



Vail Valley  
Medical Center

2016  
Community Health Needs  
Assessment

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Vail Valley Medical Center



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## **Contributors**

The following are the individuals who comprised the Vail Valley Medical Center (VVMC) Community Health Needs Assessment (CHNA). These individuals were chosen by VVMC leadership for their knowledge and expertise in healthcare and public health.

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Dr. Moore serves as VVMC's epidemiologist and Vice President of Quality while also practicing clinical medicine as a physician assistant in the specialties of general surgery, trauma, and critical care. He holds a PhD in Epidemiology/Public Health and is board certified by the National Commission on Certification of Physician Assistants (NCCPA) and the Board of Infection Control and Epidemiology (CIC). Jason is a member of the American College of Epidemiology (ACE), a fellow with the American Academy of Physician Assistants (AAPA), a member of the Society of Critical Care Medicine (SCCM), and holds NCCPA surgical certification. His research interests span multiple areas of trauma, infectious disease and critical care medicine while continually focusing on healthcare quality improvement initiatives. He served as a subject-matter expert and editor of this project.

### **Ashley Dentler, PT, DPT, CMLDT, CSCS**

Ashley Dentler serves as VVMC's Manager of the inpatient occupational and physical therapists of Howard Head Sports Medicine, a service of VVMC. She graduated from Northeastern University in Boston, Massachusetts with her Doctor of Physical Therapy. She specializes in orthopedics, trauma rehabilitation, and lymphatics. She is currently pursuing her Masters in Healthcare Administration (MHA), is a member of the American College of Healthcare Executives and volunteers with various community organizations.

### **Ann Hoak, BSN, RN**

Ann Hoak is VVMC's Quality Nurse Specialist. She relocated to the Vail Valley from Kansas City, Missouri and worked in Occupational Health prior to joining the Quality team. While improving the state of quality at Vail Valley Medical Center, Ann's primary focus has been on compliance metrics for The Joint Commission and Centers for Medicare & Medicaid Services (CMS). She has also worked closely with VVMC's Infection Preventionist on reporting National Healthcare Safety Network data and state reportable health conditions to the Colorado Department of Public Health.

### **Sarah Drew, RN, BSN**

Sarah Drew serves as Vail Valley Medical Center's Trauma Program Coordinator. Sarah graduated from Loma Linda University School of Nursing with her bachelor's degree (BSN) and has been working in emergency medicine and trauma since. As Trauma Coordinator, Sarah represents Eagle County and VVMC in several community committees, including Eagle County Public Safety Council. In her role as a member of Eagle County Public Safety Council, Sarah has interviewed and surveyed council members as part of this project's stakeholder group.

### **Tim Wise, MBA**

Tim Wise joined the VVMC finance department as a Senior Financial Analyst in 2009 then transitioned to the role of Senior Business Projects Manager in 2012. Mr. Wise has held a variety of financial positions over the past 20 years in the Denver metro area at hospital systems, including Denver HCA Hospitals, Exempla Healthcare and University of Colorado Hospital. He also has experience as a Financial Analyst with Cigna Healthcare. He holds a Master's Degree in Business Administration, and he has been active volunteering in the local community as a PTA officer and coaching youth sports programs and served as a contributor and financial expert on the project.

### **Michael Holton**

Michael Holton is the Director of Marketing for VVMC. Michael grew up in Poteau, Oklahoma, home of the "World's Tallest Hill" (Cavanal - 1,999 ft.). After graduating from the University of Kansas, Michael got married and moved to the mountains - the smartest move of his life. Michael's background includes touring with his rock band, television production for PBS, marketing for Vail Resorts, and consulting for healthcare companies. Michael is also the Vice President of the Vail Valley Young Professionals Association and a council member on the Vail Valley Local Marketing District Advisory Council. He served as a contributor and marketing expert on this project.

## **Executive Summary**

The Vail Valley Medical Center (VVMC) has conducted a Community Health Needs Assessment (CHNA) in accordance with the Patient Protection and Affordable Care Act of 2010. This act requires tax-exempt hospitals to conduct a community health needs assessment and develop a community health implementation plan every three years. This report is the second iteration of its kind conducted by VVMC and demonstrates the continued dedication towards identifying community health needs and the potential for incorporating these needs in the vision and mission of VVMC.

What follows is information extracted from primary and secondary data sources that were used to determine the amount of community benefit currently provided by VVMC to Eagle County, potential gaps in services, and health needs that may warrant additional consideration in the future. In conducting the needs assessment, every attempt was made to direct special attention to determining the chronic disease needs and health issues faced by populations at risk.

A detailed description of the VVMC service area leads this report and is followed by brief summaries of service locations and specializations, the methodology used in the data collection and analysis, the current state of health in Eagle County with both state and national comparisons, the data analysis and prioritization process, and finally, the community health needs of the county as determined by this project. Identified needs include those with a broad scope such as access to and the cost of healthcare, chronic disease states such as heart disease, mental health, and substance abuse, as well as acute conditions such as unintentional injury. Although VVMC currently provides significant community benefits, this report provides examples of community health needs around which Vail Valley Medical Center will continue to build its vision of providing superior health services to the residents and guests of Eagle County.

The CHNA project was only possible through the combined efforts of VVMC professionals, leaders, and numerous community stakeholders.

## **I. About Vail Valley Medical Center**

Vail Valley Medical Center is a Joint Commission-accredited hospital and a designated Level III Trauma Center with 58 licensed beds. The medical staff consists of over 100 board-certified, full-time and affiliated physicians and close to 900 employees serving Eagle County. This county is best known for the world-class resorts of Vail and Beaver Creek Mountains. Situated approximately 125 miles west of Denver in Colorado's Central Rocky Mountain region, VVMC's primary facility and inpatient services are located adjacent to Vail Mountain while ancillary operations can be found stretching roughly 40 miles to the west along the I-70 corridor. The umbrella of programs and services provided by VVMC encompass not only the traditional concept of care for the sick and injured, but also educational programs that enable the healthy to remain well.

### **Mission Statement**

Vail Valley Medical Center will provide superior health services with compassion and exceptional outcomes.

### **Vision**

Vail Valley Medical Center will continue its development as an independent, not-for-profit medical center, providing superior health services aligned to the needs of Eagle County residents and visitors, world-renowned orthopedic services, regional cancer services, and emergency services. VVMC will integrate and align service offerings with our physician partners to maximize:

- Flexibility and responsiveness to patient needs including preventive health services
- Excellence in specialized care supported by comprehensive research and education
- Continuous quality improvement through investment in technology, facilities and staff development

VVMC will provide these services in an environment that enables and supports trust and respect.

## **Vail Valley Medical Center Service Area**

The primary campus for VVMC is located in the town of Vail, Colorado, at 181 W. Meadow Drive. Additional facilities can be found throughout the Vail Valley in the towns of: Avon, Beaver Creek, Edwards, Eagle, and Gypsum.

Eagle County is composed of the following towns:

- Vail
- Minturn
- Red Cliff
- Avon / Eagle-Vail / Beaver Creek
- Edwards
- Wolcott
- McCoy
- Bond
- Burns
- Eagle
- Gypsum
- El Jebel\*
- Basalt\*

- \* Basalt and El Jebel are towns located in the southwestern corner of Eagle County along Colorado Highway 82. Both towns are in a region typically referred to as the Roaring Fork Valley, and this includes the communities of; Aspen and Snowmass Village, Carbondale, and Glenwood Springs. Due to geographic proximity of both towns to Aspen Valley Hospital and Valley View Hospital, these towns were not analyzed in detail for the VVMC CHNA. In addition, a portion of Basalt has been included in the catchment area of the community health needs assessment for Aspen Valley Hospital.

*Please refer to Appendix A for a map of Eagle County.*

## **History of Vail Valley Medical Center and Service Areas**

In conducting the CHNA, the service area is Eagle County, Colorado. Founded in 1883, Eagle County initially drew its economic support from agricultural operations and mining.<sup>1</sup> Today the county measures nearly 1,700 square miles, with over 80% federally owned mountainous terrain held by the U.S. Forest Service and the Bureau of Land Management.<sup>1,2</sup>

By the late 1950s, agricultural operations gave way to the resort industry with the development of Vail Mountain. Vail's original development effort was spearheaded by members of the 10<sup>th</sup> Mountain Division, a specialized military operations corps that had trained in mountain warfare tactics at nearby Camp Hale, situated approximately 25 miles south of what is now the town of Vail.

The origins of VVMC trace back to 1962, with the original medical clinic designed to serve residents and guests of the fledgling Vail Ski Resort that commenced operations in December of the same year. What began as a "bare-bones" facility staffed by healthcare professionals passionate about medicine and the outdoor lifestyle, VVMC has grown exponentially in the intervening 50 years.

In 1960, prior to the opening of Vail Ski Resort and Vail Valley Medical Center, the population of Eagle County was 4,677 people.<sup>3</sup> By 1970 it had grown by over 60% to nearly 7,500 people with the rise in the popularity of skiing in the Colorado Rockies.<sup>3</sup> Healthcare for both residents and guests was an integral part of the growth and success of the region. In addition to residents and guests, VVMC serves patients from a surrounding 16,556-square-mile region.<sup>2</sup>

## **Determination of the Community Served**

The service area of VVMC is largely determined by local geography. The primary campus sits to the west of the summit of Vail Pass (elevation 10,662 feet) and within the town of Vail on the northern perimeter of the Vail ski resort. Mountainous terrain exists throughout Eagle County with the base elevation of the Town of Vail at 8,150 feet. The east-to-west distance of Eagle County, measured from its boundaries at the Vail Pass summit to the entrance of Glenwood Canyon along Interstate 70, is nearly 60 miles.

To this day, travel within Eagle County remains challenging in the winter months, as snow and ice related events can significantly slow or restrict driving. It is not uncommon for portions of I-70 to be closed following moderate to severe weather with associated motor vehicle accidents. There are limited alternate routes along the course of I-70 in the event of its closure. For these reasons, VVMC serves primarily Eagle County residents and guests along with providing acute care services to travelers passing through the county.

## Services Provided by Vail Valley Medical Center

Specialists employed by VVMC provide specialty care in the following disciplines: internal medicine, cardiology, obstetrics & gynecology, general surgery, radiology, pediatrics, trauma, critical care, anesthesia services, urology, oncology, pain management, orthopedic surgery, plastic surgery, and sports medicine to residents and guests of Eagle County. Corresponding with the growth of the Vail Valley, VVMC continues to expand its services and community reach through multiple service lines including:

**Behavioral Health:** VVMC employs full-time Social Workers and contracts with Mind Springs Health for after hours and on-call coverage of acute behavioral health needs.

**Cardiovascular:** The outpatient Cardiology Institute is staffed with interventional Cardiologists and a Nurse Practitioner. Services include:

- The Cardiac Catheterization Lab which opened in 2015
- Anticoagulation Clinic
- Cardiac rehabilitation services (Phases I-III) including pharmacy and nutrition consultation.
- A wide range of diagnostic and interventional coronary procedures as well as cardiac stress testing.

**Emergency Services:** Vail has a 24-hour level III Trauma Center staffed by board certified emergency and trauma physicians and critical care registered nurses.

- Beaver Creek Emergency Department is staffed during the winter months by board-certified physicians and critical care nurses with on-site acute care services.
- Avon and Gypsum Urgent Care centers are staffed by board-certified physicians and critical care nurses with on-site x-ray, and lab services.

**Imaging:** VVMC offers diagnostic x-ray, fluoroscopy, bone-scanning, PET/CT Scanning, Nuclear Medicine services, MRI, Ultrasound, and Echocardiography.

**Inpatient Care:** VVMC offers 24/7 Adult and Pediatric Hospitalist coverage with 58 licensed beds, including ICU care.

- Adult hospitalists serve all community medical needs.
- VVMC provides a wide range of inpatient services including:
  - Anesthesiology with pain service coverage
  - Critical care
  - Dietitians
  - General surgery/trauma care

- Hospice
- Infection control
- OB/GYN services
- Orthopedics
- Physical and occupational therapy
- Support staff includes Social Work, Case Managers, and Chaplains.

**Laboratory:** VVMC has a College of American Pathologists (CAP) accredited full service laboratory, offering 24/7 services.

- The lab offers chemistry panels, hematological, coagulation, and microbiology tests as well as blood banking and transfusions.
- VVMC's main lab also offers advanced specialized testing to include molecular infectious disease testing, fertility testing, and specialized coagulation testing.
- VVMC contracts with Roaring Fork Pathology in Glenwood Springs for services to include pathology, histology, and cytology.

**Occupational Health:** Occupational health (Workers' Compensation Injuries and Corporate Services) are coordinated through the hospital's Occupational Health Department with locations in Vail and Avon.

**Oncology:** The Shaw Regional Cancer Center offers full-service medical and radiation oncology services to residents and serves patients from surrounding mountainous and rural areas.

- Adjacent to the Shaw Regional Cancer Center is Jack's Place, a cancer caring house where patients and their caregivers can stay during the course of their treatments.
- The Shaw Regional Cancer Center offers:
  - Breast imaging
  - Genetic cancer screening
  - Infusion therapy
  - Medical oncology with chemotherapy,
  - PET/CT scanning
  - Radiation oncology, with external beam therapy and brachytherapy
  - Oncologic and reconstructive surgery
  - A partnership with the University of Colorado offers survivorship and clinical trial programs

**Orthopedics:** Orthopedic surgeons from The Steadman Clinic and Vail Summit Orthopedics specialize in knee, hip, shoulder, hand, wrist, elbow, spine/neck, foot, and ankle procedures.

**Outpatient Care:** VVMC provides outpatient services both on and off campus including:

- Aesthetic and Reconstructive Surgery
- Cardiology
- Dietician Services
- Emergency and Urgent Care
- Endocrinology
- General Surgery
- Internal Medicine
- Occupational Health
- Pharmacy
- Physical and Occupational Therapy
- Wound and Ostomy clinic

**Pharmacy:** VVMC has pharmacies on the Vail and Edwards campuses.

- Inpatient pharmacy services are offered 24/7 including an antibiotic stewardship committee, daily patient rounding, anticoagulation monitoring and patient education, a medication reconciliation technician in the Emergency Department to assist with medication history needs.
- Outpatient pharmacy services include a Medication Synchronization program, free consultations, home delivery, on-site specialty drug compounding, and vaccinations.

