children	9%	22%	12%	12%	18%
• 65 +	7%	10%	5%	8%	9%

*Includes students

Source: American Community Survey 2017 1-year data, with 5-year data for Lafayette; Local population counts from the Colorado Department of Local Affairs

Median home value is for all owner-occupied homes based on data from the Boulder Area Realtors Association. | Community Foundation Boulder County

2017 BOULDER COUNTY POPULATION BY COMMUNITY AND PERCENTAGE OF CHANGE SINCE 2012



Boulder	106,974	5%
Erie*	10,530	18%
Jamestown	302	7%
Lafayette	28,539	11%
Longmont**	94,067	6%
Louisville	21,154	11%
Lyons	2,053	-2%
Nederland	1,539	4%
Superior	13,046	2%
Ward	156	2%
Unincorporated Area	44,494	0%
Total Boulder County Population	322,698	6%

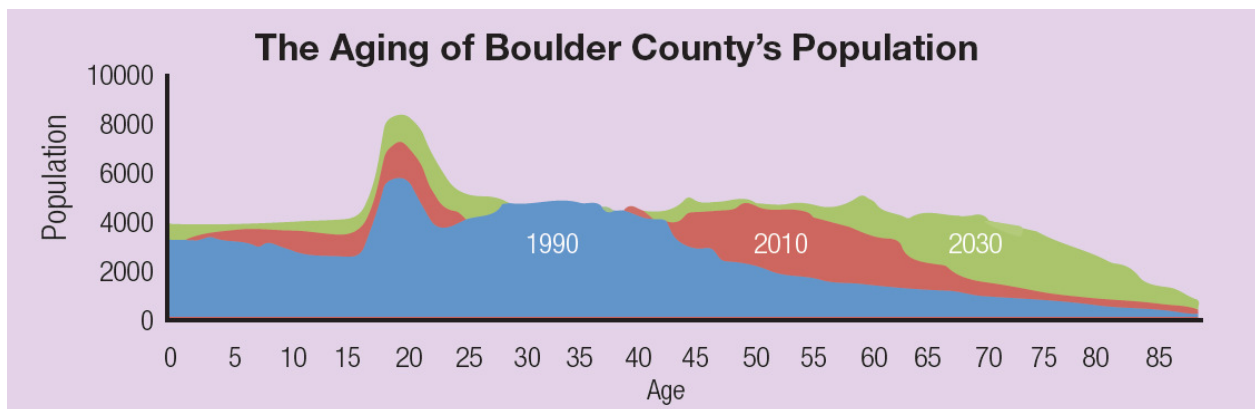
*Boulder County portion. Erie's total population was 23,940 in 2017.
 **Boulder County portion. Longmont's total population was 94,191 in 2017.
 Source: Colorado Department of Local Affairs | Community Foundation Boulder County

Gender

Boulder County's population was evenly split between males and females at 50.1% and 49.9% respectively. This is not expected to significantly change over the next decade.

Age

In 2018, the median age of Boulder County residents was 37.4, indicating that our population is fairly young. However, forecasts from the Colorado State Demography Office indicate that there will be a significant shift upwards in Boulder County's median age over the course of the next decade. In its 2018 annual report, the Boulder County Area Agency on Aging stated that 65,000 Boulder County residents are 60 years or older.



*different colors in the graph represent the population distribution for 1990, 2010 and for the projected population distribution in 2030.

The future will look quite different for health care providers in Boulder County and the demand for healthcare services, particularly in chronic disease management, which includes heart disease, cancer, stroke, will steadily increase.

Diversity

Overall, the state of Colorado is becoming more diverse. However, Boulder County’s overall diversity tracks differently from the rest of the state. According to 2010 US Census data, more than 20% of Colorado residents identified as a person of color, up from 17% in 2000, with the greatest number identifying as Hispanic or Latino. In comparison, it was estimated that in 2017 close to 45,000 Latinos (14%) called Boulder County home.

BOULDER COUNTY POPULATION BY RACE/ETHNICITY						
	Boulder County			Colorado	U.S.	
	1990	2000	2017	2017	2017	
White Non-Hispanic	90%	84%	78%	68%	61%	
Latino – Any race	7%	11%	14%	22%	18%	
Asian	2%	3%	5%	4%	6%	
Two or more races	3%	2%	3%	3%	3%	
Some other race		5%	2%	0.2%	0%	
Black or African American	1%	1%	1%	5%	13%	
American Indian and Alaska Native	0.6%	0.6%	0.3%	2%	1%	

Source: American Community Survey, 2017 1-year data

Employment/Income

In recent years, Boulder County has enjoyed some of the lowest unemployment numbers in the nation. Nearly 40,000 new jobs have been added locally in the past decade. Boulder County ended the first quarter of 2019 with an unemployment rate of 2.5%, relatively unchanged from 2018’s 2.7%.

Furthermore, the Area Median Income is among the highest in Colorado. The Boulder Community Foundation *Trends* Report details an increase in individual median income of 10.6% from 2017 (\$68,800) to 2018 (\$76,100). Trends further reveals that more than one quarter of Boulder County residents (27%) don’t earn enough to cover their basic needs. Of concern within the County, and particularly within the City of Boulder, is the high cost of housing.

Summary of the Community's Input

Five focus group sessions were held in the month of August, 2019. The top themes and findings were:

1. Priorities from 2016 CHNA (Chronic Disease Management, Mental Health, and Wellness/Preventative Health received a HIGH level of agreement and were noted as continuing to be the top health care priorities for the community at large. Challenges related to substance abuse emerged frequently in the discussions.
2. Access to healthcare and the ability to navigate the healthcare system in general were noted as issues as well as ER utilization, aging of the population and social determinants of care.
3. The quality of care and inclusiveness at BCH was consistently seen as very good to excellent.

Summary of the Community's Health

The State of Colorado and Boulder tend to outperform the Nation in major health indicators. Leading causes of morbidity and mortality are cancer, heart disease, accidents, cerebrovascular disease, and chronic lower respiratory disease. Yet, there is some discrepancy in disease prevalence and care based upon ethnicity.

Addressing mental health, including addiction, continues as a top health concern so much that Boulder County Public Health has made it a number one priority. Health survey results within Boulder Valley School District (high schools) indicate that alcohol, marijuana, heroin use are up, as well as sexual activity and obesity. Additionally, the use of electronic vapor products has accelerated to 46.1% in a surveyed population.

Older adults have overall good physical health, however, access issues exist. Insurance coverage fears, affordability, use of care, and social determinants of health issues have the potential to disrupt care. There is evidence to suggest that better education of the community on health topics is needed.

2020-2022 Implementation Strategy

The Boulder Community Health CHNA process identified the following as the top four health needs for 2020-2022:

1. Chronic disease management and traumatic injury
2. Mental health including chronic pain management and substance abuse
3. Wellness and preventative health including aging of the population and access to care
4. Community education

Initiatives that support the four selected community health needs are detailed within this section of the document with descriptions of the actions and resources that BCH will commit and planned collaborations to address the need. BCH will utilize healthcare personnel, supplies, programs, technology, facilities and improvements, and commitment of funds to meet the health needs of its community. Annually, BCH will make adjustments to initiatives based on meeting the community health needs.

Chronic Disease Management

Chronic diseases and conditions—such as heart disease, stroke, cancer, type 2 diabetes, obesity, and arthritis—are among the most common, costly, and preventable of all health problems. The goal of the BCH chronic disease management program is to improve health and quality of life, while increasing value and decreasing the total cost of care. BCH has committed extensive resources to its chronic disease programs in the areas of personnel and technology. BCH has partnered with the Boulder County Area Agency on Aging and other community organizations by identifying and referring patients whose overall health will be improved through a support group and caregiver training.

High Risk Patient Care Management and Registries

All BCH's primary care clinics have an RN Care Coordinator on site to educate and coach patients in better management of their chronic disease and to prevent complications. BCH participates in several health care registries including The American College of Cardiology, Society of Thoracic Surgery, Cancer, and American Heart Association's "Get With the Guidelines". BCH uses these tools to gather data and run reports to proactively analyze patient populations with certain disease parameters to ensure they are getting timely follow-up appointments, education, and the resources they need to be successful in managing their conditions. Calls are made to patients who are seen in the ER or post hospitalization to ensure understanding of discharge instructions, the ability to obtain ordered meds, and the necessary follow up is scheduled. Also, care coordinators enroll patients from the various registries and hospital discharge lists for ongoing care management.

BCH has a certified Diabetic Education program staffed by a registered nurse and a registered dietician Diabetic Educator. She provides individual consults for all primary care clinics and group diabetes education classes for patients. She also offers pre-diabetes classes that are open to the public throughout the county. BCH has added the capability to provide onsite screening for diabetic eye disease, point of care testing of Hba1c and offers diabetic education and medication management during these visits. Future plans include expanding group visit opportunity across the network. BCH also partners with several other prediabetes programs (the YMCA diabetes prevention program and the Area Agency on Aging's program) to address our pre-diabetic population.

BCH utilizes an ambulatory pharmacist to focus on improving the diabetes and depression care in 3 of our primary care clinics, and continues to expand to our other clinics to include all clinics over time. The pharmacist reviews prescriptions and works with the clinical team to review current medications, safely optimize new prescribed medications and provides direct education and medication management to patients.

BCH will also utilize three endocrinologists that it has hired who will be located at two different locations to assist in comprehensive care of the community.

To adjust towards our aging population, BCH is steadily adding capacity within its primary care clinics to manage the chronic condition of dementia. Care management will be augmented by early identification of disease, outreach to patients and caregivers, education on the disease process, and partnership with community organizations to assist in congruent care of the patient.

Readmission Avoidance/Transitional Care Team

BCH has a team of transitional care nurses that provide education and support to our highest risk patients after a hospitalization. There is continuous collaboration across BCH departments and providers, community medical partners and agencies, skilled nursing facilities and social support organizations to provide patients with coordinated care when and where they need it. The team focuses on high risk patients with diagnoses of pneumonia, congestive heart failure, acute myocardial infarction, chronic obstructive pulmonary disease, coronary artery bypass graft surgery, and lower extremity joint replacement surgery. The readmission avoidance team utilizes strategies such as ensuring the patient's understanding of discharge instructions, medications, their disease state. The team also monitors for warning signs of relapse and assists in finding social supports and returning these patients to primary and specialty care for follow up facilitates optimal healing.