**Pediatrics:** VVMC employs Pediatric Hospitalists to provide care for pediatric patients. Services include:

- Emergency Department and hospital consultations
- Pediatric orthopedic trauma is served through The Steadman Clinic and Vail Summit Orthopedics
- Pediatric trauma and general surgery needs are served through Mountain Surgical Associates
- Additional, specialized pediatric care is provided through tertiary care centers in the Denver area.

**Physical and Occupational Therapy:** Howard Head Sports Medicine treats a wide range of physical and occupational therapy acute sports injuries, degenerative joint disease and chronic pain conditions.

- Howard Head Sports Medicine also specializes in:
  - Active Release Technique
  - Aquatic Therapy
  - Dry Needling
  - Hand Therapy
  - Inpatient Therapy Services

- Lymphedema Therapy
- Manual Therapy
- Occupational Therapy
- Oncology Therapy
- Pilates
- Postoperative Therapy
- SafeFit®
- Sports Rehabilitation Therapy
- Total Joint Therapy
- Vestibular Therapy
- Women's Health
- Workers' Compensation Injuries

**Post-Acute Care:** VVMC does not provide home care, hospice, skilled nursing facility, or swing beds.

- VVMC currently partners with Home Care and Hospice of the Valley for discharge home care needs.
- A Community Paramedic Program is offered through Eagle County Paramedics.

**Surgery:** VVMC provides a variety of surgeries for elective and emergency procedures as well as a pre-surgical planning care for all elective surgical patients.

- General surgery services include abdominal, thoracic and endocrine procedures.
- Laparoscopic surgery services include hernia repair, gall bladder removal, appendectomy, colon and small bowel procedures as well as the management of reflux disease.
- Urology surgical services include cystoscopy, ureteroscopy and cancer surgery of the prostate and bladder.
- Cancer surgery services include breast, colon and rectal, endocrine, lung and melanoma. Early detection and treatment of cancer services are provided with colonoscopy and endoscopy.
- Mountain Surgical Associates provides trauma and critical care for VVMC.
- The Steadman Clinic and Vail Summit Orthopedics provide orthopedic and joint replacement surgeries for VVMC.
- Colorado Mountain Medical provides obstetric/gynecological surgical procedures.

**Trauma:** VVMC is designated as a Level III trauma center with board certified trauma surgeons from Mountain Surgical Associates. The Trauma Services

Department includes a program manager, a registrar/prevention coordinator and an injury prevention specialist.

- In 2015 VVMC's Trauma Services Injury Prevention program provided education to over 12,000 people and provided 1,142 helmets via ThinkFirst presentations, car seat education and community events.
- Members of the trauma department are active in community outreach programs and clinical research.

**Traveler's Clinic:** VVMC provides a full service travel clinic for those traveling abroad. Services include:

- Vaccine recommendations and administration
- Consultation on diseases that can be contracted by food and water, such as traveler's diarrhea, typhoid, giardia, etc.
- Insect precautions and information on preparing for diseases they may carry (for instance; Zika Virus, malaria, dengue fever, yellow fever and others)
- Travel preparations for special medical conditions, such as pregnancy, diabetes, heart disease and chronic conditions
- Information on general safety concerns, such as traveling with children, jet lag or traveling to high altitudes
- Physical exams and post-travel consultations to determine if any symptoms warrant additional medical attention

**Women's and Children's Center:** VVMC's Women's and Children's Center provides 24/7 perinatal care services to promote a family-centered continuity of care. These services include antepartum, labor and delivery care and perioperative care for cesarean births. The physician team includes anesthesiologists, pediatric hospitalists, neonatology consultations, and obstetricians.

- VVMC provides childbirth education classes to the Vail Valley community including prenatal, breastfeeding, baby care, and sibling classes as well as a new parent support group.
- VVMC has International Board Certified Lactation Consultants who provide lactation support and education for inpatients as well as outpatients.
- VVMC's injury prevention specialist provides car seat education to our patients and their families.
- As a Level II Nursery, VVMC provides care for stable or moderately ill newborns born at or beyond 32 weeks gestation and weigh 1500g or more.

## **Vail Valley Medical Center (and affiliate) Service Locations:**

### **Vail**

- Anesthesiology
- Cardiac Care (Cardiac catheterization laboratory)
- Childbirth
- Ear, Nose & Throat (Colorado Mountain Medical)\*
- Emergent Care
- Family Medicine (Colorado Mountain Medical)\*
- Gastroenterology
- Hospitalist Services
- Imaging
- Internal Medicine (Colorado Mountain Medical)\*
- Laboratory
- OB/GYN (Colorado Mountain Medical)\*
- Occupational Health
- Orthopedics & Sports Medicine
  - (The Steadman Clinic, Vail Summit Orthopedics)\*
- Pediatric Hospitalist Service
- Pharmacy
- Physical Therapy and Occupational Therapy
- Respiratory Care
- Sleep Studies
- Social Services
- SBIRT (Screening, Brief Intervention, and Referral for Treatment)
- General Surgery and Trauma Care
- Wound Care

### **Edwards**

- Aesthetic & Reconstructive Surgery
- Breast Imaging
- Cancer Care
- Mountain Family Health Center\*
- Ear, Nose & Throat (Colorado Mountain Medical)\*
- Family Medicine (Colorado Mountain Medical)\*
- Gastroenterology (Colorado Mountain Medical)\*
- Internal Medicine (Colorado Mountain Medical)\*
- OB/GYN (Colorado Mountain Medical)\*
- Orthopedics & Sports Medicine (The Steadman Clinic, Vail Summit Orthopedics)\*
- Pediatrics (Colorado Mountain Medical)\*

- Pharmacy
- Physical Therapy and Occupational Therapy
- SBIRT (Screening, Brief Intervention, and Referral for Treatment)
- Surgery
- Urology (Colorado Mountain Medical and Rocky Mountain Urology)\*

**Avon**

- Urgent Care
- Physical Therapy
- Occupational Health
- Traveler's Clinic

**Beaver Creek**

- Urgent & Emergency Care
- Physical Therapy

**Eagle**

- Cardiology
- Imaging
- Internal Medicine
- Physical Therapy and Occupational Therapy
- Surgical Consultation
- Wound Care

**Gypsum**

- Urgent Care
- Physical Therapy

\*denotes services not owned by VVMC

*Please refer to Appendix B for a map of VVMC service locations.*

**Vail Valley Medical Center Community Outreach Programs**

VVMC also provides community outreach programs, to advance and enhance the overall health and wellbeing for local residents. These include:

**Arts in Healing:** Arts in Healing program provides regular musical performances, visual art exhibits, workshops and performances to enhance the overall health care environment for our patients, visitors and staff. Music and art can reduce stress and anxiety and can aid in emotional and mental healing.

**Med Sync:** This cutting edge program, implemented by Vail Valley Medical Center pharmacists, attempts to increase medication compliance by allowing for scheduled monthly refills for maintenance medications. Medication pickup is available in Edwards and at the Vail campus.

**Car Seat Checks:** VVMC's nationally certified child passenger safety technician and instructor is on staff and provides education on how to correctly install a child's car seat into any vehicle.

**Cardiac Rehabilitation and Anticoagulation Clinic:** VVMC offers cardiac rehabilitation for patients who have suffered, are at risk for a cardiac event, or in need of prevention of further disease. Additional services include monitoring for patients taking anticoagulants and patient education.

**Community Cardiac Health Education:** VVMC collaborates with Starting Hearts, a local nonprofit organization, to provide cardiac education and awareness of automated external defibrillator (AED) placements in Eagle County. It is also developing an integrative medicine program for cardiac patients to help them avoid developing more advanced heart disease through behavioral changes in nutrition, exercise and stress management.

**Friends of VVMC Lecture Series:** This quarterly lecture series features topics of current community interest such as Cardiology, Vision, Nutrition, Orthopedics, Hormone Replacement Therapy, Patient Safety, and various other health issues.

**Health Fairs:** Vail Valley Medical Center hosts and participates in health fairs including partnering annually with the 9Health Fair, a 501(c) (3) nonprofit organization. These fairs provide convenient healthcare screenings for county residents in an effort to empower the community to explore and improve their health and wellness.

**InteGreat!:** VVMC has partnered with the Eagle River Youth Coalition to provide summer lunches to children who receive subsidized lunches during the school year. In 2015, this program served 7,700 meals to children in three Eagle County schools and will continue to expand locations as well as transportation to children and their families to ensure healthy lifestyles and nutrition.

**SafeFit®:** This is a cutting edge wellness based program designed and administered by Howard Head Sports Medicine physical therapists. SafeFit® is an "opt-in" wellness program, which saves employers costs by directing

employees to a SafeFit® clinic. SafeFit® physical therapists provide screenings, guidance, education and empowerment regarding musculoskeletal conditions, rather than seeing a medical provider.

**Survivorship and Support Programs for Cancer Patients:** Through its Sprit of Survival program and the Shaw Outreach Team, Shaw Regional Cancer Center works with cancer patients, family members, and caregivers to provide assistance in the area of counseling, nutrition, and fitness programs. Shaw Outreach Team also supports Jack's Place Caring Lodge, on-site lodging accommodations patient and families during treatment.

**ThinkFirst:** This is a National Injury Prevention educational program that focuses on behavior modification with the overall goal of reducing traumatic injuries. Through the ThinkFirst VVMC chapter, a neurocognitive baseline ImPACT test is performed at no charge to members of sports teams or clubs prior to the start of each sports season.

**Women's Health Screening and Diagnostic Services:** These grant-funded programs provide breast and cervical screening and diagnostic services to eligible low-income women in an effort to reduce morbidity and mortality associated with breast and cervical cancer.

**Youth Sports Initiative:** This program has brought together local healthcare providers to create and implement a concussion management program for youth participating in organized-sports-activities in Eagle County. VVMC also partners with The Steadman Clinic to provide pre-participation physicals to high school student athletes at no cost.

**Additional Community Outreach:** VVMC participates in local and regional community events through team sponsorships and providing information to community members regarding local services provided at VVMC or one of its affiliate locations.

## **II. The Community Health Needs Assessment**

### **Introduction**

The CHNA provides an analysis of the current state of health in Eagle County. This information is compared to both local survey findings regarding perceived health needs among residents, as well as state and national benchmarks to help identify community health needs. This analysis assists in determining areas of community health importance and potential areas for either improvement to current practice or novel endeavors for the organization in addressing community health needs.

### **Methodology**

#### ***Primary Data Collection***

In conducting the CHNA for Eagle County, VVMC gathered data from a variety of sources. Primary data collection involved data from surveys conducted in Eagle County targeted to stakeholders representing the broad interests of the communities served by Vail Valley Medical Center.

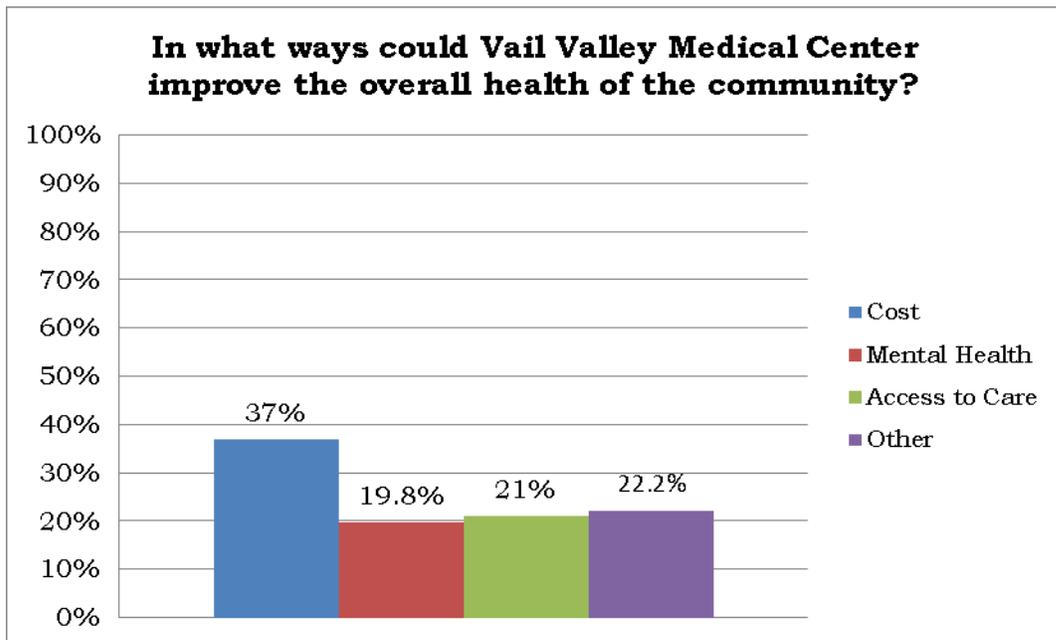
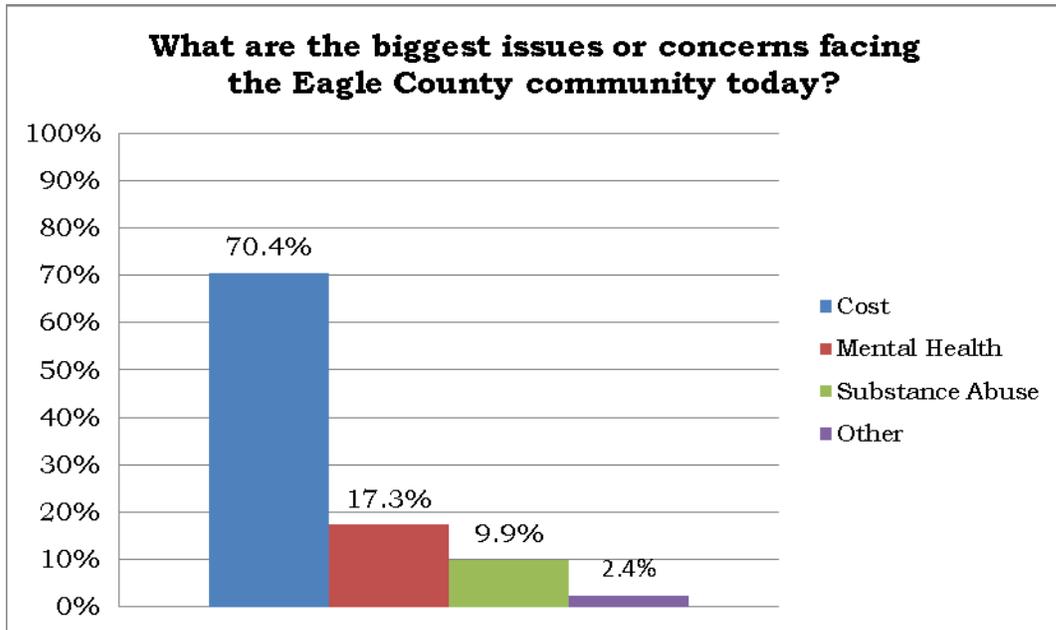
#### *VVMC Community Stakeholder Questionnaire*

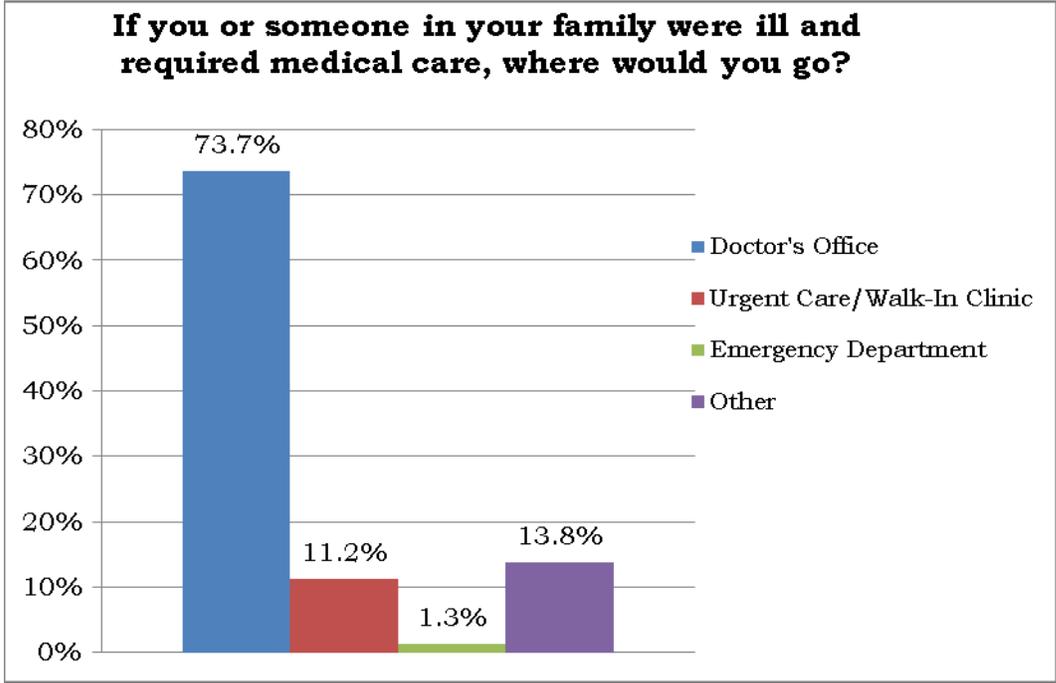
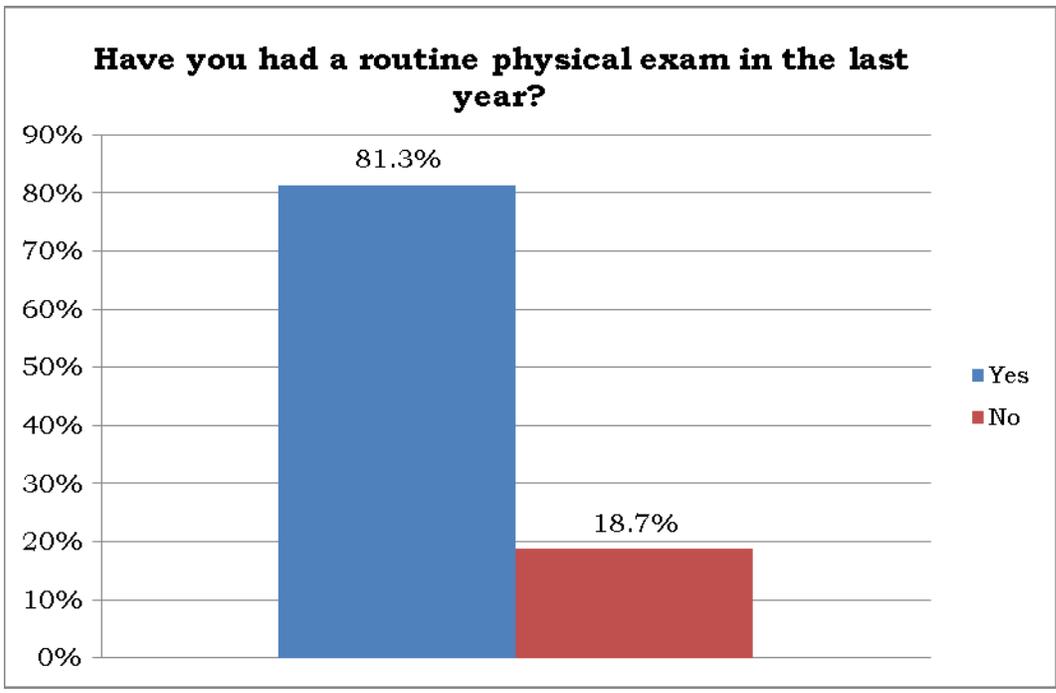
The VVMC CHNA team carried out this survey in April 2016. In total, the survey was distributed to 236 key stakeholders, with a response rate of 34.3%. Individuals were chosen to participate who were seen to represent the broad interests of the Eagle County community. Respondents to the survey included representation from the following agencies or organizations:

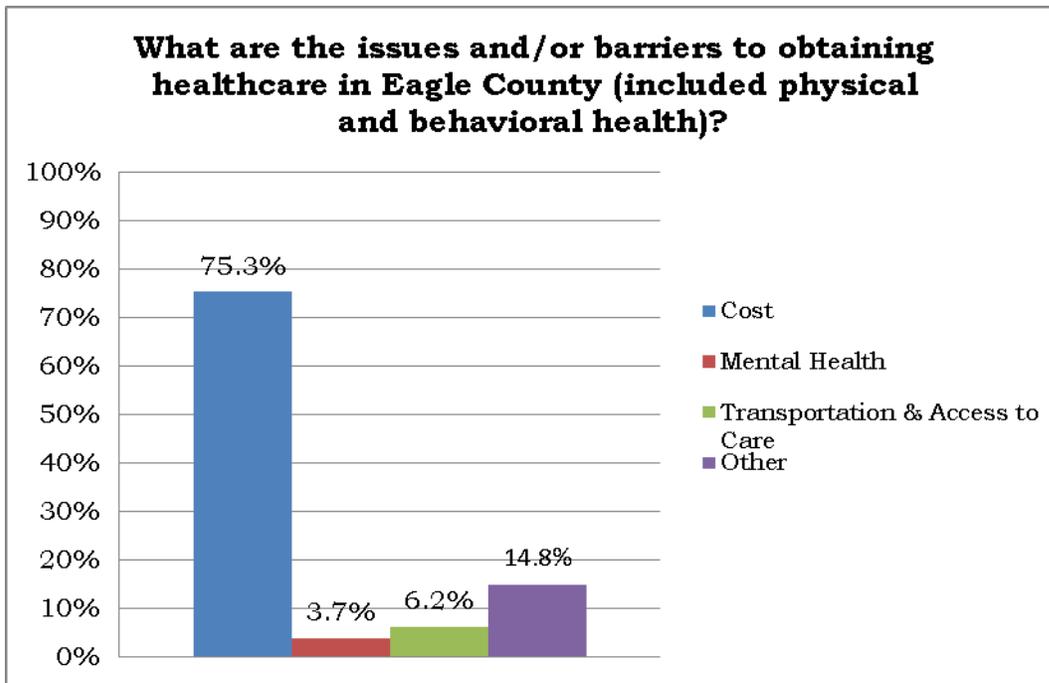
- Key staff members from the following Eagle County organizations: Fire Departments, Emergency Medical Services and Police Departments
- County Coroners
- Religious leaders and Club Managers
- Town Managers and Eagle County Public Information Officers
- Local Charitable Organizations
- Town Council and key staff members (county wide)
- Vail Valley Partnership key staff members
- Eagle County Commissioners
- Eagle County School District Board members and school principals
- Vail Daily Newspaper key staff members
- Vail Recreation District key staff members
- Prominent Business leaders

## Community Questionnaire

Highlight questions from the *Community Stakeholders Questionnaire* are presented below:







\*Findings from the community survey represent only the opinions expressed by those in our sample which may or may not represent the opinions of those in the total population of the county.

### **Consultation with Eagle County Public Health**

Eagle County Public Health agency, in cooperation with the Eagle County Department of Environmental Health and community organizations and stakeholders, conducted a Community Health Improvement Plan for 2017. This document served as an invaluable resource for both secondary data collection and consultation in the development of this edition of the community health needs assessment.

### ***Secondary Data Collection***

VVMC conducted secondary data collection by compiling statistics from several different local, state, and national sources. U.S. Census Bureau data was used to demonstrate general population statistics comparing Eagle County to the State of Colorado. Colorado Department of Public Health and Environment (CDPHE) data was used to present Eagle County population demographics across a broad range of health indicators. The Healthy Kids Colorado Survey provided health behavior statistics in the adolescent population. Eagle County statistics were compared with the State of Colorado to demonstrate a frame of reference for these indicators. Lastly, the *Healthy People 2020* initiative from the U.S. Department of Health and Human Services

provides research-based, epidemiological data for benchmarking comparisons where applicable.

### ***Prioritization***

There are several techniques used by public health experts to prioritize healthcare concerns within a community. The expressed goal of prioritization is to identify, categorize, quantify, and rank health issues within a defined population. According to the Centers for Disease Control and Prevention's "Assessment Protocol for Excellence in Public Health" (APEXPH), prioritizing health issues "assists an organization in identifying the issues on which it should focus its limited resources".<sup>5</sup>

After prioritizing the top health problems from community health assessment data and input from our community stakeholders, VVMC utilized the *Hanlon Method for Prioritizing Health Problems* to establish the focus areas the organization may consider within the next three years. This method was chosen to allow for objective comparisons of health concerns and determine the feasibility of action plans. The *Hanlon Method* results in quantitative scores applicable to the health problems being analyzed allowing for stratification and ranking with the ability to prioritize issues for future assessments.<sup>6</sup>

### ***Calculation of Priority Scores***

Calculations were performed by quantifying the size, seriousness and effectiveness of current, validated interventions. The *size* of the health concern was defined in terms of the percentage of the population affected, including changes from past data. The *seriousness* of the issue was defined by the urgency (changes in incidence rates & current access to needed services), severity (disability; consistent with World Health Organization Disability Assessment Schedule), and potential economic loss to the individual. Lastly, the potential *effectiveness of intervention development and implementation* was determined after reviewing the current medical literature and highlighting successful interventions in relation to realistic expectations of success among the target population of Eagle County.

The *PEARL* (Propriety, Economic Feasibility, Acceptability, Resources, and Legality) mnemonic was applied to the prioritized health issues to determine the feasibility of addressing the health needs.<sup>6</sup> This final feasibility consideration addressed the potential for realistic implementation of action plans according to the identified health needs. Specific considerations addressed include: consistency with the mission statement of the organization, the economic feasibility of addressing the health concerns, community

acceptance, the availability of sustainable resources to affect change, and legal considerations.

### ***Study Limitations***

In conducting the CHNA for Eagle County, VVMC recognizes there may be several limitations in data collection as well as information gaps impacting the organization's ability to accurately assess the needs of the community. In gathering information from community stakeholders, the VVMC CHNA team discovered the lack of a comprehensive, county/community-wide survey tool making broad-scale data collection challenging.

Additionally, when analyzing data from various secondary sources, there are data regarding the Eagle County population that is incomplete, incompatible, or inconsistent. There may also be incomplete representation of targeted populations, including the uninsured, the poor, and minority groups due to the limited availability of relevant data. In analyzing community healthcare needs, research was lacking regarding the effectiveness of certain interventions, as well as outcome measures. Finally, to date, there is not a validated, universally accepted community health prioritization methodology.

## **III. Eagle County Community Profile**

The following data demonstrates the current state of health in Eagle County utilizing both state and national comparisons where applicable. In addition, every attempt has been made to present the community health profiles of populations at risk.

### **Population**

According to the U.S. Census Bureau, the population of Eagle County increased by over 25% between the years of 2000 to 2010 and subsequently increased by nearly 35% from 2010 to 2015.<sup>2</sup> Recent data shows a current population of over 53,000 people. The State of Colorado experienced more than twice the rate of growth as Eagle County over the same time period. An important consideration when interpreting Eagle County census data is the fact that during peak visitor seasons, population figures rise dramatically with the influx of visitors and guests visiting the community only to regress with the seasonality.

Total Population Statistics, 2015

Region	2010	2015	% change
Eagle County	52,197	53,605	+2.7%
Colorado	5,029,324	5,456,574	+8.5%

**Source:** U.S. Census Bureau. *State and County Quickfacts*. 2015.

**Population by Age**

Comparatively speaking, Eagle County has a slightly younger population than the State of Colorado. The percentage of individuals under the age of 65 years is roughly consistent with the State of Colorado, while Eagle County has a significantly smaller percentage of individuals aged over 65 years when compared to the State. Of note, the percentage of the population over 65 years of age has increased in both the county and at the state level since 2011.

Percent of Population by Age, 2014

Age	Eagle County	Colorado
<5 years old	6.1%	6.3%
<18 years old	23.2%	23.3%
≥ 65 years old	8.1%	12.7%

**Source:** Colorado Department of Public Health and Environment. 2015. United States Census Bureau; QuickFacts.

**Population by Gender**

In Eagle County, there is a slightly higher male to female ratio when compared with the State of Colorado. This ratio has remained essentially stable since 2011.

Percent of Population by Gender, 2014

	Eagle County	Colorado
Male	53.0%	50.2%
Female	47.0%	49.8%

**Source:** U.S. Census Bureau *State and County QuickFacts*. 2015.

### **Population by Race and Ethnicity**

The population of Eagle County has a higher percentage of Hispanics and Latinos compared to the State of Colorado. Also, there are lower percentages of White Non-Hispanics, Blacks, Asians, and American Indian and Alaska Natives compared to the State of Colorado. Much of the change in the cultural mix of Eagle County residents occurred over the past 20 years as result of a rapid expansion of resort properties and amenities. Workers flooded to the area to fill the many service sector jobs, including construction, housekeeping, maintenance, recreational operations, retail, restaurant and other resort operations.