RN Care Managers in the primary care clinics follow up on their patients not receiving Transitional Care services to ensure continuity of care. ER follow up focuses on understanding of discharge instructions and appropriate follow up care. The care managers provide education on accessing appropriate levels of service and the availability of extended hours and same day appointments in primary care.

Mental Health (including chronic pain management and substance abuse)

Boulder Community Health has a longstanding commitment to caring for individuals suffering from mental health disorders, chronic pain, and substance abuse. The following have already been implemented or are planned for the next three years:

Integrating Behavioral Health into Primary Care

Trying to find access to psychiatric care can be daunting, especially for those struggling with depression and anxiety. BCH primary care clinics traditionally referred patients outside of our clinic system for such services. This created multiple barriers for patients, for example, a patient referred to a psychiatrist could wait months to be seen due to the shortage of professionals accepting insurance and new patients resulting in a low percentage of patients following up on the recommendation. Integrating behavioral health into primary care includes adding social workers into all of our primary care teams to address the behavioral health needs common in primary care, such as insomnia, anxiety, depression, and substance abuse. These licensed clinical social workers or Masters of Social Work provide short term solution focused counseling, quick interventions for anxiety, depression and stress management, and consults

with primary care providers for assistance with diagnosis and treatment of mental health conditions, direct patient therapy, and assistance with support and referrals to higher levels of service with community partners. They are using MyStrength, an online and mobile mental health support tool, to augment the short term therapy offered.

BCH is also partnering with the State to train providers for medical assisted treatment for narcotic addiction with the goal of increasing access to substance abuse treatment in our community. Depression screening and higher intensity follow up for newly diagnosed depressed patients has been a recent initiative that is improving the care of our patients with depression.

Community Mental Health Initiative

Boulder Community Health is an active participant in a “Community Mental Health Initiative” to improve community mental health care. This is led by Mental Health Partners (MHP), the county’s largest provider of mental health care. This effort includes the development of a care compact between MHP and BCH Primary Care to improve communication about shared patients for diagnosis, treatment recommendations and care continuity.

In support of Boulder Community Health’s vision of partnering to create and care for the healthiest community in the nation, the BCH Foundation established the Community Collaboration Fund. Whether it’s partnering in support of mental health, playing a role in caring for underserved populations, improving patient experience, or educating our community, we are utilizing the fund to help accelerate community partnerships, including many that intersect with our mental health focus. BCH will continue to partner with organizations such as Bridge House to provide on-site health care related services to homeless and low-income adults, leading to better care and reducing emergency department utilization. In addition to provision of care to the homeless, BCH is extending partnerships where appropriate to assist in social determinants of care such as the Bridge House’s Ready to Work and Community Table Kitchen job training programs helps in overall well-being. BCH participates in ongoing collaborative efforts between the organizations to assess where BCH can expand our impact in caring for individuals experiencing homelessness.

Della Cava Family Medical Pavilion

BCH will continue to leverage The Della Cava Family Medical Pavilion to provide mental health care within our community. The Pavilion is an innovative 70,000 sq. ft. mental health facility added to our Foothills Hospital campus in April 2019. Highlights of this \$45 million facility:

- BCH has been the only acute care hospital in Boulder County providing inpatient behavioral health services serving socioeconomically disadvantaged populations. Our new unit in the Della Cava Pavilion expands our inpatient capacity to 18. Approximately 30% of our patients are indigent in transient housing or homeless living on the streets. A similar proportion are on Medicaid or uninsured.
- The multi-faceted program provides inpatients with cognitive behavioral therapy, medication management, family involvement, and acute emotional crisis management with the goal of personal independence and a successful return to the community.
- The Outpatient Counseling Center offers caring, effective individual and group counseling.
- The BCH electroconvulsive therapy (ECT) program treats depression and is performed by the most experienced ECT practitioners in the Mountain States region.

Anchor Point Mental Health Endowment

The Anchor Point Mental Health Endowment supports the emotional well-being of our patients along the continuum of care, empowering them to maintain personal independence while they address their mental health. To date, the BCH Foundation has raised over \$2 million which is being utilized to pay for medical and support services that would otherwise not be available to these patients. Examples include extending needed therapy services and providing transition supplies such as clothes, hygiene products and other necessities.

Community Support through BCH Foundation

The BCH Foundation has raised close to \$8 million dollars to support further investment in mental health services at BCH. This was made possible through the generosity of over 450 individuals and organizations in the community who share our commitment to expand access to critical mental health services.

Chronic Pain Management and Substance Abuse

Staff in the primary care clinics have been trained and are skilled at managing chronic pain, and have care coordination assistance for referral to higher levels of treatment when needed. Advanced Practice Clinicians with expertise in pain management are embedded in two primary care clinics accepting referrals from internal PCPs. BCH will continue its medication take-back program to reduce improper disposal and availability of unused opioids.

\$200,000 in grant funds from the City of Boulder will support our Substance Education and Awareness (SEA) approach for 2020-21, which will include \$50,000 each year for Boulder Community Health's community education and engagement activities about opioid use/abuse and chronic pain management. The Opioid & Chronic Pain Response Program Coordinator and Patient Navigator will offer navigation and short term case management for those seeking treatment for opioid use disorder and/or chronic pain management without narcotics. They will assist participants with finding services at the appropriate levels of care as well as getting connected to treatment and subsequent wrap around services (housing, insurance coverage, transportation, medical treatment, food insecurity, etc). Additionally, the program works in conjunction with over 50 community agencies to help facilitate Suboxone inductions in the ED and connects people to opioid treatment, integrative therapies for chronic pain (massage, acupuncture, reiki) and hosts community education events.

Opioid Reduction Programs

To address the opioid epidemic locally, BCH has partnered with the City of Boulder, Boulder County Public Health and CDPHE to prevent the spread of opioid abuse and treat opioid dependence through:

- Educational outreach to physicians, dentists and oral surgeons regarding non-opioid pain medications and best practices to safely prescribe opioids when needed.
- Reducing new opioid prescriptions by offering non-opioid medications in the ER, inpatient and ambulatory settings.
- Opening a Mind-Body Clinic that will teach patients how to manage their chronic pain using alternative strategies such as cognitive-behavioral therapy, mindfulness meditation, alternative pain control therapies, and non-opioid medications.
- In our Surgery and Labor and Delivery suites, BCH has implemented new protocols that occur before, during and after a procedure that have been shown to decrease patient reliance on opioid medications during recovery.

- We are using data from the Colorado prescription drug monitoring program to identify and target providers with high-risk prescribing patterns for educational efforts addressing alternative approaches to pain control.

Wellness and Preventative Health (including aging of the population and access to care)

The inspirational vision of BCH -- partnering to create and care for the healthiest community in the nation -- is a call to action for BCH and our community.

Population Outreach for Preventative Care Services

Boulder Community Health sees over 67,000 patients within its primary care clinics and the number of patients more than doubles when all patients within Boulder Valley Care Network are counted. Preventative services are an important aspect of creating the healthiest community. Regular outreach to patients who have identified “gaps in care” are done electronically via the portal, or by phone call or mail. Our population health approach is focusing on our total panel of patients to address patients who have not been seen or have routine screening and preventive care services that need to be addressed. We have specific programs in place to improve influenza vaccination rates and HPV vaccination rates using data transparency and process improvement to increase rates with the goal of beating national benchmarks.

Employee Wellness

Leading by example with its own employees and physicians, BCH has established an employee and physician wellness committee. This committee meets monthly and focuses on compassionate care for both healthcare workers and patients. They have sponsored symposiums and recently put on a workshop focusing on empathetic communication to reduce burnout and improve patient experience. Schwartz Rounds are occurring monthly with the goal of strengthening the caregiver-patient relationship and addressing the problem of caregiver burnout by reminding caregivers why they entered the healthcare profession. The Urban Zen program has also been implemented to bring alternative treatments such as yoga, massage, etc. to both caregivers and patients.

BCH has swapped out sugary drink and processed food vending machines for healthy snacks and beverages. Healthy eating is stressed in our cafeteria, including the use of vegetables grown in the BCH rooftop garden. BCH recently opened an exercise gym in a 2,500 sq. ft. space adjacent to Foothills Hospital that is available to all staff and medical staff 24/7.

Health providers are a community asset to be fostered and maintained and BCH takes physician wellness very seriously. Through the Practitioner Health and Wellbeing Committee, Medical Staff of BCH offer education, counseling and support for practitioners surrounding their own health and well-being. The initiative serves not only BCH employed physicians, but the medical community at large.

Community Wellness Programs

Walk with a Doc is a program that couples a healthy walk around various locations in the community with education on current health topics, blood pressure screenings, and healthy snacks. This partnership with the community serves to promote exercise and overall health to community members. The success of the Boulder Walk with a Doc program helped spur the creation of a community

collaborative for cross promotion of wellness initiatives within the BCH primary and secondary service areas. Partners include City of Boulder Parks and Recreation, Boulder County Area Agency on Aging, Boulder County Public Health, Boulder Valley School District and more. A program coordinator, staffing and funding for the events is provided by BCH. BCH recently partnered with the Town of Superior to start a monthly Walk with a Doc program in that community, too.

The Boulder Valley Care Network, of which BCH is a collaborator, provides health coaching to employees of the St. Vrain Valley School District and Boulder Community Health.

Programs particular to child and teen safety include education partnering to provide educational offerings with Boulder Valley School District, Lake Eldora Ski Race team, Emergency Family Assistance Association (Boulder), and Community Cycles Kids and Adult Cycling Programs in RETAC (Regional Trauma Medical Advisory Council), ThinkFirst, and distracted driving. BCH assists adults and seniors through partnership with the City of Boulder Senior Services, Boulder Fire, and others in fall prevention day and other onsite programs at retirement communities. Additionally, a car fit program has been designed to fit seniors in their cars as their bodies change.

Aging of the Population

Recognizing the changing demographics within the service area is crucial in providing care to our community. The aging of the population detailed within the Community Health Needs Assessment necessitates evolution of our services. The following areas of care within the organization have received significant resources to provide necessary care for our aging population.