Population by Race and Ethnicity, 2014

	Eagle County	Colorado
White Non-Hispanic	67.1%	69.0%
Hispanic or Latino	30.0%	21.2%
Black or African American	1.0%	4.5%
Asian	1.2%	3.1%
American Indian and Alaska Native	1.4%	1.6%

**Source:** U.S. Census Bureau State and County QuickFacts. 2015.

### **Population by Education**

The VVMC service area demonstrates a roughly equal percentage of people without a high school diploma or equivalent along with an increased percentage of individuals who have completed a Bachelor’s degree or higher level of education when compared to the State of Colorado. Recent data demonstrates a slight increase (+1.8%) in obtained education levels when comparing high school graduate or higher with the CHNA performed in 2013.

Educational Attainment, 2010-2014

Total Population, 25 years and older	Eagle County	Colorado
High School Graduate or Higher	89.9%	90.4%
Bachelor’s Degree or Higher	47.3%	37.5%

**Source:** U.S. Census Bureau State and County QuickFacts. 2015.

### **Population by Health**

The percentage of the total population under the age of 65 years in Eagle County who live with a disability is half that of the State of Colorado. Of note, the percentages of the local population who live without health insurance is nearly double that of the state at-large.

Total Population, Under Age 65 years

	Eagle County	Colorado
With a Disability	3.6%	7.2%
Persons Without Health Insurance	22.4%	11.6%

**Source:** U.S. Census Bureau State and County QuickFacts.2015.

### **Population by Income**

According to the U.S. Census Bureau, median household income takes into account the earnings of all individuals 15 years and older within a household.<sup>2</sup> In Eagle County, the median household income is greater than the State of Colorado and has increased 3.8% (compared to a 2.9% increase at the state level) since the 2013 census.

Median Household Income, 2010-2014

	Eagle County	Colorado
Household Earnings	\$73,774	\$59,448

**Source:** U.S. Census Bureau State and County QuickFacts.2015.

### **Population by Unemployment Rate**

The unemployment rate is defined as the percentage of people in the labor force that are unemployed.<sup>2</sup> In VVMC's service area, the unemployment rate has trended downward from the previous CHNA (5.6%) and remains slightly lower than the State of Colorado.

Unemployment Rates, 2015

	Eagle County	Colorado
Unemployment	3.6%	4.2%

**Source** U.S. Bureau of Labor Statistics. 2015.

### **Population by Poverty Level**

An individual is considered to be in poverty when his or her income, or their family's income, is less than the family's threshold.<sup>2</sup> The U.S Census Bureau official definition of poverty uses income "before taxes and does not include capital gains or noncash benefits (such as public housing, Medicaid, and food stamps)."<sup>2</sup> Compared to the State of Colorado and the United States at-large (14.8%), Eagle County has a significantly smaller percentage of individuals living below the poverty level.

Population below the Poverty Level, All Ages

	Eagle County	Colorado
Poverty	7.8%	12.0%

**Source:** U.S. Census Bureau State and County QuickFacts. 2015.

### **Birth Indicators**

According to the Colorado Department of Public Health and Environment, the definition of *fertility rate* is the total number of live births per 1000 women ages 15 to 44.<sup>8</sup> In Eagle County, the fertility rate is slightly greater than that of the State of Colorado. The *teen fertility rate* is defined as the total number of live births to women ages 15 to 17 years per 1000 women.<sup>8</sup> Compared to the State of Colorado, Eagle County has a lower rate of births to teenage mothers.

The definition of *low birth weight* is an infant weight of less than 2,500 grams (5lb, 9oz) at birth.<sup>8</sup> The percentage of low birth weight children is calculated from the total number of live births. Eagle County has a near equal percentage of low birth weight infants when compared to the State of Colorado and demonstrates improvement from 2011.

*Adequacy of Prenatal Care* is determined using the *Kotelchuck Adequacy of Prenatal Care Utilization Index* to determine if the initiation of prenatal care and services received was appropriate. In Eagle County, although improved from 2011, a lower percentage of women receive adequate prenatal care compared to the State of Colorado.

The *Infant Mortality Rate* is the total number of infant deaths that occur in the first year of life per 1,000 live births.<sup>8</sup> In VVMC's service area, the infant mortality rate is relatively similar to the State of Colorado. The goal of the U.S. Department of Health and Human Services *Healthy People 2020* campaign is a rate of 6.0 per 1000 live births for both the VVMC service area and the State of Colorado.

## Eagle County Birth Characteristics, 2014

	Eagle County	Colorado
Total Number of Births	665	65,816
Smoking During Pregnancy	1.7%	6.7%
Preterm Births (<37 Weeks)	6.9%	8.4%
Percentage Low Birth Weight (<2500 grams)	8.0%	8.8%
Percentage of women who received prenatal care after 1 <sup>st</sup> trimester/No Care	24.4%	19.7%
Live Births to Unmarried Women	17.8%	22.7%
Education of Mother <High School Diploma/GED	15.6%	12.2%
General Fertility Rate <sup>a</sup>	64.2	61.2
Rate of Major Congenital Anomalies (per 10,000 live births) 2011-2013	887.2	646.1
Rate of Infant Deaths (under 1 year of age) per 1,000 live births 2011-2013	5.6	5.1
Rate of live births born to women age 15-17 per 1,000 women age 15-17 2011-2013	9.3	12.4
Percentage of pregnancies resulting in live births that were unintended 2009-2011	31.9	37.1

**Source:** *Eagle County Births and Deaths 2014; Colorado Births and Deaths 2014; Colorado Department of Public Health and Environment-Colorado Health Indicators. a. per 1000 females ages 15-44.*

## Leading Causes of Mortality and Morbidity

The three age-adjusted leading causes of death in the VVMC service area are cancer, heart disease, and unintentional injury. The age-adjusted incidence rate for death due to cancer, heart disease, unintentional injury, chronic respiratory disease, suicide, and liver disease, in the VVMC service area are below those of the State of Colorado. Overall, the death rate in Eagle County is about half that of the State of Colorado. Motor vehicle accidents and legal intervention are higher than state rates. Compared to 2011, the age-adjusted rate for causes of death due to cancer, heart disease, and suicide, have all decreased. Of note, current data around cerebrovascular disease as a cause of death was incomplete at the time of this publication.

Age-Adjusted Rate for Leading Causes of Death  
Per 100,000 Population

Cause of Death	Eagle County	Rank	Colorado	Rank
All Causes	303.5		657.2	
Cancer	66.2	1	133.0	1
Heart Disease	65.8	2	126.5	2
Unintentional Injury	31.4	3	45.0	4
Chronic Respiratory Disease	29.4	4	46.2	3
Motor Vehicle Accidents	22.7	5	9.0	9
Suicide	14.5	6	19.4	6
Homicide and Legal Intervention	6.8	7	3.4	
Chronic Liver Disease	4.9	8	12.4	8
Alzheimer's Disease	0.0	-	26.6	5
Diabetes	0.0	-	15.2	7

**Source:** Eagle County Births and Deaths 2014; Colorado Births and Deaths 2014

**Cancer**

In the VVMC service area, rates of prostate cancer and melanoma exceed those of the State of Colorado, while the rates of breast, colon, and lung cancers are lower than the state reported rates. Compared to 2011, the rates of breast cancer, colon cancer, and lung cancer have all demonstrated slight increases. Additional information is available under the Preventative Practices, and Health Needs of Eagle County sections of this document.

Age-Adjusted Cancer Incidence Rates, 2009-2011  
 Per 100,000 Population

Cancer	Eagle County	Colorado
Age-adjusted incidence rate of invasive cancer (all sites combined)	347.1	421.5
Age-adjusted incidence rate of invasive breast cancer among females (per 100,000 females)	116.8	122.6
Age-adjusted incidence rate of colorectal cancer	26.4	30.3
Age-adjusted incidence rate of lung and bronchus cancer	28.4	42.2
Age-adjusted incidence rate of invasive melanoma (skin cancer)	24.0	18.1
Age-adjusted incidence rate of prostate cancer among males (per 100,000 males)	121.4	101.1

**Source:** National Cancer Institute; State Cancer Profiles

### **Heart Disease and Stroke**

The overall prevalence rates for measured cardiovascular and cerebrovascular events in the VVMC service area are less than those in the State of Colorado. County measurements relating to heart failure and stroke have decreased since the CHNA 2013 edition while the incident rate of acute myocardial infarction has increased at both the county and state levels.

Although the percentage of adults (18+ years) living in the VVMC service area who have ever had a heart attack is less than the state reported percentage (1.5 vs. 2.0%), and is nearly identical to previous CHNA data, the percentage of those who have been diagnosed with coronary heart disease or angina approximates the state percentage (2.2 vs. 2.8%). Rates of heart disease overall have decreased by roughly 7% in both Eagle County and in the State of Colorado since previously published data.

Morbidity from Heart Disease and Stroke, 2010-2012  
Per 100,000 Population

Hospitalization Cause	Eagle County	Colorado
Heart Disease (all)	1624.0	2392.3
Acute Myocardial Infarction	139.9	168.7
Heart Failure	365.5	708.1
Stroke	151.8	256.1

**Source:** Colorado Department of Public Health and Environment; Colorado Health Indicators; Morbidity Heart Disease and Stroke in Eagle County.

### ***Injury***

According to the Colorado Department of Public Health and Environment, injuries are the leading cause of death for Coloradans aged 1-44.<sup>9</sup> Over the past 20 years, the age-adjusted injury death rate in the state has increased by nearly 20%.<sup>9</sup>

In Eagle County, there is a lower rate of hospitalization due to unintentional injuries by most mechanisms of injury when compared to the State of Colorado. Of note, the age-adjusted rates for deaths due to motor vehicle accidents in the state have dropped nearly 43 % from the 1995-2011 data collection period.

Falls continue to be a significant mechanism for injury in Eagle County contributing significantly to total injury hospitalizations in the county. Unfortunately, this trend is not unique to Eagle County. According to the Centers for Disease Control and Prevention, over 700,000 patients are hospitalized because of a fall annually in the United States.<sup>10</sup> Injuries from falls, while participating in recreational sports such as skiing or snowboarding likely shine a unique statistical light on Eagle County.

Locally, regionally, and nationally, suicide continues to exert a significant and tragic burden on victims, families and communities. The rate of hospitalizations secondary to suicide has decreased by nearly 10% since 2011 in Eagle County. Consistent with this finding, the age-adjusted suicide rate in Eagle County decreased nearly 18% from 2011-2014 contrasting with a near 12% increase at the state level over the same time period.

Age-Adjusted Rate of Hospitalizations for Injuries, by Mechanism, 2012-2014,  
Per 100,000 Population

Hospitalizations	Eagle County	Compared to State of Colorado <sup>1</sup>
Total injury hospitalizations	427.7	L
Motor vehicle traffic	36.2	L
Unintentional poisoning	6.6	L
Falls	167.2	L
From stairs	10.7	L
From ladders/scaffolding	3.4	L
From structure	2.1	-
From cliff	1.6	-
From same level: skis <sup>2</sup>	34.5	H
From same level: snowboard <sup>2</sup>	4.0	-
Suicide/self-inflicted	20.8	-
Total firearm-related	1.5	-
Assault	5.6	-
Fire/burn	2.1	L

**Source:** Colorado Department of Public Health and Environment-Colorado Health and Environmental Data: The Colorado Trauma Registry, Colorado Injury Hospitalization Statistics; Colorado Births and Deaths 2014; Eagle County Births and Deaths 2014. 1. H or L indicates the rate for the county or region is significantly higher or lower than the rate for the state; 2. 2001 forward.

### **Diabetes**

According to the Colorado Department of Public Health and Environment, nearly 20,000 adult Coloradans were diagnosed with diabetes in 2012.<sup>11</sup> Diabetes continues to exert a significant toll on the state as diabetes is the eighth leading cause of death in the State of Colorado. The percentage of adults (18+ years) in the VVMC service area who currently have diabetes is less than that of the State of Colorado, while the percentage of women who developed diabetes during pregnancy is equal to that at the state level. Data for the VVMC service area was not available for individuals less than 18 years of age at the time of publication.

Population Health Outcomes – Morbidity-Diabetes

Diabetes	Eagle County	Colorado
Percent of adults (aged 18+ years) with diabetes 2011-2013	5.0%	6.9%
Percent of women who had diabetes that started during pregnancy 2009-2011	6.8%	6.8%

**Source:** Colorado Department of Public Health and Environment-Colorado Health Indicators; Diabetes’ Impact in Colorado; Diabetes Fact Sheet 2013.

**Arthritis & Asthma**

The percentage of adults who have been diagnosed with arthritis in the VVMC service area is significantly lower than that of the State of Colorado. Interestingly, current data, when compared to 2009 Colorado Department of Public Health data, demonstrates a 7.3% increase in adults with arthritis in Eagle County. This change may possibly reflect an active, aging current population combined with an influx of new, older residents to the Valley.

The percentage of adults who have been diagnosed with asthma in the VVMC service area is roughly consistent with the State of Colorado and demonstrates a slight decrease from 2010 data. Data for the VVMC service area was not available for individuals less than 18 years of age at the time of publication.

Population Health Outcomes

	Eagle County	Colorado
Percentage of adults aged 18+ years with arthritis 2011-2013	16.7%	22.4%
Percentage of adults (aged 18+ years) that have been told by a health care provider that they currently have asthma 2011-2013	7.5%	8.7%

**Source:** Colorado Department of Public Health and Environment-Colorado Health Indicators.

**Health Behaviors**

**Preventive Practices**

When it comes to preventive care, Eagle County has lower rates of influenza and pneumonia vaccination compared to the State of Colorado. Rates of cholesterol and diabetic monitoring as well as breast cancer screening are increased when compared to the state. Colorectal cancer screening rates are lower in Eagle County when compared to state reported rates. Of note, rates of adherence to established guidelines regarding both mammography and

colorectal cancer screening have decreased in Eagle County since 2010 data. When compared to *Healthy People 2020* targets, Eagle County demonstrates a decreased rate of preventive practices.