Heart and Lung Disease

The prevalence of heart and lung disease dramatically increases with an aging population. BCH will continue to utilize medical and technological treatments to care for these diseases including expansion of its structural heart and electrophysiology programs, integration of surgical robotics, increasing access for rehabilitation services for patients with cardiac and pulmonary disease, and adding specialist clinics in other locations.

Surgical Services

Acquisition of new technologies allows for enhancing care.

Women's Health Services

Organizing service lines to provide optimal coordination of care in the inpatient and outpatient settings is crucial. Women's Health Services will further align obstetrics and gynecology, oncology, imaging, urology, and midwifery to provide optimal care and interface with community providers.

Joint Replacement

Bone loss and osteoarthritis due to aging are the primary indications for joint replacement. BCH's joint replacement program is a certified "Gold Seal" program by The Joint Commission with the goal of improving care of our patients and reducing total costs to provide the highest possible value.

Population Health Outreach

BCH will continue to provide proactive outreach for patients with specific chronic disease states to ensure they are receiving regular and appropriate care. The Boulder Valley Care Network, mentioned previously in this document, serves to further efforts in the management of population health.

Antibiotic stewardship activities, championed by BCH infectious disease physicians assist in better utilization of antibiotics to promote overall health within the community.

Palliative Care

BCH partners with The Conversation Project and local members of that organization to target interventions to address advanced care planning in our Medicare population. This includes RN and MD co-visits to create a plan and facilitate choosing a medical power of attorney and help establish goals of care. Strong partnerships with community palliative care programs provide ongoing care post hospitalization.

Home Visits

BCH has its own home health agency as well as several others in the community that are utilized to check on patients with medical needs at home and provide needed nursing and therapy services. We also employ a nurse practitioner available for chronic disease management home visits. Home visits are regularly performed by RNs and physical therapists for care, education, medication reconciliation, assessment for social needs and referrals to community programs for our elderly population.

Fall Risk Programs

BCH collaborates on an annual screening for fall risk which includes targeted support, appropriate exercise, balance training and home safety evaluations. In addition, we are continuing to partner with the Boulder County Area Agency on Aging to provide education and exercise classes that maintain mobility and help prevent falls. An area-wide forum on fall prevention has been held for two consecutive years at a BCH facility at no charge. BCH commits in-kind labor, food and the venue.

Access to Health Care

Utilization of the Epic electronic health record portal “MyBCH” by patients, “Carelink” by community providers, and “Hyperspace” by hospital based providers will allow BCH to have greater continuity of care and allow for better access amongst patients and physicians. Online services will include messaging with primary care providers, scheduling appointments, getting cost estimates for procedures, and even video consultations. BCH plans to further expand these services to provide even more value to the community and make it easier to access care at BCH. This investment will also allow for improved patient record sharing with other healthcare providers to facilitate improved coordination and continuity of care to our community.

Inclusion

Boulder Community Health will continue to place emphasis on inclusion through participation in community groups and forums dedicated to promoting equity and wellbeing of LGBTQ+ and other oftentimes marginalized populations. Employee training in diversity and equity, the formation of an inclusion and equity steering committee, an employee resource group, and BCH’s participation in the Human Rights Commission survey are examples of inclusion. As a result, BCH is now ranked in the Healthcare Equality Index and strive to improve its ranking.

Technology

BCH is planning to expand into telehealth to improve direct access to physician consultation without the inconvenience of an office visit. Our Ambulatory Patient Portal allows direct to physician contact in primary care and specialty clinics access via email for routine tasks and communication.

Hours of Service

To improve access within the BCH system and based upon a principle of “the right care in the right place at the right time,” BCH has implemented after hours primary care in all clinics with family medicine and internal medicine offices expanding hours of service to 7am to 7pm. BCH has also expanded the number of same day/next day appointments in all of its clinics and an after-hours nurse triage line has been opened which allows 24x7 access to a nurse. BCH owned physician practices continue to standardize patient appointment slots and times to increase the overall access to patients.

Physical Locations

BCH has opened urgent care clinics in Gunbarrel, Superior, and Erie. Utilizing its state of the art medical office building in Erie, BCH can meet the needs of patients residing in East Boulder and Weld Counties. Additionally, specialty providers are being scheduled in offsite locations to provide better access to populations requiring their services.

Collaborative Programs

BCH participates in the Boulder County Health Improvement Collaborative (BCHIC). By participating in this collaborative, BCH partners with the Community Foundation and other community partners including other hospitals, Clinica, Salud, housing, dental aid, mental health partners, Boulder County Health to improve access to specialists for patients with Medicaid. Community support groups such as stroke, breast cancer, cancer, and ostomy are all provided to the community members suffering from these diseases.

Community Education

Boulder has the distinction of being one of America’s most educated communities, which means our population has a demonstrated affinity for public education programs. Boulder Community Health uses multiple approaches to provide our community with a wide range of education programs designed to address specific population groups and issues.

General Health Education

Boulder’s many amenities make it a community where many people are aging in place. BCH offers an extensive roster of free lectures by local physicians that address the wide gamut of chronic conditions that impact people as they age – heart disease, orthopedic issues, diabetes and more. These programs are offered at locations across our service area – Boulder, Broomfield, Erie, Lafayette and Longmont. Feedback from the CHNA assists in tailoring community lectures on topics impacting our community.

Childbirth and Parenting Education

Boulder Community Health’s Family Birth Center offers a wide range of pre-natal classes addressing the concerns of pregnant families – labor techniques, breastfeeding, newborn care, etc. Parenting classes cover topics like preparing siblings for a new baby and pediatric CPR/first aid. Classes are held in Boulder and have a small charge. Plans are underway to begin offering classes in Erie.

Injury Prevention Education

Boulder Community Health targets both ends of the age spectrum for practical education on avoiding injury. Older adults are offered free or low-cost sessions on topics such as preventing falls and improving driver safety. Children are offered free programs on concussion prevention, bicycle safety, and other risks. Sessions are held in locations across Boulder County, from local schools to public parks.

Life-Saver Education

Many local residents are eager to learn how to help friends and neighbors who suddenly suffer a life-threatening illness or injury. In the last two years, Boulder Community Health has begun offering free training programs to teach local residents without medical training how to intervene to save lives threatened by heart attack or uncontrolled bleeding. These “Hands-only CPR” and “Stop the Bleed classes” are offered across the county, from classrooms in BCH facilities to community fairs. Plans are being developed to expand the capacity of these popular programs.

Partnership Programs

Boulder Community Health regularly partners with local non-profit organizations and government agencies to develop education programs targeted at identified health needs, from youth suicide (partnership with Mental Health Partners, Boulder Rotary and Boulder Valley Rotary) to helping older citizens regain mobility (partnership with Boulder County Area Agency on Aging). BCH is open to exploring new partnerships in communities across Boulder County.

Sponsorships

Each year, BCH provides financial and in-kind support to organizations that provide or participate in first order provision of health care in our community, along with organizations that support inclusion and diversity. Stressing its vision of “partnering to create and care for the healthiest community in the nation,” BCH will continue to partner with other community organizations and agencies whose mission is to positively impact social determinants of health.

Implementation Strategy Summary

Boulder Community Health is guided by its mission of “providing our community with the highest value healthcare in an innovative, patient-centered environment” and its vision of “partnering to create and care for the healthiest community in the nation,” along with feedback from the community to provide exceptional care. The initiatives detailed within this document are focused on meeting the evolving needs of the community and will be tracked and updated annually.

Appendices

Appendix One - Community Input Report

BCH hired David R. Belin of RRC Associates to facilitate focus-group meetings, which served to gather community input on health needs. His report is below:



Boulder Community Health Focus Groups Community Needs Assessment 2019 *Focus Group Notes*

Introduction

As a component of the update to the Community Health Needs Assessment, Boulder Community Health convened a series of five focus groups with a variety of individual BCH staff, members of the board of directors, community leaders, non-profit leaders, Boulder City/County service providers, and other individuals with perspective into the health care needs of the greater Boulder community. This brief report summarizes the findings from those focus group sessions.

RRC Associates moderated the focus groups on behalf of BCH. The goal of the focus groups was to gather input related to the health care needs of the community, to prioritize those needs, to identify potential gaps in services, to gather suggestions for improvements to meeting the community's health care needs, and to evaluate the access, safety, and quality of BCH services.

The five focus groups were held in the second half of August 2019 in the Leo Hill Conference Room at the BCH Foothills Hospital in Boulder, Colorado.

Focus group participants were recruited from various groups and community organizations. Some of the focus group sessions were conducted with existing groups during their regularly scheduled meetings; other groups were assembled from lists of partners and community non-profits that BCH works with on a regular basis.

Audio recordings of each session are available as electronic audio files.

Focus Group Sessions

- BCH Patient Family Advisory Council – August 21st at 5pm
- BCH Board of Directors and BCH Foundation Trustees – August 22nd at 4pm
- Boulder Not for Profit Organizations – August 26th at 4pm
- BCH Nurse Practice Council and other clinical BCH staff – August 28th at 1pm
- Boulder City and County Services Departments – August 28th at 4pm

Overview of Topics

The topics discussed in the focus groups centered around the health care needs of the community, how well BCH is currently meeting those needs, and how BCH could better meet those needs in the future. Specific topics included the overall quality, safety, breadth, timeliness, and satisfaction with a variety of inpatient and outpatient services that BCH provides.

Because of the broad range of topics covered in the focus groups, some of the issues and suggestions collected in the focus groups are within BCH's direct control, some are within its area of influence, and some are outside of BCH's immediate ability to address the needs. For example, quality of care in the ER or electronic medical records are directly within BCH's control, helping patients navigate the health care system in general or promoting healthy lifestyles are within BCH's area of influence, and the issues of affordable housing or the social determinants of health are largely beyond BCH's direct area of control.

Focus Group Findings

This section presents a summary of the findings from the focus group discussion. The feedback is organized roughly in order of importance, with the issues that received the highest level of consensus and/or areas most within BCH's direct control placed at the top of the list, and issues that were less commonly mentioned and/or outside BCH's area of influence farther down on the list.