#### Preventive Practices

	Eagle County	Colorado
The percentage of adults aged 65+ years who report having had a flu shot in the past 12 months 2011-2013	55.7%	66.7%
The percentage of adults aged 18+ years who report having had a flu shot in the past 12 months 2011-2013	35.5%	41.4%
The percentage of adults aged 65+ years who report having ever had a pneumonia shot 2011-2013	59.5%	74.5%
The percentage of adults aged 18+ years who have had cholesterol screening in the past 5 years 2011,2013	80.8%	75.5%
The percentage of females aged 40+ years who had a mammogram within last 2 years 2012	76.9%	68.0%
The percentage of females aged 18+ years who had a Pap smear within last 3 years 2012	77.1%	78.8%
The percentage of adults aged 50+ years who had a colonoscopy within 10 years OR sigmoidoscopy within 5 years OR fecal occult blood test (FOBT) within the last 1 year 2012	54.8%	65.9%
The percentage of adults (aged 18+ years) who have ever been told by a health care provider that they had high blood pressure 2011,2013	15.9%	25.6%
The percentage of adults (aged 18+ years) who have ever had their cholesterol screened and a health care provider told them they had high blood cholesterol 2011,2013	28.4%	34.2%
Diabetic monitoring	89.0%	84.0%

**Source:** Colorado Department of Public Health and Environment.2011; Colorado Department of Public Health and Environment-Colorado Health Indicators

#### **Exercise, Obesity and Healthy Behavior Statistics**

The Centers for Disease Control and Prevention defines obesity as having a body mass index (BMI) of greater than or equal to 30.<sup>12</sup> Overweight is defined as having a BMI of greater than or equal to 25.<sup>12</sup> In the state of Colorado, 35.1% of adults were classified as overweight while slightly over 20% were obese.<sup>12</sup> Eagle County demonstrates significantly lower percentages of both obese and overweight adults when compared to both the State of Colorado and national benchmarks.

Physical activity can be described as participating in 30 or more minutes of moderate activity per day on five or more days per week, or, 20 or more minutes of vigorous activity per day on three or more days per week. Physical inactivity is defined as no physical activity during leisure time. Eagle County has a lower percentage of physically inactive adults compared to the State of Colorado and a higher percentage of adults with access to exercise opportunities.

The number of adults participating in moderate to vigorous activity on a weekly basis is higher than both the State of Colorado and national top performers. Compared with the State of Colorado, Eagle County has a lower rate of alcohol impaired driving deficits and adults smoking metrics while exceeding metrics with top U.S. performers around excessive drinking, alcohol impaired driving deficits, sexually transmitted infections, drug overdose deaths and teen births.

## Health Behaviors, 2016

	Eagle County	Colorado	Top US Performers
Adult Smoking <sup>a</sup>	14.0%	16.0%	14.0%
Percentage of adults (aged 18+ years) who are obese (Body Mass Index (BMI) ≥ 30) 2011-2013	5.4%	20.8%	30.6%
Physical Inactivity <sup>c</sup>	10.0%	15.0%	20.0%
Access to Exercise Opportunities <sup>d</sup>	97.0%	91.0%	91.0%
Percentage of adults aged 18+ years who get 30+ minutes of moderate activity per day on 5+ days/week or 20+ minutes of vigorous activity per day on 3+ days/week 2011, 2013	73.0%	61.1%	n/a
Excessive Drinking <sup>e</sup>	24.0%	19.0%	12.0%
Alcohol Impaired Driving Deaths <sup>f</sup>	23.0%	34.0%	14.0%
Sexually Transmitted Infections <sup>g</sup>	214.0	393.0	134.1
Teen Births <sup>h</sup>	35	33	19
Drug Overdose Deaths <sup>i</sup>	9	16	8
Limited Access to Healthy Foods <sup>j</sup>	4.0%	6.0%	2.0%

**Source:** County Health Rankings.org; Colorado Department of Public Health and Environment-Colorado Health Indicators;

- a. percentage of adults were current smokers; b. percentage of adults who report a BMI of over 30; c. percentage of adults aged 20 and over who report leisure time activity; d. percentage of population with adequate access to locations for physical activity; e. percentage of adults reporting binge or heavy drinking; f. percentage of driving deaths with alcohol involvement; g. Newly diagnosed chlamydia cases per 100,000 population; h. Number of births per 1000 female population aged 15-19; i. Number of drug poisoning deaths per 100,000 population; j. percentages of population who are low income and do not live close to a grocery store

### Communicable Diseases

The Eagle County Public Health Department's Communicable Disease Program is involved in the prevention and control of communicable diseases

through monitoring, investigations, identification of risk factors, the coordination of prevention strategies, and consultation with healthcare providers.<sup>1</sup> In Eagle County, the rate of new tuberculosis cases is roughly half that of the State of Colorado. That rate, however, is slightly higher when compared to *Healthy People 2020* benchmarks.

From a communicable disease perspective, only new cases of human immunodeficiency virus (HIV) and Hepatitis A in Eagle County exceed that of the State of Colorado in comparison. Rates of HIV in Eagle County increased exponentially from 2010 through 2012 and have since demonstrated a decreased incidence rate of over 2% through 2014 (population adjusted, no new cases). While chlamydia remains the most frequently diagnosed nationally reportable disease, rates of both chlamydia and gonorrhea are substantially lower when compared to the State of Colorado.

Communicable Diseases, 2011-2013  
Rate of new cases per 100,000 population

	Eagle County	Colorado
Tuberculosis	0.6	1.3
AIDS	2.6	4.1
HIV	9.4	5.0
Chlamydia (2014)	260.8	1681.0
Gonorrhea (2014)	9.4	188.8
Hepatitis A	3.2	0.6
Hepatitis B (acute)	0.0	0.5
Hepatitis B (new, chronic)	8.3	27.0
Hepatitis C	0.0	0.6
Pertussis	0.0	21.1
Campylobacter	14.1	14.8
STEC (shiga toxin producing E.coli)	0.0	1.0
Salmonella	10.3	10.5
Shigella	1.9	2.0
West Nile Virus	0.6	3.0
Foodborne Illness	1	99

**Source:** Colorado Department of Public Health and Environment-Colorado Health Indicators; U.S. Department of Health and Human Services. 2013. *Healthy People 2020*.

### ***Mental Health***

According to the Colorado Department of Public Health and Environment, a lower percentage of adults in Eagle County report their general

health as fair or poor, and overall, report a positive perception on their state of general and mental health when compared to the State of Colorado. In Eagle County, a higher percentage of women report postpartum depression symptoms compared with the State of Colorado. Eagle County has lower rates of mental health hospitalizations and suicide hospitalizations compared with the State of Colorado. Of note, these numbers represent the number of residents of Eagle County who required hospitalization and not necessarily the location where the hospitalization occurred.

From both a regional and local perspective, suicide is a significant public health issue that affects members of the general population regardless of gender, age, race, ethnicity, socioeconomic status, or sexual orientation. In 2012, the age-adjusted suicide rate in the state of Colorado was 19.7 (per 100,000 population).<sup>13</sup> This was a 13.2% increase from 2011 and the highest rate of suicide ever recorded in Colorado. According to the Colorado Department of Public Health and Environment, “the number of suicide deaths in 2012 exceeded the number of deaths from homicide, motor vehicle crash, influenza and pneumonia, breast cancer, and diabetes.”<sup>15</sup>

In both Eagle County and in the State of Colorado, suicide was the seventh leading cause of death. Colorado is consistently among the ten states with the highest suicide rates nationally.<sup>14</sup> In 2014, the age-adjusted rate of suicide in the state of Colorado was 19.4 (per 100,000 population).<sup>13</sup> In Eagle County, the age-adjusted rate of suicide in 2014 was 14.5 reflecting a 7.6% decrease when compared to 2012.<sup>8</sup> According to the 2015 Colorado Health Access Survey, roughly 10% of Coloradans over the age of 5 years old are not getting the mental health care they need.<sup>15</sup> Mental health is clearly an ongoing health need worthy of persistent and progressive consideration at the national, state, and county levels.

## Adult Mental Health Indicators

	Eagle County	Colorado
Percent of adults who reported that their general health was fair or poor 2011-2013	8.4%	13.8%
Average number of days (in the past 30 days) experienced by adults when their mental health was not good 2011-2013	2.9	3.4
Percent of adults who are satisfied or very satisfied with their life in general 2008-2010	96.5%	95.6%
Percent of women who experienced 1 or more major life stress events 12 months before delivery 2009-2011	63.0%	70.4%
Percent of women who often or always felt down, depressed, sad or hopeless since the new baby was born 2009-2011	11.9%	10.5
Age-adjusted rate of mental health hospitalizations (per 100,000 population)(2011-2013	1469.5	2802.4
Age-adjusted rate of suicide hospitalizations (per 100,000 population) 2011-2013	26.3	51.8
Age-adjusted suicide rate, <i>Per 100,000 population</i> ; 2014	14.5	19.4

**Source:** Colorado Department of Public Health and Environment-Colorado Health Indicators; Eagle County Births and Deaths 2014; Colorado Births and Deaths 2014

### **Alcohol Use**

Binge drinking is defined as drinking five or more drinks per occasion for males and drinking four or more drinks per occasion for females, in about 2 hours .<sup>16</sup> While often perceived as behavior among young adults, binge drinkers over the age of 65 years reported binge drinking more often, averaging up to 6 times a month.<sup>16</sup>

Over half of the alcohol consumed by adults in the United States is in the form of binge drinks and binge drinkers are 14 times more likely to be involved in alcohol-impaired driving situations than non-binge drinkers.<sup>16</sup> Eagle County has a higher prevalence of binge drinking compared to the State of Colorado and only slightly less than national targets. When discussing alcohol consumption, the rates of women, in Eagle County, who drank alcohol while pregnant are almost twice the rate of the State of Colorado.

Mental Health-Substance Abuse

	Eagle County	Colorado	Healthy People 2020 Target <sup>s</sup>
Percent of adults who reported binge drinking (males 5+/females 4+ drinks on one occasion) in the past 30 days 2011-2013	23.3%	19.2%	24.3%
Percent of women who drank alcohol during the last 3 months of pregnancy 2009-2011	19.3%	10.7%	22.7%

**Sources:** Colorado Department of Public Health and Environment.2011. U.S. Department of Health and Human Services.2013. Healthy People 2020.

**Substance Use**

In 2014, Colorado became one of the first states in the nation to legalize the retail sale of marijuana for nonmedical use.<sup>17, 18</sup> In Eagle County, as well as in the state of Colorado, nearly 40% of high school students, grades nine through 12, reported using marijuana at least once.<sup>18</sup> The percent of high school students who have used marijuana in the last 30 days in Eagle County (22%) is only slightly lower than the State of Colorado (23%).<sup>18</sup>

Over recent years, Eagle County, the State of Colorado, and the United States overall are roughly consistent in the rates of marijuana use among high school students.<sup>17</sup> Results from the 2011-2012 *Eagle County Healthy Kids Colorado Survey* demonstrated that almost 30 % of students in grades seven through 12 reported knowing someone with a medical marijuana card while only 1% of those students reported obtaining marijuana from someone who had a card during the past 30 days.<sup>18</sup> The topic of marijuana use has been followed closely by researchers, health professionals, and public health officials alike as the monitoring of the patterns of use coupled with the potential for adverse outcomes, particularly among adolescents, remains of particular interest.<sup>17,18</sup>

Percent of High School Students Using Marijuana.

	Eagle County	Colorado	U.S.
Percent of high school students who report ever using marijuana-2011/2012	39.0%	40.0%	40.0%
Percent of high school students who used marijuana in the past 30 days	21.0%	22.0%	23.0%

**Source:** *Eagle County*; 2012 STUDY; The Relationship between The Legalization Of Medical Marijuana and Usage By Teens

**Smoking**

In VVMC’s service area, although exceeding national targets, there is a lower incidence rate of adults who smoke cigarettes as well as women who smoke during pregnancy, when compared to the State of Colorado. The percentage of adults who smoke cigarettes rose nearly 4% from the previous CHNA project while the corresponding state increase was only 1%.

Percent of Cigarette Smokers, 2016

	Eagle County	Colorado	Healthy People 2020
Percent of adults aged 18+ years who currently smoke cigarettes 2011-2013	13.7%	17.9%	12.0%
Percent of women who smoked during the last three months of pregnancy 2009-2011	5.8%	8.3%	n/a

**Source:** *Colorado Department of Public Health and Environment-Colorado Health Indicators.*

**Access to Care**

Early access to health services can help to promote quality of life, reduce health disparities and decrease overall healthcare costs.<sup>19</sup> Barriers to access include cost, availability, and lack of insurance.<sup>19</sup> Lack of access affects the overall state of health and quality of life while decreasing life expectancy.<sup>19</sup> Compared to the State of Colorado, Eagle County has a higher percentage of both uninsured children and adults while a lower number of preventable hospital stays and overall healthcare costs. The percentage of uninsured populations in Eagle County has risen incrementally since 2010.

## Clinical Care, 2016

	Eagle County	Colorado	Top US Performers
The percentage of population under age 65, uninsured	22.0%	16.0%	11.0%
The percentage of children (aged 0-18 years) eligible but not enrolled in Medicaid 2012	28.4%	11.5%	n/a
The percentage of children (aged 0-18 years) eligible but not enrolled in Child Health Plan Plus(CHP+) 2012	11.8%	30.6%	n/a
Preventable Hospital Stays	18	33	38
Health Care Costs	\$7,911	\$8,303	n/a

**Source:** Colorado Department of Public Health and Environment-Colorado Health Indicators

### **Community Safety Net Providers**

As described by the Institute of Medicine (IOM), a safety net provider or system is one that aims to deliver a significant level of health care to the “uninsured, Medicaid, and other vulnerable populations.”<sup>20</sup> In Eagle County, although rates of practicing physicians, nurse midwives, and physical therapists are higher than that of the State of Colorado, comparatively the county is underrepresented among all remaining practitioner populations including: primary care physicians, physician assistants, nurse practitioners, registered nurses, dentists, respiratory therapists, all manners of social workers, optometrists and psychologists.