Top Themes/Findings

- A high level of agreement was noted for the priorities from the 2016 Community Needs Assessment: Chronic Disease Management, Mental Health (including chronic pain management and substance abuse), and Wellness/Preventative Health (including ageing of the population and access to care). These three areas continue to be the top health care priorities for the community at large. Other health care needs mentioned included pediatrics, adult care, after-hours care, and others.
- Access to health care was among the top concerns, particularly for the availability of appointments with specialists and psychologists (sometimes having to do with not enough scheduling staff to be able to make the appointments in the first place), and also for the ability to navigate the health care system in general. These factors, among others, are seen as barriers to access to BCH services. Additionally, one group mentioned the lack of a 24-7 pharmacy in the community as a barrier to access, and another group brought up the low level of ambulance service to the rural and mountain areas of Boulder County as another barrier.
- Additionally, needs that are not direct health care needs but have a major impact on the health of the community include housing, transportation, education about health care options, access to health care, and others. Many participants in the focus group stressed that these larger-picture issues are critical to health care. For example, "Housing is the best prescription we can write," said one participant, summarizing the importance of these macro-level issues to the issue of health care.
- More specifically, homeless/housing insecure issues were mentioned frequently, along with the inter-relationship between health and housing challenges in the community. The lack of

affordable housing, the high proportion of household incomes spent on housing, and other factors contribute to a tenable housing situation for many residents, who are sometimes seen as one small step away from being homeless. People who are housing insecure are often less able to pay attention or prioritize their own health, which was a concern expressed in several of the groups. Though this factor is outside BCH's direct control, it is seen as important to address at the larger community level; BCH could play a role in that conversation.

- Utilization of the Emergency Room, rather than an Urgent Care facility, was a topic that was brought up frequently. Better education for the general public about Urgent Care options and locations is seen as being needed to more appropriately address many health care situations. BCH's increasing network of facilities is noted as a positive when it comes to keeping people away from the ER who don't need to be there.
- An increasingly aging population is an important demographic dynamic that is impacting health care services. Elderly patients might not have the experience or access to recent technology, including check-in kiosks, and might not have access to basic transportation to get to appointments. Also, some seniors are ageing alone and are becoming more isolated from the community, which complicates health care and self-care.
- BCH outreach to the community is regarded as very good, particularly the Walk with a Doc and community lecture series programs. The Walk with a Doc program is an excellent way to talk to a doctor "without the white coat" in a casual and non-threatening environment. The lecture series is important and reaches many people but could be promoted to a wider audience utilizing social media and other promotional tools, especially as the readership of the local newspaper continues to decline.
- BCH is generally seen as being very welcoming and inclusive, but perhaps not as much for certain patients from some marginalized groups in the community. For example, most signs are in English only and most of the people portrayed in BCH advertising are white. One person mentioned that Clinica is more welcoming to the Hispanic/Latino community. On the other hand, BCH staff is very highly regarded as "treating patients like family" and that "little things make the difference" when it comes to being welcoming. BCH could reach out more directly to members of other communities to learn more about their needs and opinions related to this matter.
- Many participants in the groups praised the mental health services available at the Della Cava Center at the Foothills Medical Campus. Mental health was one of the top priorities in terms of community health care needs and the Della Cava Center was mentioned in most of the groups as a positive contribution to addressing some of the mental health needs in the community. One suggestion was to embed professionals with mental health training into clinics so that cases that require such skills would have a "warm handoff" to the next step of care.
- Challenges related to substance abuse emerged frequently in the discussions. From vaping and alcohol, to opiates and heroin, substance abuse is an issue across demographic groups in the Boulder community. Addressing these problems through education is a critical need in the community.

- The quality of the services at BCH is consistently seen as very good to excellent. Most of the focus group participants were complimentary of BCH for excellent quality of care. Security and safety at BCH facilities are also typically seen as top quality.

Other Topics/ Areas

- The issue of loneliness and isolation was mentioned as an area of concern, from college students to seniors. Some people in the community are experiencing stresses and don't have the resources to deal with them, which can lead to a variety of problems, including suicide, homicide, hate crimes, and other major issues. An open question was how to increase the sense of belonging and reduce isolation. "Care is a term that has meaning," explained one participant.
- Alzheimer's/Dementia will become increasing issues in the community and will require additional resources and attention as the elderly population grows in the Boulder area. The long-term care needs for patients with these diseases will increase.
- The fact that BCH is a non-profit, independent hospital is seen as a plus among a small group of connected community leaders but does not matter as much to the general public. "People don't know, and they only want the best care," commented one participant. Though the general public might not recognize it, BCH's status is important in the mission of the hospital, the delivery of services to the community, and in making decisions locally.
- BCH is sometimes perceived as the facility for emergency services, but not for routine care. Again, education and communication with the community might improve this perception.

Summary

The participants in the groups provided valuable and honest feedback about BCH's strengths and areas for improvement. This positive and constructive information can be used to update the Community Health Care Needs Assessment and to make continuous improvements to better meet the health care needs of the entire community.

Appendix Two: The State of the Community's Health

Overview

The State of Colorado

The State of Colorado received a high grade across all life stages with an overall B+, and the Nation's best rankings for obesity at 21.5%. Even though it is a leading score, these rates still increased by 3% since 2006. Colorado is second only to Oregon for physical activity and fewer adults are smoking cigarettes, down from 19.4% to 17.3%.

The Colorado Health Foundation's 2016 Colorado Health Report Card gives the following grades for health at different ages:

- Healthy Beginnings – C+ (up from 2014)
- Healthy Children – C+ (up from 2014)
- Healthy Adolescents – B (no change)
- Healthy Adults – B+ (no change)
- Healthy Aging – B+ (down from 2014)

The Colorado Health Access Survey 2019 performed by the Colorado Health Institute details “six stories” impacting the health of Coloradans:

1. Insurance Coverage – no change on the surface, but still waters run deep
The rate of people in Colorado going without insurance remained unchanged at 6.5% — statistically the same as in 2015 and 2017. But that overall stability masks turbulence just beneath the surface.
2. Use of Care – More people visited the doctor and dentist
Four out of five Coloradans (81.1%) saw a general doctor at least once in the past year — an increase of more than 10 percentage points from 2017.
3. Behavioral Health: Greater awareness, even greater need
Behavioral health includes mental health and substance use.
4. Food, Housing and Health – The economic boom is unbalanced
There is increasing recognition that factors outside the doctor's office have a profound effect on health. 10% of Coloradans experience food insecurity, 7% experience housing instability.
5. Unfair Treatment – A wakeup call for health care
An estimated 620,000 Colorado adults – about 15% – say they have been treated unfairly sometimes or often when seeking medical care throughout their lives. Of these, three-quarters (74.6 percent) report the experiences were somewhat or extremely stressful.
6. Affordability – Warning signs of a backslide
The cost of health care is an increasing concern for Coloradans. Nearly one in five residents (18.1 percent) said they had problems paying medical bills in the past year.

Boulder County

Overall, Boulder County ranks very high in the State of Colorado for having low mortality and morbidity rates. According to the County Health Ranking Report by the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, Boulder County ranks 4th out of 60 counties assessed for health outcomes. More than 86.6% of Boulder County adults reported their health as “good/excellent” with some discrepancies seen due to ethnicity and income:

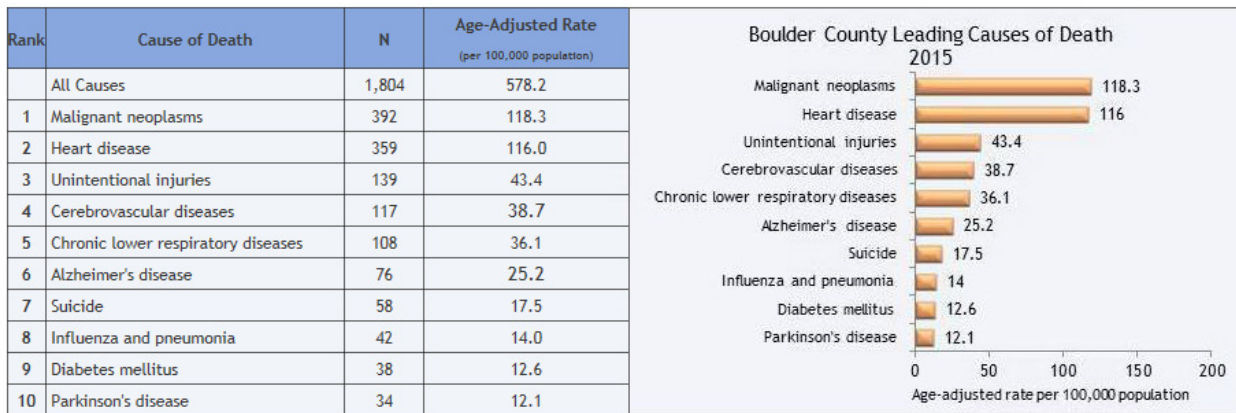
How Boulder County Residents Rank Their Health

	General Population	Anglo	Latino	<\$25K Income	\$25K-\$50K Income	\$50K+ Income
Poor/Fair	12%	8%	32%	24%	20%	4%
Good/Excellent	88%	92%	68%	76%	80%	96%

Source: 2011-2012 Behavioral Risk Factor Surveillance System, CDPHE

Leading Causes of Morbidity

Cancer, heart disease, accidents, cerebrovascular disease and chronic lower respiratory disease are the top five leading causes of morbidity in Boulder County.



* Indicates one or two events in the category.

- Age-adjusted rates are adjusted to the 2000 U.S. standard population using the direct method applied to 10-year age groups.
- Age-adjusted rates provide a better basis for comparison among different geographical areas or time periods.
- Only leading causes of death with 3 or more events in 2015 are included.
- Rates based on small numbers are unstable and should be interpreted with caution.

Source: Colorado Health Information Dataset (CoHid)

Cancer

Breast cancer is the most common type of cancer among women in the U.S. The most recent data from the Colorado Department of Public Health and Environment shows that the incidence rate for breast cancer in women of all races in Boulder County was 131.79 cases (2010-2012) and was down from 134.5 (2003-2009). According to the CDPHE, 71% of women over the age of 50 in Boulder County reported having had a mammogram in the previous two years and almost twice as many cases were reported in Caucasian women as compared to Hispanic women.