Workforce Population for Safety Net Providers

	Eagle County	Colorado
The rate of practicing primary care physicians (per 100,000 population) 2013	61.1	63.3
The rate of practicing physicians (per 100,000 population) 2013	246.5	225.9
The rate of active, licensed physician assistants (per 100,000 population) 2013	34.4	42.2
The rate of active, licensed nurse practitioners (per 100,000 population) 2013	32.5	55.8
The rate of active, licensed certified nurse midwives (per 100,000 population) 2013	7.6	5.6
The rate of active, licensed registered nurses (per 100,000 population) 2013	760.4	1064.5
The rate of active, licensed dentists (per 100,000 population) 2013	59.2	70.8
The rate of active, licensed respiratory therapists (per 100,000 population) 2013	9.6	41.3
The rate of active, licensed physical therapists (per 100,000 population) 2013	158.6	94.1
The percentage of adults aged 18+ years who reported having one or more regular health care providers 2011-2013	72.1%	76.5%
The rate of active, licensed clinical social workers (per 100,000 population) 2013	28.7	75.3
The rate of active, licensed social workers 2013	9.6	13.8
The rate of active, licensed optometrists (per 100,000 population) 2013	11.5	17.1
The rate of active, licensed psychologists (per 100,000 population) 2013	22.9	43.9

**Source:** Colorado Department of Public Health and Environment-Colorado Health Indicators

## **IV. The Health Needs of Eagle County**

The following list represents the prioritized ranking of the community health needs of Eagle County, Colorado by VVMC. This collection of needs is the product of primary and secondary data analysis coupled with a prioritization and feasibility evaluation. Although every attempt was made to identify existing services in Eagle County, VVMC acknowledges there may be programs in existence that were not captured for this study.

The listed needs do not necessarily represent areas that warrant immediate action. To the contrary, some are logistically prohibitive within the current climate of the county, the organization, and the healthcare environment at-large. The purpose of this assessment was to provide the organizational leaders of VVMC with needed information when considering how best to serve the health needs of Eagle County.

The results of all the data sources were analyzed for common themes, concerns, trends, and most importantly, significant increases in health conditions from our previous Community Health Needs Assessment project. The VVMC CHNA team identified then prioritized the areas of concern regarding healthcare within Eagle County. The needs assessment process identified the following as the prioritized health needs of Eagle County:

1. Access to Healthcare
2. Cancer
3. Heart Disease
4. Unintentional Injury
5. Chronic Respiratory Disease
6. Mental Health
7. Substance Abuse

### **1. Access to Care**

Access to high-quality healthcare is an essential component to reduce health disparities and promote quality of life across a population. According to the US Department of Health and Human Services, the percentage of adults who reported delaying or not receiving needed medical care due to cost increased from 2004-2010 and then declined 8% during the 2010-2014 time period.<sup>21</sup> Although seemingly optimistic, healthcare expenditures in the United States totaled \$2.6 trillion in 2014, demonstrating a 5 % increase from 2013.<sup>21</sup>

Additionally, with hospital care expenditures accounting for nearly 40% of all personal healthcare expenditures in 2014, per capita personal healthcare expenditures increased over 4% from 2013.<sup>21</sup>

Access to care has a significant influence on several factors affecting individuals, families, and communities, including overall health, well-being, quality of life, prevention of disease and disability, screening and treatment of illness, and prevention of premature death.<sup>19</sup> Through primary data collection, multiple issues emerged related to access to care, including: lack of health insurance, affordable care and transportation.

In addition, according to the Centers for Disease Control and Prevention as well as the U.S. Department of Health and Human Services, Eagle County fares in the least favorable quartile compared to peer counties utilizing the Community Health Status Indicators (CHSI) tool with regards to cost being a barrier to care as well as number of uninsured citizens.<sup>22</sup> With regard to access to primary care providers, the county falls into the middle quartiles when compared to like counties.<sup>22</sup>

### **Affordable Care**

The high cost of healthcare can deter individuals from seeking timely and appropriate care. In the United States, adults who do not have health insurance are seven times more likely to forego medical care because of cost.<sup>23</sup> The following programs are available in Eagle County that address affordable care issues relating to access to healthcare:

## Eagle County Public Health

The Eagle County Public Health Department offers several healthcare services to the residents of Eagle County including Family Planning, Prenatal Care and Disease Prevention and Control. Payment for services is offered on a sliding scale, and Medicaid and CHP+ are accepted. Pediatric vaccinations are offered for \$14 per vaccination; however, uninsured minors may receive vaccinations at a reduced rate, based on ability to pay. Persons over the age of 18 are offered vaccinations at a fee based on vaccination. Tuberculosis screening is also offered for a small fee, with treatment coordination available as needed.

## Eagle County Health and Human Services

Eagle County Health and Human Services provides application assistance to individuals who meet income and health requirements to obtain Colorado Medicaid (or Emergency Medicaid if applicable), CHP+, and Medicare.

## Eagle Healthcare Center

Eagle Healthcare Center is a medical office building located in the town of Eagle. This facility maintains a collaborative relationship between VVMC and Valley View Hospital. Services provided by VVMC in this location include internal medicine, cardiac care, dermatology, physical therapy, surgical consultation, and wound care.

## Vail Valley Charitable Fund

Annually, the Vail Valley Charitable Fund (VVCF) awards grant funds for medical costs to qualified Eagle County residents who apply for and outline their financial need.

## Colorado Mountain Medical (CMM)

Colorado Mountain Medical is a primary care and specialty clinic, which accepts a variety of insurance plans; including Medicare and Medicaid for children up to age 18.<sup>17</sup> There are three CMM medical offices throughout Eagle County. CMM does not offer discounts or financial assistance to underinsured or uninsured patients.

## Doctors on Call

Doctors on Call is a walk-in, primary care, physician clinic, which provides affordable healthcare to insured, uninsured, and underinsured patients. They accept all forms of insurance, including Medicare and Medicaid. They also meet local market prices for comparable medical services. Doctors On Call offers discounts for patients who are uninsured or underinsured.<sup>18</sup>

## Diversified Services

VVMC provides internal medicine/primary medical care needs in Vail, Edwards, and Eagle. They provide free Annual Wellness Visits to all Medicare patients and most insured patients.

## Mountain Family Health Center

Mountain Family Health Center's mission is "to provide high quality healthcare in the communities we serve, with special consideration for the medically underserved regardless of ability pay". They provide primary care services to individuals without commercial insurance. Government insurance (Medicaid, Medicare, Child Health Plan Plus (CHP+)) is accepted. Self-pay patients may qualify for Colorado Indigent Care Program (CICP), a discounted program to assist with medical costs. Mountain Family Health Center has four locations in Colorado, including two in Eagle County - Edwards and Basalt.

## Primary Care Health Clinics

In the town of Basalt, there are over five primary care health clinics and primary care physician practices. The majority of these facilities accept self-payment and private insurance only.

## **Lack of Health Insurance**

Major obstacles in obtaining appropriate healthcare that affect residents include being uninsured or underinsured. Being underinsured refers to those with health coverage that does not adequately protect them from high medical expenses.<sup>25</sup> In Colorado 93.3% of the population currently holds health insurance equating to a 7.6% increase from 2013.<sup>26</sup>

Due to low premiums coupled with high deductibles or co-pay requirements, the rate of residents underinsured rose 2.5% compared to 2013 data.<sup>26</sup> In 2015, the percentage of people who have visited a healthcare provider in the past year has increased over 3% while the percentage of residents who felt they didn't get the medical care they needed due to cost, declined nearly 2%. Residents aged 30-39 years old represent the state's highest underinsured rate at 13.4%, down nearly 50% from 2013.<sup>26</sup>

The underinsured rate for residents earning below 300% of the federal poverty level (FPL) demonstrated a roughly 12% drop since 2013.<sup>26</sup> As of 2015, the underinsured rate declined for all racial and ethnic groups in the state of Colorado. While Hispanics have the highest rate of uninsurance in the state, at more than double the rate of non-Hispanic white residents, the uninsured rate demonstrated a 46.0% drop in the Hispanic population since 2013.<sup>26</sup> The Eagle County Health Statistics Region (HSR12) has an underinsured rate of 11.7% and is second only to the northwest corner of Colorado (HSR11) in most uninsured in the state.<sup>26</sup>

Reasons for Lack Health Insurance (State of Colorado)

	2011	2015
Cost of health insurance is too high	84.6%	82.2%
Employed family member depended upon for insurance was not offered or eligible for employer's coverage	40.6%	29.4%
Employed family member depended upon for health insurance lost job or changed employers	39.3%	25.7%
Do not need health insurance	13.5%	20.8%
Lost eligibility for Medicaid or Child Health Plan Plus (CHP+)	17.4%	14.9%
Do not know how to get health insurance	17.4%	14.1%
Family member who had health insurance is no longer part of family	8.4%	11.9%
Have pre-existing medical condition and cannot obtain health insurance	12.5%	8.7%

**Source:** Colorado Health Access Survey: A New Day in Colorado. CHAS Findings. September 2015. Colorado Health Institute for The Colorado Trust.

The following represents the payer-mix for VVMC, including all satellite operations and facilities for the 2015 fiscal year.

Payer Mix at Vail Valley Medical Center, 2015

Payer	
Medicare	23.7%
Blue Cross	17.2%
United Healthcare	10.8%
Medicaid	9.1%
Aetna/Cofinity	8.3%
Cigna/Great West Healthcare of Colorado	7.2%
Rocky Mountain Health Plans	4.1%
Self-Pay (No Insurance)	4.0%
Worker's Compensation	3.4%
Vail Resorts	3.1%
All Other Payers	2.6%
Vail Valley Medical Center	1.9%
Commercial	1.8%
Military	1.4%
Humana	1.4%

**Source:** Vail Valley Medical Center. Eagle County Resident Encounter, Fiscal Year 2015.

Vail Valley Medical Center Resources

In accordance with federal guidelines, Vail Valley Medical Center provides discounted services to patients who qualify under the hospital's policy, participates in Medicaid, provides health education, health research, subsidizes health services including community health improvement activities, and contributions to community health screening events.<sup>24</sup> VVMC offers financial assistance to those patients who meet income and residency

requirements. Additional financial considerations for patients include up to a 12% discount for any patient who is underinsured or does not have insurance coverage (certain stipulations apply), with the option to enroll in a flexible payment plan for balances paid within 12 months from the date of the patient's "self-pay" designation .<sup>27</sup>

In addition to these programs, VVMC offers a financial assistance program to qualified patients that can cover up to 100% of their medical bills. In total, based on the most recently filed Form 990 tax return, the annual cost of VVMC's financial assistance program and various benefit programs to the community is over \$12 million.

Lastly, Vail Valley Medical Center has undertaken the significant initiative of tailoring urgent care and primary care service lines to meet the needs of the community. Additional sites as well as cost structures are currently in the development phase in the hopes of enhancing services and decreasing healthcare costs for the community.

### **Transportation**

Lack of transportation may also challenge access to appropriate healthcare for residents. Currently, there is no available data regarding the transportation needs for individuals seeking healthcare services within Eagle County. Outside of the towns of Vail and Avon, there is no free or discounted public transportation available for individuals under the age of 60.

#### *Vail Valley Medical Center Resources*

VVMC does not currently offer transportation services for patients, with the exception of prescription medication delivery to a patient's home. VVMC provides shuttle service for its employees to/from its main campus in Vail during the winter months when parking restrictions and fees are enforced within the Town of Vail parking structures. Free bus passes are also given to employees upon request.

#### *Eagle County Transportation Services*

The Eagle County public bus service (ECO) offers services along the I-70 and U.S. Highway 6 and corridors in Eagle County for a small fee. Additional

service is available to the towns of Minturn and Leadville, which are residential communities for many Eagle County workers.

### *Other options*

Mountain Ride assists Eagle County residents over 60 years of age, veterans, Medicaid travelers and those with disabilities with finding free or low cost transportation throughout Eagle County as well as other parts of the state. The Town of Vail bus service operates within town limits for no charge. The Vail Transportation Center serves as a terminal for ancillary bus and shuttle services. The town of Avon also provides public transportation services free of charge within its town limits.

## **2. Cancer**

In 2014, cancer was the leading cause of death in Eagle County and the runner up behind heart disease at the state level.<sup>8, 13</sup> Not only is the mortality rate from cancer significant, but it is a disease that adversely affects quality of life with profound mental, emotional, social, and economic burdens. Despite the high rates of cancer throughout the population, morbidity and mortality may be reduced by decreasing preventable risk factors, implementing prevention measures, and providing relevant screening practices.<sup>34</sup>

Recent data from the Colorado Department of Health and Environment reiterates certain consistent risk factors for cancer such as lack of a healthy diet and exercise, tobacco, heavy alcohol use and obesity.<sup>44</sup> Socioeconomic status cannot be ignored as Coloradans who reside in poorer neighborhoods were more likely to smoke tobacco, be obese, be less physically active and describe decreased rates of screening practices.<sup>44</sup> Subsequently, these residents were also more likely to die within the first five years following a cancer diagnosis.<sup>44</sup> This disparity persists regardless of race, ethnicity, gender, or age group.<sup>44</sup> Although the poorest areas of the state demonstrate the highest incidence rates of oral, colorectal, lung, and cervical cancers, their rates of breast, prostate, and melanoma are lower than areas with a stronger economic profile.<sup>44</sup> Overall, this epidemiological trend holds true for Eagle County.

In Eagle County, rates of breast cancer screening (76.9%) are currently about 9% higher than state metrics, though fall short of meeting the *Healthy People 2020* target (81.1%).<sup>35</sup> Rates of colorectal screening in Eagle County

(54.8%) are currently below both the State of Colorado and the *Healthy People* 2020 guidelines (70.5%).<sup>35</sup>

### **Breast Cancer**

In Colorado, female breast cancer is the most commonly diagnosed cancer and the second leading cause of cancer-related deaths in women.<sup>44</sup> The age-adjusted incidence rate of invasive breast cancer in Eagle County demonstrates only a slight decrease since the previous needs assessment project, with state rates remaining relatively consistent as well. The U.S. Preventative Services Task Force recommends screening mammograms for women over the age of 50 to take place every 2 years.<sup>44</sup>

Early detection is an important component of mitigating the morbidity and mortality due to breast cancer. If allowed to progress, cancer cells can spread to other areas of the body, complicating treatment and increasing the risk for early mortality. The percentage of women over 40 years of age in Eagle County who have obtained screening mammograms remains higher than that of the state of Colorado, even while demonstrating a roughly 5% decrease over time.

The Shaw Regional Cancer Center (SRCC) offers screening and prevention programs that are free to qualified members of the general public, a portion of which are grant-funded and channeled through Mountain Family Health Center. In addition to providing diagnostic and treatment services, SRCC also offers a variety of survivorship services focusing on nutrition, fitness and psychological support for patients and their caregivers. The services found at the SRCC are utilized by patients from Eagle County as well as from the surrounding areas.