Colorectal cancer is one of the most commonly diagnosed cancers in the United States, and is the second leading cancer killer in the U.S. If adults, ages 50 or older, had regular screening tests, as many as 60% of the deaths from colorectal cancer could be prevented. According to CDPHE, the incident rate of colorectal cancer in Boulder County was 250 residents (2010-2012), a dramatic decrease from 646 in 2003-2009.

Heart and Cardiovascular Disease

Ischemic heart disease is characterized by narrowing of the arteries of the heart, resulting in less blood and oxygen reaching the heart muscle. Most ischemic heart disease is caused by atherosclerosis and can result in a heart attack. 22% of Medicare enrollees living in Boulder County in 2017 have ischemic heart disease. This number decreased from 24% in 2009.

Diabetes

Boulder County reports 4.8% of adults live with diabetes. While the percentage of Boulder County residents diagnosed with diabetes is lower than the State of Colorado, a greater percentage of those diagnosed are in the Hispanic community and the disease becomes more prevalent as the population ages.

Obesity

Like the rest of the state, Boulder County is experiencing an upward trend in obesity rates. Obesity increases the risk of many diseases and health conditions including heart disease, Type 2 diabetes, cancer, hypertension, stroke, liver and gallbladder disease, respiratory problems and osteoarthritis. Approximately 15% of adults in Boulder County are classified as obese, with the Hispanic population having more than twice the number of obese adults as non-Hispanics.

Mental Health

Psychological distress can affect all aspects of our lives. It is important to recognize and address potential psychological issues before they become critical. Occasional down days are normal, but persistent mental/emotional health problems should be evaluated and treated by a qualified professional. Mental health continues to be a major concern nationally and locally:

- Colorado ranks in the top 10 states in the incidence of suicide, which is the leading cause of death in Coloradans age 10-24.
- The age-adjusted death rate due to suicide for the United States is 12.9 per 100,000, Colorado is 19.7, and Boulder is 16.3.
- Suicide constituted the second leading cause of death among Colorado youth and young adults ages 10 to 34.
- In 2017, 7% of Colorado youth attempted suicide.
- Nearly 70% of Colorado's 178 school districts are unable to meet national ratio recommendations for mental health or health professionals. Boulder is 7.8% below the Colorado average of high school attempted suicide. (Boulder County Compass 2015)

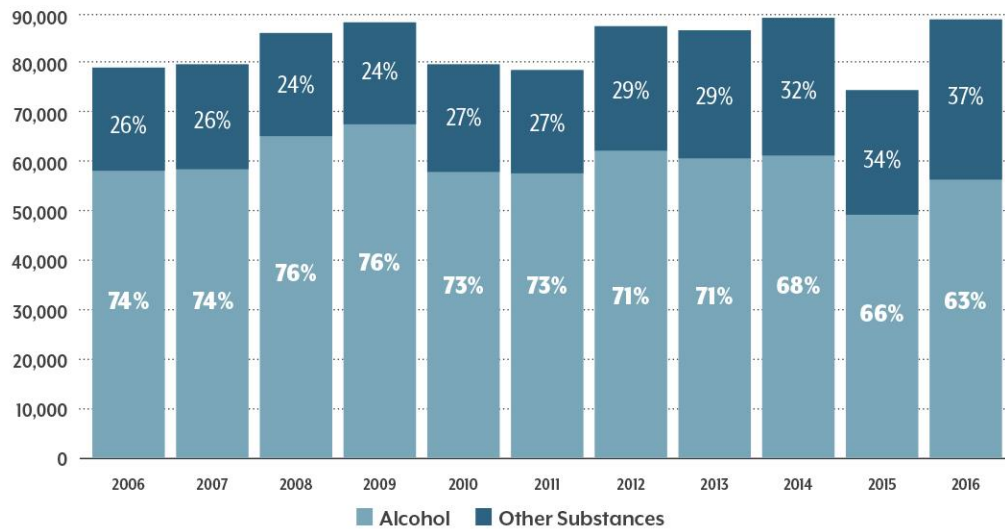
The Boulder County Department of Public Health Community Needs Assessment in 2017 revealed that the number one priority was mental health and that gaps in addressing mental health include:

- Difficulty accessing services in a timely manner
- Cost
- Challenges with coordination and transition
- Limited prevention and early detection/intervention services
- Limited support and curriculum in schools
- Limited specialized services
- Lack of integration with primary care

Substance Use and Addiction

- High school binge drinking is significantly higher in Boulder than the rest of Colorado (22.1% in Boulder, compared to 16.6% in Colorado)
- Boulder County is initiating more intervention and treatment

Admissions in Colorado's Substance Use Treatment Facilities Have Remained Steady for the Past Decade



Source: Treatment Episode Data Set. (2016)

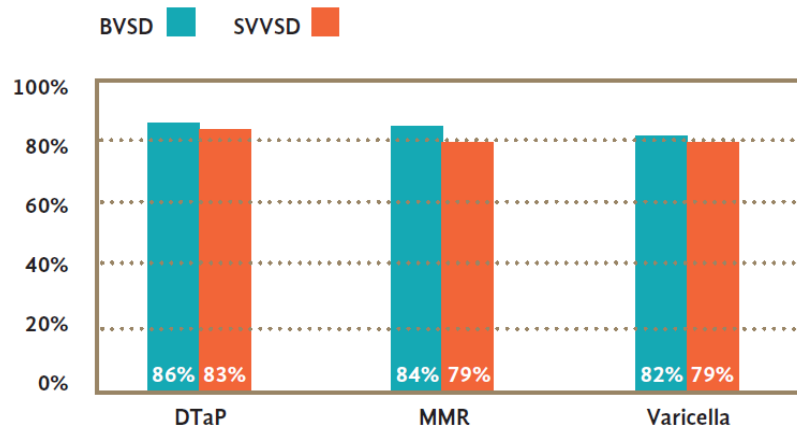


Aging and Health

Vaccination Rates

Boulder County has not seen any cases of measles. However, the county has a lower, although improving, school vaccination rate than many places and pockets of very low vaccination rates, putting it at greater danger for a measles cluster, or what health professionals call an outbreak. For the 2018-2019 school year, the vaccination rate for MMR in Boulder Valley schools was 92%, on the low end of what's required to achieve herd immunity, or the percentage of the population that needs to be vaccinated to prevent a disease from becoming endemic. The St. Vrain schools average of 89% was below herd immunity.

KINDERGARTEN STUDENT VACCINATION RATES, BVSD AND SVVSD, 2017/2018 SCHOOL YEAR



Source: The Status of Children in Boulder County, 2018

Youth

Colorado data on infant and child indicates an overall increase in health measures:

- From 2015 to 2016 ranking improved from 30th to 25th among states
- Infant mortality dropped to 5.1 deaths per 1,000 from 5.6 deaths per 1,000 during this same period
- Colorado continues to be in the bottom 10 states for low birth weight babies, holding steady at 8.8%
- Only 5% of children remain uninsured, down from 14.1% in 2007. Even so, Colorado kids still rank 28th in the nation for overall health. Child poverty was reduced from 21.6% to 20.1%, moving Colorado's children up to 12th place (previously 14th). Colorado is ranked 5th in child obesity (10.9%). Colorado's Hispanic child obesity ranked 33rd. Low-income children are often eligible for health insurance through two public insurance programs

In regards to immunization, the percentage of children 19-25 months receiving all recommended immunizations dropped from 80.3% in 2007 to 74.3% in 2016. Both Boulder Valley School District and the St. Vrain School District reported an average up-to-date immunization rate of about 90% in 2018.

In 2017, BVSD identified several priority areas impacting the health and well-being of our youth in both high school and middle school. These areas are:

- Emotional wellness
- Early initiation of adult behaviors
- Harassment/bullying

The Boulder County Healthy Kids Colorado Survey results (Shared Measurement for Collective Impact on Youth Health) measures youth risk and protective behaviors across a spectrum of health issue areas.

Results from the 2017 Healthy Kids Colorado Survey for Boulder County of high school students indicates that Boulder youth behaviors track closely with national rates. Noted within the table below, where available, is an indication of the behavior increasing or decreasing since the 2013 Survey.

YRBS Results 2017 – BVSD	2013	2017	Trend from prior measurement
Consumed alcohol (prior 30 days)	32.1%	34.7%	Increased
Consume alcohol regularly (1-2 per month)	59.8%	84.8%	Sig. Increased
Used marijuana (prior 30 days)	20.4%	22.4%	Increased
Smoked cigarettes (prior 30 days)	8.0%	7.5%	Decreased
Ever used heroin	1.5%	2.3%	Increased
Attempted suicide (prior 12 months)	13.7%	15%	Increased
Currently sexually active (prior 3 months)	19.7%	23.3%	Increased
Used condom during last intercourse	66.7%	61%	Decreased
Obese	9%	14.7%	Increased

With the indicator of cigarette smoking as the only exception, each of the remaining indicators has moved in the wrong direction. Other notable trends include “use of any tobacco product” increased to 9.9%, and the percentage of students who have ever used an electronic vapor product was **46.1%**. Any prescription pain medication use ever is 13%.

Overall, teen birth rates in Boulder County were significantly lower than the state average and our neighboring counties. However, according to the Colorado Department of Public Health, only 68% of young mothers in this age group receive early prenatal care, a key factor in improving birth outcomes and lowering health care costs by reducing the likelihood of complications during pregnancy and childbirth.

Adult Health and Behaviors

Boulder County Public Health partnered with the community to identify and prioritize the most pressing health issues affecting our community. Community partners and stakeholders identified three specific areas of strategic focus to improve the health of our county over the next five years. The three focus areas were prioritized from over 40 key health issues using local health data and by assessing the magnitude, severity and actionability of each issue.

Boulder County Public Health’s Health Compass (<http://www.bouldercountyhealthcompass.org>) is an excellent tool that monitors the health of Boulder County residents. A system is utilized for each ranking whereby each county is ranked relative to the health of other counties with 1 or 2 being the healthiest. A dashboard of Robert Wood Johnson County Health Rankings utilized on the compass website and is as follows:

- **Clinical Care Ranking – 2 (of 1 to 7).** The ranking is based on a summary composite score calculated from the following measures: uninsured, primary care physicians, mental health providers, dentists, preventable hospital stays, diabetic monitoring and mammography screening.
- **Self-Reported General Health Assessment (poor or fair) – 9%.** This indicator shows the percentage of adults who answered poor or fair to: "How is your general health?"