From an epidemiologic perspective, this increased rate of screening mammographies is consistent with the decreased rates of unemployment and poverty found in Eagle County coupled with an increased median household income of over 24% when compared to the state of Colorado.<sup>2</sup> For many women, Vail Valley Medical Center provides comprehensive care for breast surgery including chemotherapy, radiation and surgical intervention, including reconstruction. From the perspective of early detection, enhanced screening practices can only serve to benefit the community at large.

## **Colorectal Cancer**

In the state of Colorado, colorectal cancer affects one in 19 men and one in 24 women in their lifetimes.<sup>44</sup> Colorectal cancer is the second leading cause of death from cancer in the state of Colorado.<sup>44</sup> The U.S. preventative services task force recommends colorectal cancer screening starting for adults aged 50.<sup>44</sup> The age-adjusted rates of colorectal cancer in Eagle County have remained relatively consistent while a moderate decrease in rates have been appreciated at the state level.

Risk factors for colorectal cancer include family history, inflammatory bowel disease or polyps, smoking, obesity, physical inactivity, a diet high in red meat, a diet sparse in fruits and vegetables, and a diet which includes significant alcohol intake.<sup>44</sup> A unique characteristic about colorectal cancer is that this disease is often preventable with appropriate screening, as precancerous lesions can be removed prior to the development of cancer.<sup>44</sup> In 2010, the percentage of adults aged 50 years or more who had colorectal screening decreased nearly 5%. Although Eagle County colorectal cancer rates remain below that of both the state of Colorado as well as national targets, enhancing colorectal screening practices is an area of opportunity for VVMC.

## **Lung Cancer**

Lung cancer plays a prominent role as a cause of death in the United States and in the State of Colorado, regardless of gender.<sup>44</sup> Consistent with other types of cancer, poverty is an independent risk factor while, tobacco remains the primary risk factor.<sup>44</sup> Unfortunately, the first symptoms of lung cancer often herald the late progression of the disease.

Annual screening with low-dose computed tomography is recommended for adults aged 55-80 years (with a 30-pack-year smoking history).<sup>44</sup> Of note, screening can be discontinued once a person has not smoked for 15 years.<sup>44</sup> In Eagle County, the age-adjusted rates of lung cancer are well below that of the State of Colorado which has remained consistent over time. Although the rates of adult smoking in Eagle County remain below that of the state of Colorado, there has been an increase in smoking habits in the county of over 40% since the last community health needs assessment project. While rates remain low, this is an area of continued surveillance for both Vail Valley Medical Center and the county.

## **Melanoma**

Although other types of skin cancer (squamous cell and basal cell carcinoma) occur with more frequency, melanoma remains the deadliest form of skin cancer.<sup>44</sup> In the State of Colorado, the lifetime risk of being diagnosed with melanoma is approximately 1 in 24 for men and 1 in 45 for women.<sup>44</sup> Risk factors include fair skin, a personal family history of melanoma, multiple or atypical moles, tanning booth use, immunosuppression, and over exposure to ultraviolet radiation in sunlight.<sup>44</sup> Protection measures include sun protection and the avoidance of indoor tanning.<sup>44</sup>

Not surprisingly, residents of the State of Colorado who live in the poorest areas demonstrate the lowest rates of screening, early detection, and subsequently survival.<sup>44</sup> In Eagle County, age-adjusted rates of invasive melanoma have decreased 30% from 2008-2011, while still remaining significantly higher than state rates. Due to the comparatively high percentage of Eagle County adults who achieve moderate to vigorous activity coupled with a wide variety of outdoor activity options, melanoma education and screening should remain a priority for the organization and county.

## **Prostate Cancer**

In the State of Colorado, prostate cancer is the second most common cause of cancer death among men (after lung cancer) and remains the most common cancer diagnosed in men.<sup>44</sup> Age and race are the most relevant risk factors for the development of prostate cancer with risk increasing after the age of 50 and among black men.<sup>44</sup> Screening involves increased information and education, physical examinations, and possibly a blood test for men beginning at age 50 or at age 45 for those of increased risk.<sup>44</sup>

Compared to other malignancies, recent data demonstrates a minimal effect from socioeconomic status on early detection among men diagnosed with prostate cancer, although men who live in poorer areas continue to demonstrate lower overall survival rates.<sup>44</sup> The age-adjusted rates of prostate cancer in Eagle County as well as in the State of Colorado have demonstrated significant decline over time, and continued education coupled with appropriate screening and surveillance measures will hopefully perpetuate this trend.

### *Services Provided by the Shaw Regional Cancer Center*

- Chemotherapy/ Infusion Care
- Radiation Therapy
- Breast Imaging and Diagnostics Center
- Cancer Counseling and Support
- Clinical Trials
- Disease-Specific Multidisciplinary Conferences
- Fitness and Wellness
- Home Care and Hospice
- Medical Library
- Nutrition and Dietary Consultation
- Pastoral Services
- Pet Partners
- Oncology Pharmacy
- Physical Therapy and Rehabilitation
- Spirit of Survivorship Program
- Skin cancer screenings
- Sun Safety Program – Skin cancer prevention education at local elementary schools
- Breast cancer prevention education
- Vail Health Magazine cancer prevention articles

### *Jack's Place*

Jack's Place is a Cancer Caring House located adjacent to SRCC and features 12 private guest rooms in a 10,825 square-foot lodge setting. Patients traveling to the SRCC for cancer treatment are able to stay at Jack's Place along with a family member and caregiver on a "pay-what-you-can" philosophy. In 2015, Jack's place served 335 patients and provided rooms for 1,084 nights at no cost to cancer patients. The following services are also offered to patients at Jack's Place:

- Yoga
- Pilates
- Tai Chi
- Massage
- Meditation

- Nutrition Classes
- Acupuncture
- Support Groups
- Look Good Feel Better, through American Cancer Society

#### *Vail Breast Cancer Awareness Group*

The Vail Breast Cancer Awareness Group strives to ease the financial and emotional burden endured by women in Eagle County who are battling breast cancer. Any woman living in Eagle County who is diagnosed with breast cancer is eligible for services provided by Vail Breast Cancer Awareness Group. The group offers the following services:

#### *Day to Play Program*

Every Eagle County resident diagnosed with breast cancer receives \$500 to use as she wants to help relieve the stress of cancer treatments.

#### *Pink Lemonade Bubblegum Day to Play*

Children of mothers who are undergoing treatment for breast cancer are eligible to receive a day to play.

#### *The Gap Fund*

This program started in 2012, granted \$50,000 to the Sonnenalp Breast Diagnostic Imaging Center at the Shaw Regional Cancer Center to help women cover the cost of diagnostic breast imaging services.

### **3. Heart Disease**

In 2014, the overall age-adjusted death rate due to heart disease in Eagle County was 65.8 per 100,000 population compared to 126.5 in the state of Colorado.<sup>8,13</sup> Compared to 2013 data, Eagle County demonstrated an appreciable drop in the rate of mortality relating to heart disease and remains below the 5-year average.<sup>8,13</sup> Though demonstrating a significant improving trend, heart disease still affects a disproportionate number of residents and demonstrates significant disability and economic loss.<sup>39</sup>

There are several risk factors that contribute to heart disease, including: obesity, high blood pressure, high cholesterol levels, cigarette smoking,

diabetes, poor diet, and a lack of physical activity.<sup>39</sup> Many of these risk factors may be controlled with proper prevention methods and intervention.<sup>3</sup> Primary prevention is essential for cardiac disease, and proper screening is important to treat and mitigate controllable risk factors.

In addition, early recognition and treatment of a heart attack can improve patient outcomes and reduce mortality.<sup>39</sup> Post-heart attack-after care is crucial to help prevent a recurrence of cardiovascular emergencies.<sup>39</sup> With the addition of a new cardiac catheterization laboratory in 2015 providing comprehensive care in the setting of acute myocardial infarction as well as elective and semi-elective treatment options for a variety of cardiac conditions, VVMC's hope is a for a continued trend towards improvement.

Vail Valley Medical Center's Cardiology Institute specializes in heart and vascular health, providing comprehensive diagnostic testing and medical management of coronary disease, hypertension, lipid disorders, arrhythmia, valvular heart disease, cardiomyopathies and congestive heart failure. Additional services include pacemaker implantation, preoperative evaluation and anticoagulation services, as well as cardiac rehabilitation and comprehensive screening physicals for young athletes.

Cardiac Diagnostics include:

- Nuclear stress testing
- Stress echocardiograms
- EKGs
- CT angiograms
- Heart rhythm monitoring

VVMC's patients range from healthy adults seeking preventative cardiac care to those with significant cardiac illnesses. The Vail Valley Medical Center employees board certified cardiologists who treat cardiac disease with a comprehensive approach that begins with diagnostics and assessments and can include treatments such as blood thinners, electrophysiology (which includes the advanced care for arrhythmias and the use of pacemakers and defibrillators) and/or rehabilitative measures.

The following programs are available in Eagle County related to cardiac disease:

### *Starting Hearts*

Starting Hearts is a local non-profit organization focused on preventing deaths due to Sudden Cardiac Arrest (SCA). This group offers free Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED) classes in Eagle County.<sup>50</sup> VVMC has partnered with Starting Hearts to place AEDs throughout Eagle County in order to provide community members and guests access to this cardiac lifesaving equipment.

## **4. Unintentional Injury**

In Colorado, unintentional injury is the leading cause of death among individuals' ages one to 44.<sup>9</sup> Among causes, traumatic brain injury contributes to 28% of all deaths due to unintentional injury, 17% of hospitalizations and 11% of all unintentional injury emergency department visits.<sup>9</sup> Injuries are a leading cause of disability among both males and females throughout all age groups without regard to race, ethnicity, social, or economic status.<sup>9</sup>

While contributing to increased morbidity and mortality in the population, injuries have mental, social, and financial impacts on individuals, families, and communities.<sup>9</sup> Although the rate of unintentional injuries in Eagle County is lower than that of the State of Colorado as well as of the United States overall, unintentional injury rates have increased over 30% since 2011.<sup>8</sup>

Consistently, the leading causes of hospitalization for unintentional injury among Eagle County residents are recreational trauma including ski and snowboard injuries, followed by falls and motor vehicle accidents. In Eagle County, motor vehicle deaths require special mention. The age-adjusted death rate due to motor vehicle accidents in Eagle County has increased over 90% from 2013.<sup>8</sup> Additionally, this rate exceeds the local 5-year average as well as the State of Colorado death rate due to motor vehicle accidents.<sup>13</sup> Although affecting a relatively small number of residents, the increased incidence rate of motor vehicle deaths coupled with the significant disability and financial loss aspects highlight the importance of recognizing motor vehicle accidents as a significant public health concern in Eagle County.

The following injury prevention programs are available in Eagle County:

### *ThinkFirst*

ThinkFirst is a national foundation with a local chapter at VVMC. This program's goal is to provide education on how to protect oneself from injury with particular attention to preventing brain and spinal cord injuries. It is funded by VVMC along with grants provided by state, regional, and local entities and private donations.

The services provided by this program include offering injury prevention education to all Eagle County elementary, middle, and high schools, skier safety education, child passenger safety education and technical training, adult fall prevention education, and injury prevention education at local public events. In 2015, ThinkFirst – VVMC provided 1,142 ski and bike helmets to individuals in need and reached over 12,000 individuals with injury prevention education, and 35 presentations were provided at Eagle County Schools reaching over 1600 students.

In addition to classroom presentations, ThinkFirst staff attended 13 community events reaching over 7000 individuals to provide injury prevention education beyond the classroom. VVMC's ThinkFirst program collaborates with Vail and Beaver Creek's Mountain Safety Team to address skier safety and promote helmet use at local schools and during January's National Skier Safety Weekend on the mountain. Over the past year, 11 skier safety presentations were held at Eagle County Schools reaching over 3,000 students and staff attributing 337 ski helmets and 805 bike helmets to students and adults in need.

### *Research*

Ski and snowboard injuries are the leading causes of hospitalization in Eagle County. Therefore, VVMC conducts ongoing research studying the factors that contribute to recreational and alpine trauma. This research has extended to incorporate the recent legalization of marijuana and the potential effects this may have on recreational trauma in the county. Findings are presented at medical conferences and in peer-reviewed journals.

### *Eagle County Emergency Medical Services (EMS) Prevention Committee*

The mission of the Eagle County EMS Prevention Committee is to be a cooperative, interagency group that coordinates and facilitates a variety of prevention activities for the citizens and guests of Eagle County. The committee collaborates on various prevention activities ranging from car seat safety, seat belt safety, drug and alcohol prevention for kids, distracted driving prevention, suicide prevention, and senior safety. The committee is responsible for Camp 911 twice a year in Eagle County. This is an all day camp for youth ages 9-11 teaching a variety of rescue, safety and injury prevention tactics.

### *Gore Range DUI Taskforce*

The Gore Range DUI (Driving Under the Influence) Taskforce is composed of law enforcement agencies in Eagle County. This taskforce is deployed at various times to saturate different travel routes within the county with highly trained DUI officers. The taskforce takes a zero-tolerance approach to DUI enforcement for the ultimate goal of reducing alcohol related crashes.

### *Adult Fall Prevention Classes*

Through a partnership with Eagle County's Well and Wise program, fall-prevention classes for adults 55 and older are offered. Tai Chi for Arthritis and Fall Prevention classes were held for members of the Eagle County community.

### *Child Passenger Safety*

VVMC offers child passenger safety education to parents in the Women and Children's Center. This educational interaction assists parents with the technical use of their car seat and to explain laws and best practices for proper use of their car seat. During 2015, nearly 300 car seats were checked by certified staff at VVMC.

### *Youth Sports Initiative*

This effort has brought together local healthcare providers to create and implement a concussion management program for youth participating in organized sports activities in Eagle County. Through the ThinkFirst

VVMC chapter, a neurocognitive baseline *ImPact* test is performed at no charge to members of sports teams or clubs prior to the start of each sports season. These tests are used as one tool in the individualized “return to play” protocol in the event an athlete suffers a concussion. During 2015, 670 student athletes in Eagle County took a baseline test.