- **Health Behaviors Ranking - 2 (of 1 to 7).** The ranking is based on a summary composite score calculated from the following measures: adult smoking, adult obesity, physical inactivity, access to exercise opportunities, excessive drinking, alcohol-impaired driving deaths, sexually transmitted infections, teen births and a food environment index.
- **Morbidity Ranking – 3 (of 1 to 15).** The ranking is based on a summary composite score calculated from the following measures: poor or fair health, poor physical health days, poor mental health days and low birth weight.
- **Mortality Ranking – 7 (of 1 to 8).** This indicator shows the ranking of the county in overall length of life according to the County Health Rankings. The ranking is based on a measure of premature death.
- **Age Adjusted Death Rate due to Diabetes – 9.7 per 100,000**
- **Osteoporosis: Medicare Population – 5.9%.** This indicator shows the percentage of Medicare beneficiaries who were treated for osteoporosis.
- **Adult Days in Poor Mental Health – 11.3% (same 2013 – 2014).** This indicator shows the percentage of adults who stated that they experienced eight or more days of poor mental health in the past month.
- **Depression: Medicare Population –14.4% (2017).** This indicator shows the percentage of Medicare beneficiaries who were treated for depression.
- **Frequent Mental Distress – 9.4% (2016).** This indicator shows the percentage of adults who stated that their mental health, which includes stress, depression, and problems with emotions, was not good for 14 or more of the past 30 days.

Colorado Health Access Survey Data: State of Colorado
Mental Health and Substance Use

	2015		2017	
	Number	Percentage	Number	Percentage
Mental health status				
Good mental health (less than 8 days of poor mental health during the past 30 days; Ages 5 and older)	4,349,615	90.1%	4,358,606	88.2%
Poor mental health (8 or more days of poor mental health during the past 30 days; Ages 5 and older)	477,613	9.9%	581,751	11.8%
Needed mental health care or counseling services but did not get it at that time during the past 12 months (Ages 5 and older)	442,278	9.0%	381,689	7.6%
Of those who did not receive needed mental health care, reasons for not getting needed mental health care				
You were concerned about the cost of treatment	252,018	57.3%	213,815	56.1%
You did not feel comfortable talking with a health professional about your personal problems	177,286	40.2%	119,245	31.4%
You were concerned about what would happen if someone found out you had a problem	120,433	27.6%	82,977	22.0%
You had a hard time getting an appointment	150,006	34.0%	132,944	35.2%
You did not think your health insurance would cover it	171,831	43.3%	150,711	43.1%
You did not seek an appointment because you were uninsured (Uninsured at some point in the past 12 months)	40,869	65.2%	38,985	72.4%
In the past 12 months, talked with:				
A general doctor or primary care about your own mental health	NA	NA	800,880	16.03%
A mental health provider about your own mental health	NA	NA	734,096	14.62%
Substance Use				
Needed substance use care but did not get it at that time during the past 12 months (Ages 18 and older)	NA	NA	67,128	1.64%
Of those who did not receive needed substance use care, reasons for not getting needed substance use care				
You were concerned about the cost of treatment	NA	NA	35,719	54.08%
You did not feel comfortable talking with a health professional about your personal problems	NA	NA	27,357	41.30%
You were concerned about what would happen if someone found out you had a problem	NA	NA	29,288	43.91%
You had a hard time getting an appointment	NA	NA	13,671	20.50%
You did not think your health insurance would cover it	NA	NA	31,522	52.82%

Older Adults

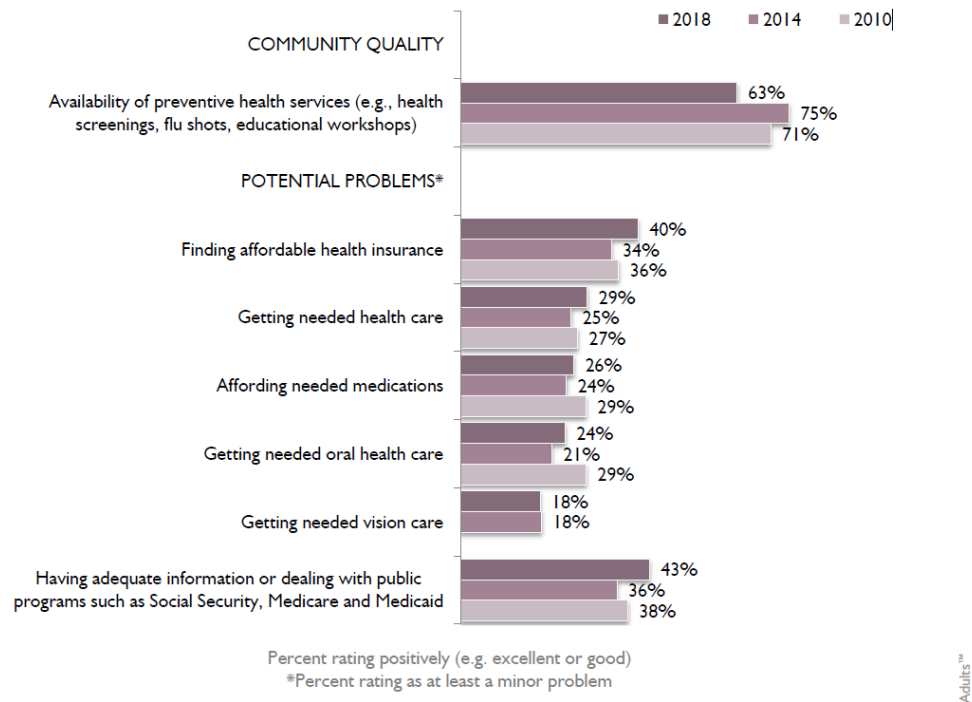
The Health Access Survey performed by the Colorado Trust and the Colorado Health Institute Local indicates that seniors self-report as in better health than the average Coloradans with only 9.4% in fair or poor health within Boulder and Broomfield Counties and 19.6% as the Colorado average.

The Boulder County Age Well Strategic Plan and the Community Assessment Survey for Older Adults revealed that seniors are finding difficulty in accessing care:

Within the Boulder County Age Well plan, three access goals were stated:

- Goal 12: Individuals and the community as a whole acknowledge the importance of all aspects of health and wellness. (Taken from page 12 of the Area Agency of Aging final-area-plan-2015-2019)
- Goal 13: Health and wellness services are affordable, accessible and readily available.
- Goal 14: Wellness includes dying and end-of-life as a natural part of life.

Figure 14: Health Care in Boulder County



Across Colorado, over three-quarters of older residents felt they had good fitness opportunities (including exercise classes and paths or trails, etc.) while 4 in 10 felt they had good access to quality physical health care (see Figure 12). The availability of quality physical health care declined significantly between 2010 and 2018 to below-average levels. Older residents rated their overall physical health as “excellent” or “good” with many participating in healthy activities such as eating fruits and vegetables (37%) and exercising regularly (50%). In addition to rating aspects of physical health, older residents provided insight into their mental health. About one-quarter of older residents felt there was “excellent” or “good” availability of mental health care in Colorado while 86% rated their overall mental health/emotional well-being as “excellent” or “good.”

Regional Subgroup:

Percent of respondents who rated the following as "excellent" or "good":	Age			AAA overall
	60 to 64 years (A)	65 to 74 years (B)	75 or over (C)	(A)
How do you rate your overall physical health?	87% C	86% C	75%	83%
How do you rate your overall mental health/emotional wellbeing?	92%	91%	88%	90%
How do you rate your overall quality of life?	90% C	91% C	83%	88%

Access to Care

Health insurance is a key indicator for determining whether or not residents will access preventive care or seek disease management and acute care. Delays in seeking care can lead to unmet health needs, potentially avoidable hospitalizations and an increase in morbidity and mortality rates overall.

The Affordable Care Act (ACA), which authorized health insurance marketplaces or exchanges, led to some 11 million individuals obtaining a new health policy between October 2013 and June 2015.

The 2019 Colorado Health Access Survey (CHAS) finds that the state’s insurance rate is 93.5%, essentially unchanged from 93.3% set in 2015 and refers to this trend as “the new normal”. The uninsured rate is 6.5%, basically unchanged from 2015’s 6.7%. Recent political discussions make the gains on the number of insured uncertain in the future. In Boulder and Broomfield Counties, the rate of uninsured dips to 5.3%

A Changing Health Coverage Landscape

Health Insurance Coverage, All Ages, 2009-2019

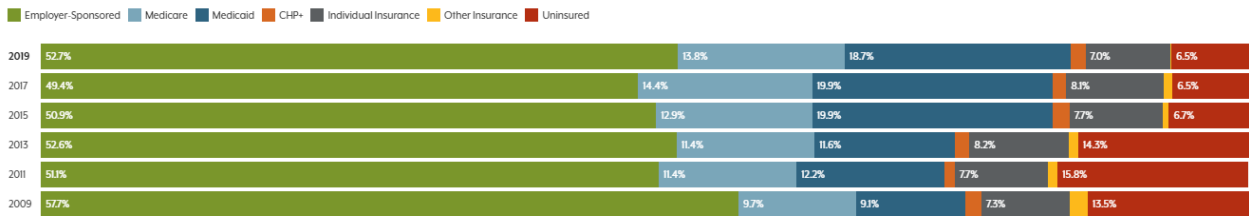
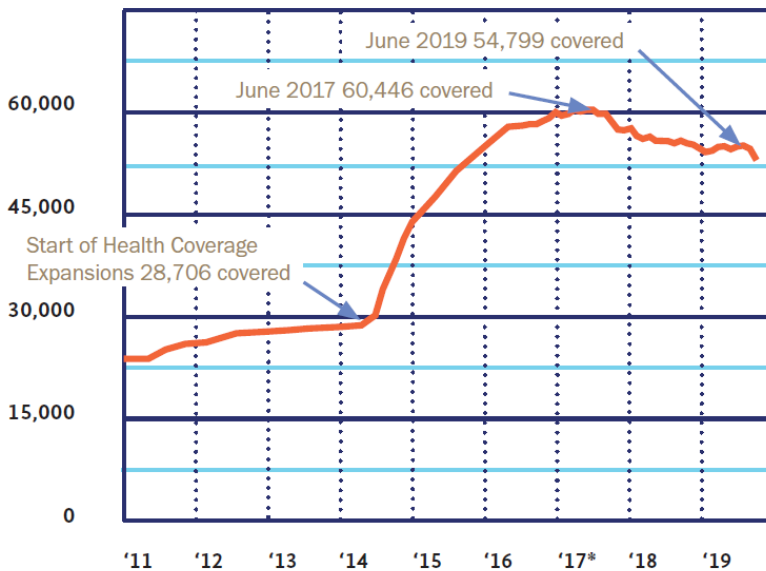


Chart: Colorado Health Institute - Source: 2019 Colorado Health Access Survey

BOULDER COUNTY ENROLLMENT IN MEDICAID AND CHP+



Source: Boulder County Housing and Human Services

Four out of five Coloradans (81.1%) saw a general doctor at least once in the past year — an increase of more than 10 percentage points from 2017.

Nearly three-quarters (73.6%) of Coloradans had a dental visit in the past year — an encouraging change. The rate had been stuck at around two-thirds of Coloradans for the previous decade, despite the fact that many Coloradans gained dental insurance over that period.

Use of Health Care Services

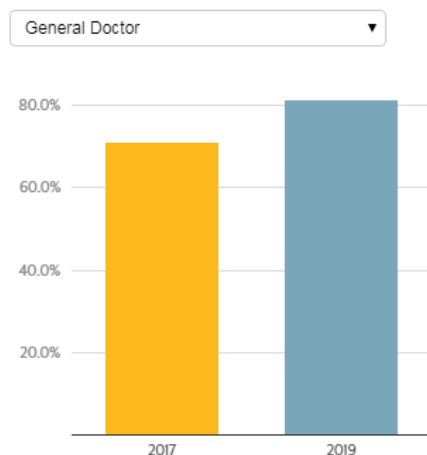


Chart: Colorado Health Institute
Source: 2019 Colorado Health Access Survey

Discrepancies in the rate of insured residents emerge due to income and ethnicity. More than 93% of Anglo residents currently have health insurance compared to 89.6% for Latino residents.

When it comes to the Boulder County's children, over 92% have health insurance. With an estimated childhood poverty rate of 13%, financial barriers to health coverage is an issue and significant effort has been put towards enrolling eligible children into Colorado's Health Plan Plus and Medicaid. Of concern is that while more than 96% of white-non-Hispanic children are insured, the Boulder County Health Department reports that only 82% of their Hispanic and Latino counterparts have insurance coverage.

The cost of health care is an increasing concern for Coloradans. Nearly one in five residents (18.1 %) said they had problems paying medical bills in the past year. That's as high as this number has been since before major provisions of the Affordable Care Act took effect in 2014.

The 2017 Colorado Health Access Survey revealed the following issues that residents age 60 and over considered barriers to obtaining healthcare:

- 15.7% stated that they could not get an appointment as soon as they thought was needed
- 11.4% stated that the physician office was not accepting patients with their type of insurance
- 11.3% stated that the physician office was not accepting any new patients
- 12% listed getting time off work (if employed) as a barrier
- 5.5% listed transportation as barrier to obtaining health care.

Three of four individuals age 60 or older reported having a preventative care visit within the past year and 17.4% visited the emergency room one or more times.

Not Getting an Appointment Ranks as Biggest Barrier to Care

In the past 12 months ...	2009	2011	2013	2015	2017
You couldn't get an appointment as soon as you needed one	16.8%	16.4%	15.0%	18.7%	15.7%
The doctor's office wasn't accepting patients with your type of insurance*	8.0%	8.4%	7.1%	9.7%	11.4%
The doctor's office wasn't accepting new patients	8.0%	9.2%	8.4%	9.2%	11.3%
You lacked transportation to the doctor's office or it was too far away	N/A	N/A	4.4%	4.7%	5.5%
You couldn't take time off work**	N/A	N/A	10.1%	10.6%	12.0%
You couldn't find child care***	N/A	N/A	4.0%	7.9%	10.0%

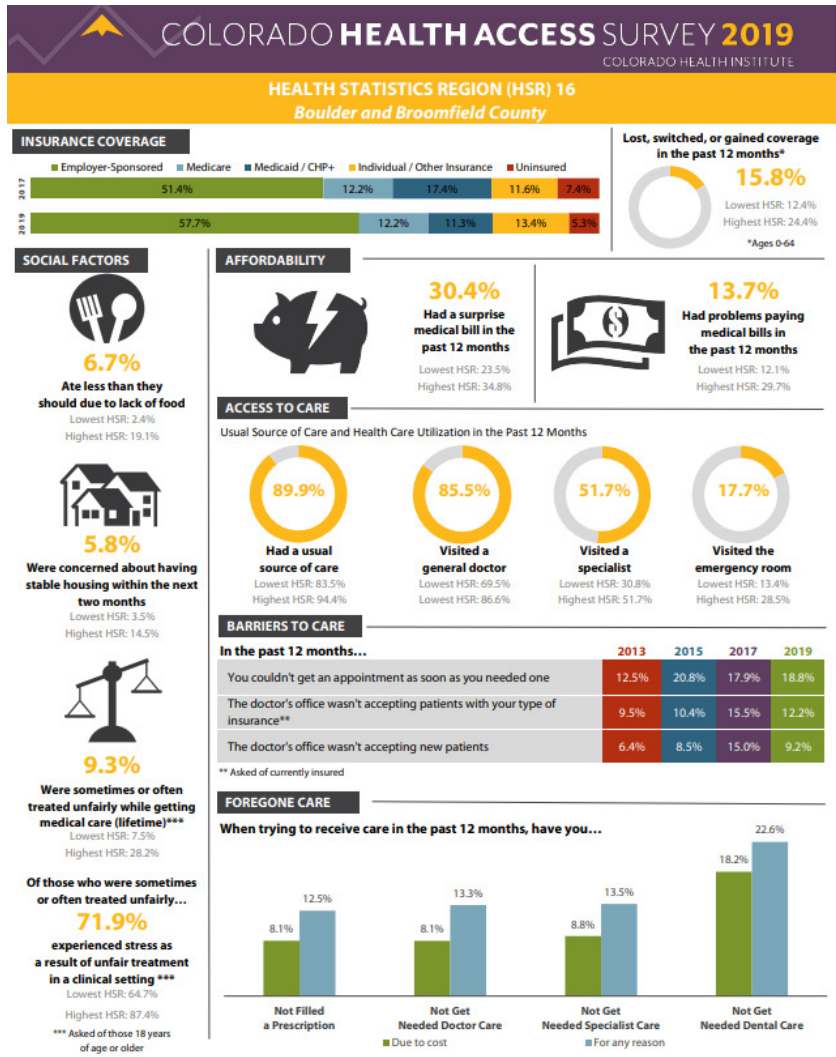
* Asked of currently insured ** Asked of employed adults and parents *** Asked of those with children

Colorado Health Access Survey Data: Health Statistics Region 16
Boulder and Broomfield counties

	HSR 16		Colorado	
	Number	Percentage	Number	Percentage
HEALTH INSURANCE				
Insured	346,503	92.6%	5,040,164	93.5%
Private insurance	235,756	63.0%	3,133,456	58.1%
Employer-sponsored insurance	192,378	51.4%	2,663,744	49.4%
Individual market (includes "other")	43,379	11.6%	469,711	8.7%
Public insurance	110,747	29.6%	1,906,708	35.4%
Medicare	45,644	12.2%	776,305	14.4%
Medicaid/Child Health Plan Plus (CHP+)	65,103	17.4%	1,130,403	21.0%
Uninsured	27,573	7.4%	350,423	6.5%
Lost coverage or switched from one type of insurance to another in the past 12 months (insured)	60,357	17.5%	792,477	15.8%
Place of employment offers health insurance to its employees (employed adults ages 19-64)	120,063	92.0%	1,695,325	85.9%
Respondent/employee was offered health insurance through employer (employed adults ages 19-64)	109,024	89.2%	1,563,731	90.7%
USE OF HEALTH CARE				
Visited a health care professional in the past 12 months	304,826	83.1%	4,240,858	79.3%
Did not visit a general doctor in the past 12 months	88,141	24.2%	1,539,564	29.1%
Visited a general doctor one time in the past 12 months	107,783	29.6%	1,187,282	22.4%
Visited a general doctor multiple times in the past 12 months	168,660	46.3%	2,571,287	48.5%
Had a visit for a check-up, physical examination or other preventive care in the past 12 months	238,188	65.5%	3,291,036	62.4%
Visited a specialist in the past 12 months	155,793	42.8%	1,962,944	36.8%
Has a usual source of care	306,868	82.8%	4,508,662	84.2%
Of those without a usual source of care, reasons for not having a usual source of care (categories sum to 100%)				
You haven't had any problems or needed to see a doctor	26,570	43.7%	369,714	49.8%
You don't plan to see a doctor even when sick	NA	NA	61,434	8.3%
You don't have insurance or were dropped by a provider	NA	NA	44,030	5.9%
You can't afford it	NA	NA	36,305	4.9%
You don't have an established physician	NA	NA	32,022	4.3%
You can't find a doctor that takes your insurance	NA	NA	31,346	4.2%
You are new to the area	NA	NA	23,532	3.2%
Other	18,231	0	144,671	19.5%
Place where you would go if you were sick or needed a medical professional (categories sum to 100%)				
A doctor's office or private clinic	280,066	76.4%	3,964,426	74.7%
A community health center	27,410	7.5%	379,951	7.2%
A hospital emergency room	15,059	4.1%	178,707	3.4%
Some other place/don't go to one place most often	44,208	12.1%	781,370	14.7%
Hospital emergency room utilization				
Did not receive care in a hospital emergency room in the past 12 months	305,704	83.7%	4,171,963	78.2%
Received care in a hospital emergency room one time in the past 12 months	42,763	11.7%	707,190	13.3%
Received care in a hospital emergency room multiple times in the past 12 months	16,874	4.6%	457,771	8.6%
Last visit was for an emergency	30,498	52.1%	723,516	63.7%
Last visit was for a condition that you thought could have been treated by a regular doctor	28,076	47.9%	413,127	36.4%
BARRIERS TO RECEIVING CARE				
In the past 12 months...				
You were unable to get an appointment at the doctor's office or clinic as soon as you thought one was needed	66,015	17.9%	837,470	15.7%
General doctor care	51,290	78.1%	594,433	72.5%
Specialty care	31,993	48.7%	354,986	43.3%
You were told by a doctor's office or clinic that they weren't accepting patients with your type of health insurance	52,996	15.5%	570,212	11.4%
General doctor care	34,587	69.0%	358,711	64.5%
Specialty care	33,070	66.0%	276,368	49.7%
You were told by a doctor's office or clinic that they weren't accepting new patients	55,241	15.0%	605,943	11.3%
General doctor care	38,309	70.0%	459,217	76.7%
Specialty care	23,252	42.5%	223,579	37.4%
You were unable to find transportation to the doctor's office or the doctor's office was too far away	17,843	4.8%	296,844	5.5%
General doctor care	NA	NA	185,591	64.2%
Specialty care	NA	NA	168,922	58.4%
You were unable to make an appointment because you could not take off from work (employed adults 16 and older)	29,032	15.4%	345,778	13.3%
You did not fill a prescription because of a reason other than cost	12,962	3.5%	291,358	5.4%
You did not see a doctor because of a reason other than cost	18,059	4.9%	295,586	5.5%
You did not see a specialist because of a reason other than cost	32,234	8.7%	297,652	5.6%
You did not see a dentist because of a reason other than cost	24,199	6.5%	386,408	7.2%
ORAL HEALTH				
Visited a dentist or dental hygienist in the past 12 months	273,188	74.4%	3,549,819	66.4%
Has dental insurance	259,904	70.6%	3,726,709	70.3%
Excellent/very good/good oral health	326,397	88.8%	4,484,274	83.8%
Fair/poor oral health	41,093	11.2%	864,655	16.2%
MENTAL HEALTH (Ages 5 and older)				
Good mental health (less than 8 days of poor mental health during the past 30 days; ages 5 and older)	312,145	89.5%	4,358,606	88.2%
Poor mental health (8 or more days of poor mental health during the past 30 days; ages 5 and older)	36,823	10.6%	581,751	11.8%
Needed mental health care or counseling services but did not get it at that time during the past 12 months (ages 5 and older)	21,896	6.2%	381,689	7.6%
In the past 12 months, you talked with a general doctor or primary care provider about your own mental health	56,315	16.1%	800,880	16.0%
In the past 12 months, you talked with a mental health provider about your own mental health	50,488	14.3%	734,096	14.6%
GENERAL HEALTH				
Excellent/very good/good health	336,732	90.8%	4,648,603	86.6%
Fair/poor health	33,969	9.2%	717,838	13.4%
Limited in any way in your ability to work because of a physical, mental, or emotional health problem (ages 18 and older)	60,204	20.5%	1,005,546	24.5%
AFFORDABILITY				
If you were eligible for health coverage through a public program at no cost to you, you become enrolled (uninsured)	NA	NA	282,050	84.6%
Has a health savings account	81,328	32.4%	902,647	25.9%
In the past 12 months...				
Did not fill a prescription for medication due to cost	41,751	11.2%	572,036	10.7%
Did not get doctor care that you needed due to cost	49,665	13.4%	543,610	10.1%
Did not get specialist care that you needed due to cost	52,491	14.1%	603,207	11.3%
Did not get dental care that you needed due to cost	83,582	17.2%	841,262	15.8%
Had problems paying or were unable to pay any of your/family's medical bills	43,737	11.8%	749,404	14.0%
VIEWS ON THE HEALTH CARE SYSTEM				
In the past 12 months, you felt that a doctor, other provider, or their staff judged you unfairly or treated you disrespectfully	15,179	5.0%	293,472	7.0%
The current health system is meeting the needs of their family (categories sum to 100%)				
Strongly agrees	123,897	35.5%	1,850,553	38.0%
Somewhat agrees	149,761	42.9%	1,806,627	37.1%
Somewhat disagrees	29,386	8.4%	485,160	10.0%
Strongly disagrees	45,765	13.1%	730,908	15.0%
The current health system is meeting the needs of most Coloradans (categories sum to 100%)				
Strongly agrees	42,811	14.0%	720,710	16.2%
Somewhat agrees	113,415	37.1%	1,435,564	32.2%
Somewhat disagrees	78,182	25.6%	1,028,616	23.1%
Strongly disagrees	71,045	23.3%	1,272,688	28.6%
ADVANCE DIRECTIVES				
Has an advance directive	104,243	35.8%	1,442,294	35.7%
Ever had a serious discussion about your advance directive with a health care provider	31,509	33.5%	560,577	40.9%
Ever had a serious discussion about your advance directive with a family member, friend, or other person you trust	88,778	85.2%	1,279,049	89.0%
SATISFACTION				
Is satisfied with the range of services covered by their insurance plan	300,954	88.7%	4,319,955	87.5%
Is satisfied with their choice of doctors and other providers	294,862	86.7%	4,377,305	88.6%
Is satisfied with the premium that they pay for insurance coverage	226,475	75.9%	2,981,719	71.0%
Is satisfied with the co-pays or co-insurance that they pay for care	243,057	82.3%	3,319,510	77.8%

In Colorado, Medicaid enrollees and people without insurance use specialty care at far lower rates than Coloradans with commercial insurance — illustrating a gap in access to care.

Medicaid patients forgo an estimated 486,000 specialty care visits annually; for uninsured patients, it's 148,000 visits. On average, that's about 87 extra visits annually for each of the state's medical specialists.



Appendix Three: Boulder Community Health Primary Service Area by City and Zip Code

Boulder	80301
Boulder	80302
Boulder	80303
Boulder	80304
Boulder	80305
Boulder	80306
Boulder	80307
Boulder	80308
Boulder	80309
Boulder	80310
Boulder	80314
Boulder	80321
Boulder	80322
Boulder	80323
Boulder	80328
Boulder	80329
Eldorado Springs	80025
Erie	80516
Jamestown	80455
Lafayette	80026
Louisville	80027
Louisville	80028
Nederland	80466
Pinecliffe	80471
Rollinsville	80474
Ward	80481

Appendix Four: Community Health Partners

The vision of Boulder Community Health is: “Partnering to create and care for the healthiest community in the Nation” and some of our partners in providing care within the community include:

Mental Health Partners (<http://www.mhpcolorado.org/Home.aspx>): Provides mental health care, programs and services, 24/7/365 walk in center for immediate mental health crisis.

Clinica Family Health (<https://clinica.org/>): Provides comprehensive primary care including medical service, behavioral health, dental care, and full-service pharmacies to struggling residents of Boulder County.

Boulder County Public Health (<http://www.bouldercounty.org/dept/publichealth/pages/default.aspx>); Works to protect the health and well-being of all people and the environment and provides a broad spectrum of health and social services to residents of Boulder County. The Boulder County Health Compass (<http://www.bouldercountyhealthcompass.org/>) features narrative, images, and a health indicators dashboard for the aggregate of Boulder and Broomfield Counties.

Boulder County Community Services

(<http://www.bouldercounty.org/dept/communityservices/pages/default.aspx>) The Boulder County Community Services Department (CSD) provides services, in partnership with the community, that enhance quality of life, support and protect our county’s diverse community of adults, children, families and elders, and promotes economic independence and self-sufficiency.

Boulder County Housing and Human Services

(<http://www.bouldercounty.org/dept/housinghumanservices/pages/default.aspx>) Boulder County Housing and Human Services is dedicated to a vision of healthy communities that are more self-sufficient, sustainable, and resilient. The department works collaboratively with partners to efficiently and effectively integrate health, housing, and human services, making it easier for our neighbors to access the help they need to get back on their feet.

BCH also wishes to recognize the Boulder Community Health Foundation for its ongoing commitment:

<https://www.bch.org/Foundation/Why-Give/Community-Collaboration.aspx>

Appendix Five: Information Sources

Not all sources of data are published within the same period that the CHNA is performed. Boulder Community Health has made every attempt at analyzing the most current data available in performing this CHNA.

American Community Survey, 3- and 5-year estimates

Boulder County Public Health Department, Health Compass

<http://www.bouldercountyhealthcompass.org>

Healthy Kids Colorado Survey Boulder Valley School District 2017 www.healthykidscolo.org

Boulder County Trends, 2019, The Community Foundation <http://www.commfound.org/about/>

The Boulder County Age Well Strategic Plan and the Community Assessment Survey for Older Adults

<http://www.bouldercounty.org/doc/cs/bouldercountycasoareport2014-final.pdf> &

<https://assets.bouldercounty.org/wp-content/uploads/2017/02/community-of-hope-assessment-2016.pdf>

<http://www.allagewell.com/introduction.html>

Boulder Economic Council <http://www.bouldereconomiccouncil.org/>

Center for Disease Control, Colorado Behavioral Risk Factor Surveillance System (BRFSS) surveys

Center for Disease Control, Youth Risk Behavior Surveillance System

Colorado Health Foundation

Colorado Department of Public Health and Environment, Health Indicators

Colorado State Demography Office

Colorado Health Institute – Colorado Health Access Survey 2019

<https://www.coloradohealthinstitute.org/research/CHAS>

Community Assessment Survey of Older Adults, Colorado State Unit on Aging 2018, National Research Center, Inc.

Colorado Health Institute’s ‘How Healthy are Boulder’s Seniors?’

http://www.bouldercounty.org/doc/cs/how%20healthy%20are%20our%20seniors_aaa_chi_feb_2016_final.pdf

National Cancer Institute State Cancer Profile

United States Census Bureau

United States Census Bureau, County Quick Facts

<http://www.allagewell.com/introduction.html> &

<http://www.bouldercounty.org/doc/cs/bouldercountycasoareport2014-final.pdf>

<http://www.countyhealthrankings.org/app/colorado/2019/rankings/boulder/county/outcomes/overall/snapshot>

https://www.coloradohealthinstitute.org/sites/default/files/file_attachments/2017%20CHAS%20DESIGN%20FINAL%20for%20Web.pdf