## **5. Chronic Lower Respiratory Disease**

Chronic lower respiratory disease (CLRD) describes diseases of the airways and lung tissue. Common examples of CLRD include chronic obstructive pulmonary disease, asthma, occupational lung disease, among others.<sup>40</sup> Notably, chronic obstructive pulmonary disease was the third leading cause of death in United States in 2011.<sup>40</sup> Although tobacco is a key risk factor for the development of chronic respiratory diseases, genetic factors, infections and air pollutants are also contributors.<sup>40</sup>

According to the Centers for Disease Control and Prevention, individuals most affected include; those over the age of 65, non-Hispanic whites, females, those of lower socioeconomic standing, current or former smokers and those with a history of asthma.<sup>40</sup> The age-adjusted death rate for chronic lower respiratory disease in Eagle County is 29.4 per 100,000 population.<sup>8,13</sup> This exceeds the five-year annual average of 16.9 and demonstrates a 27.3% increase from the past needs assessment project.<sup>8,13</sup> In Colorado, deaths due to chronic lower respiratory disease exceed the five-year average by nearly 74%.<sup>2,3</sup> Considering rates of asthma among adults in Eagle County have demonstrated a slight decrease while the rates from the state of Colorado have remained stable, the exact etiology of the increased death rate due to chronic lower respiratory disease in the county remains unclear.

With a unique setting at 8,150 feet above sea level, the doctors and staff at Vail Valley Medical Center are experts in the effects of high altitude on respiratory care, sleep patterns and breathing disorders. The Vail Valley Medical Center partners with Colorado Pulmonary Associates, PC to offer local clinics for residents at VVMC on a monthly basis. Acknowledging the recent increased incidence of this disorder in the county, the majority of patients with chronic respiratory disease are often managed at lower elevations, as such; Vail Valley Medical Center does not have current plans to expand services for this patient population. This is an area to be watched closely and should incidence

rates continue to rise and patient demand increase, expanding the service line would be considered by the organization.

Current respiratory care services include:

- Pulmonary Function Testing (PFT): exercise oximetry, methacholine challenge
- Polysomnography (Sleep Studies: CPAP/BIPAP Titration)
- Arterial Blood Gas: Oximetry Monitoring

## **6. Mental Health**

In the United States, 25% of adults have a mental illness, and mental health disorders contribute greatly to poor physical health and disability.<sup>41,42</sup> The U.S. Department of Health and Human Services describes mental health as “essential to personal well-being, family and interpersonal relationships, and the ability to contribute to community or society” by impairing a person’s functioning through altered thoughts, mood, and behaviors.<sup>41</sup>

There are treatments available for some mental illnesses, including major depression, schizophrenia, bipolar disorder, obsessive compulsive disorder (OCD), panic disorder, posttraumatic stress disorder (PTSD), and borderline personality disorder.<sup>43</sup> In addition, mental health disorders, like depression, can lead to suicide, which is the sixth leading cause of death in Eagle County.<sup>29</sup>

The current suicide rate in Eagle County is 14.5 per 100,000 population which sits slightly below the five-year annual average (14.8) and moderately below the state rate (19.4).<sup>8,13,14</sup> Although the age adjusted death rate for suicide in Eagle County is comparatively low, when taken into context considering the profound immediate, delayed, and permanent emotional, psychological, and financial losses associated, addressing mental health concerns in the county must remain a persistent topic of discussion.

In Eagle County there are several outpatient-only services available for individuals with mental health disorders. The following mental health programs and services are available in Eagle County:

### *Vail Valley Medical Center Resources*

While VVMC does not have a psychiatrist on staff, there are two licensed, clinical social workers present in the hospital Monday through Friday from 8:00 a.m. to 5:00 p.m. and on-call for emergencies on weekends. Any patient or care provider may request a social work consultation. Common reasons for requesting a social work consult include patients with emotional or mental health problems or patients with suicidal ideation. In the hospital setting, social workers provide patients with counseling and referrals for outside treatment.

Patients with mental health disorders who require inpatient treatment are admitted to VVMC for medical stabilization while placement at an outside mental health facility is pending. The current Vail Valley Medical Center off-hour resource is Mind Springs Health.

### *Mind Springs Health*

Mind Springs Health (MSH), formerly known as Colorado West Regional Mental Health is a non-profit organization providing mental health and substance abuse services throughout the Western Slope of Colorado. Its mission is “rebuild lives and inspire hope by providing exceptional mental health and addiction recovery care, strengthening the health and vitality of our communities.”<sup>33</sup> Mind Springs Health accepts Medicare, Medicaid, private insurance, and self-pay on a sliding scale.

Mind Springs Health offers a full range of programs including: adult and pediatric psychiatric services, group and individual therapy, crisis services, employee assistance programs, and substance abuse programs. VVMC has a collaborative relationship with Mind Springs in regard to mental health and detoxification services. If a patient presents to the VVMC Emergency Department, Mind Springs may provide social services in conjunction with the Town of Vail once the patient is medically cleared. These services are available 24 hours per day, seven days per week on an on-call basis.

VVMC and Mind Springs Health maintain a collaborative relationship, which allows healthcare providers to seek assistance with assessment, referrals to outpatient treatment, and placement in an inpatient facility for patients in a mental health crisis.

Therapy is available through Mind Springs for individuals, couples, families, and groups. Other services related to mental health offered include treatment for stress, anxiety, relationship and parenting issues, depression, crisis management, postpartum depression, post-traumatic stress disorder, and other serious mental health issues. Offices are located in both Vail and Eagle, where both English and Spanish speaking counselors are available. Mind Springs accepts self-payment, most private insurance, Medicaid, and Employee Assistance Program funding.<sup>7</sup>

### *Alpine Springs Counseling*

This organization offers a broad range of services related to mental health issues for adults and adolescents. There is a board-approved domestic violence education and treatment program as well as an anger management education and treatment program. Alpine Springs Counseling provides State-Certified Substance Abuse Treatment, Board-Approved Domestic Violence Treatment and Psychological Services. Alpine Springs Counseling has multiple offices in the VVMC service area with both English and Spanish-speaking counselors available.

### *Eagle Valley Counseling*

Eagle Valley Counseling offers a mix of mental health services and substance abuse services, with the intention of educating individuals on how these two issues are related. Its office is located in Edwards, and this group accepts private health insurance and self-payment on a sliding scale.

### *SpeakUp-ReachOut*

SpeakUp-ReachOut (SURO) is the Suicide Prevention Coalition of Eagle County whose goal is to reduce the number of suicides in Eagle County by providing “education, training and hope.” This group provides suicide prevention education and training programs to local schools and community organizations. Providers offer awareness programs and intervention and post-intervention resources to clients and their families. Offices are located in Avon, Edwards, and Eagle. All services provided by SURO are free of charge.

### *Samaritan Counseling Center*

The Samaritan Counseling Center is located in the town of Edwards and provides education, counseling and other mental health resources to both individuals and families of all ages. The counseling services offered include grief/end of life, spiritual, criminal justice, and post-traumatic stress disorder (PTSD). Self-payment on a sliding scale and most private insurance is accepted.

### *Private Practice Counselors*

There are over 20 private practice counselors and psychotherapists throughout Eagle County who treat individuals with mental health issues. The majority of these practitioners accepts private insurance and self-pay for treatment.

The Vail Valley Medical Center has recently embraced a Tele-Psych program with referral centers in Denver. When operational, this will provide psychiatric expertise including enhancing diagnostic and therapeutic options for residents.

## **7. Substance Abuse**

The U.S. Department of Health and Human Services defines substance abuse as “a set of related conditions associated with the consumption of mind- and behavior-altering substances that have negative behavioral and health outcomes.”<sup>28</sup> This is a health issue that has a tremendous impact on individuals, families, and communities. In the United States, about one in every 15 individuals is affected by substance abuse.<sup>29</sup> Substance abuse may substantially increase the incidence of other public health problems including teenage pregnancy, HIV/AIDs and other sexually transmitted diseases, domestic violence, child abuse, motor vehicle crashes, physical violence, crime, and suicide.<sup>10</sup> Not only do these issues impact physical health, but the financial, social, and emotional aspects of a community are severely affected.<sup>28</sup>

Eagle County’s rates of binge drinking are higher than that of the state as well as of national benchmarks.<sup>30</sup> Colorado ranks second worst in the nation for prescription drug misuse culminating in over 250,000 Coloradans misusing prescription opioids on a near annual basis.<sup>31</sup> Deaths around the misuse of

prescription opioids quadrupled from 1999 to 2014.<sup>32</sup> In the United States, 2014 can be heralded as the year in which more people died from drug overdoses than any year on record.<sup>32,33</sup> The majority of these deaths involved opioids as nearly 80 Americans die each day from an opioid overdose.<sup>33</sup> Unfortunately, the epidemic is not unique to the national or state level and continues to adversely affect the residents of Eagle County.

Vail Valley Medical Center as well as Eagle County at-large are challenged with substance abuse among residents. Although there are several counseling centers and multiple private practice counselors who provide outpatient therapy related to substance abuse and addiction in Eagle County, very few of them accept Medicare, Medicaid, have a sliding-scale fee structure, or provide charity care. This leads to issues with access to care for individuals in Eagle County suffering with substance abuse.

Inpatient substance abuse treatment currently does not exist in Eagle County. While VVMC may admit intoxicated patients for stabilization of acute medical issues, there are no readily available services to address the ongoing psychosocial needs of these patients. Currently, the limited resources available in Eagle County for substance abuse include the following:

*Screening, Brief Intervention and Referral to Treatment (SBIRT)*

In 2008, VVMC was one of 12 medical facilities in Colorado to receive funding via a federal grant to implement and maintain the Screening, Brief Intervention and Referral to Treatment (SBIRT) program. The goal of the program is to identify patients who use alcohol and other drugs, with the goal of reducing and preventing related health consequences, disease, accidents, and injuries.

At VVMC, incoming patients are screened to determine their individual use of alcohol, tobacco and/or drugs. A brief intervention is offered to those whose consumption is considered excessive and carries the potential for dependence. If an individual is identified as high risk, he/she may be referred for outside treatment.

Through universal screening, awareness is created to help educate patients on the potential negative health consequences of substance abuse. At VVMC SBIRT is the standard of care for all patients.

## *Eagle River Youth Coalition*

The Eagle River Youth Coalition (ERYC) is an organization whose mission is to identify and address youth and family needs through programs, policies, and strategic plans. ERYC collaborates with over 30 local entities in Eagle County and serves over 3,500 community members per year. The majority of services are free of charge to its clients.

The following services and programs are offered by ERYC:

*Project Towards No Drug Abuse (TND)* – In partnership with Eagle County Schools, ERYC supports this 12-session course for local high school students. Over 150 local youth currently engage in health classes that focus on evidence-based drug and alcohol reduction, violence prevention, and safe driving curriculum annually. TND addresses motivation factors, skills-building, and decision-making.

*Healthy Kids Colorado Survey* – ERYC coordinates administration of the biennial Healthy Kids Colorado Survey to local students in grades seven to 12. In 2014/2015, 2,600 students at 10 schools were surveyed on various behaviors, attitudes, and perceptions. Results, which include a multitude of alcohol and drug-related topics, are offered to the community to steer practices and help secure resources.

*Positive Social Marketing* – Positive results from the Healthy Kids Colorado Survey are incorporated into a marketing campaign designed to utilize peer pressure in a positive manner by aligning misperceptions with actual behavior. Local middle and high schools engage in the campaign, which includes a large emphasis on alcohol reduction.

*Educational Forums* – ERYC coordinates free educational events that indirectly and directly relate to alcohol and substance abuse. These events are typically geared toward parents and youth-serving professionals. Events leverage local experts, including medical professionals, law enforcement partners, and others who educate community members on various topics. Past event topics have included marijuana's impact on youth, brain development, and general substance abuse.

*Parent Education* – ERYC coordinates a range of parent education opportunities that directly and indirectly include substance use/abuse prevention and reduction components. Current opportunities include the free Eat! Chat! Parent! Series and Active Parenting of Teens series.

*Community Trainings* – ERYC coordinates a range of training opportunities for community members to gain professional development and certifications. Training topics may include addictions, counseling skills, child passenger safety, and parenting.

*Project Sticker Shock* – ERYC partners with local law enforcement entities and alcohol retailers for awareness campaigns around the dangers of purchasing and providing alcohol to minors. The campaigns occur during heavy underage drinking periods, including the Prom, Graduation, Fourth of July and school breaks.

*Safety Campaigns* – Similar to Project Sticker Shock, ERYC partners with local law enforcement agencies and event producers for safety messaging campaigns promoting youth prevention during public events that include alcohol and/or drug consumption.

*Enforcement* –Local Substance Abuse and Mental Health Administration (SAMHSA) Drug Free Communities grant, ERYC channels funds toward enforcement efforts that include: Driving Under the Influence (DUI), Minor In Possession (MIP), and compliance checks.

*Collaborative support* – ERYC supports a variety of direct-service providers through marketing, recruitment, referrals, and other capacity-building initiatives. These services include mentorship, recreation, and educational offerings.

*InteGreat!*– In an effort to decrease food insecurities, Summer Lunch program was started in the summer of 2015. In its first year, Summer Lunch program served 7,703 nutritious meals at three Eagle County Schools. To support this program, several VVMC employees volunteer their time to serve meals.

### *Alcoholics and Narcotics Anonymous*

Alcoholics Anonymous (AA) is a support group for men and women in alcohol recovery, with the goal of supporting individuals in their effort to achieve sobriety. There is no cost to AA members. The towns of Eagle, Edwards, and Vail provide daily meetings, with Spanish-speaking meetings are held five days per week in Avon and Eagle. Meetings are also available in the towns of Basalt, Beaver Creek and Minturn.

Narcotics Anonymous (NA) is a non-profit fellowship of men and women in recovery from narcotic abuse. They meet regularly to support each other with the goal of maintaining complete abstinence. There are meetings four days per week in the towns of Avon and Eagle. There are also Spanish-speaking meetings available. The town of Basalt holds a weekly NA meeting as well.

### *WayFinder*

Wayfinder is a program whose goal is to serve as a single point of entry for the coordination and integration of care for adolescents between the ages of 10 to 18. This group performs comprehensive assessments for clients, develops individualized treatment plans, coordinates “wraparound” treatment services, performs long-term progress monitoring and provides evaluation. This program does not offer direct services, but rather works with existing service providers in Eagle County to ensure the delivery of integrated care, including substance and alcohol abuse services.

### *Al-Anon*

Al-Anon is a support group for families and friends of alcoholics. Meetings are offered in Beaver Creek, Eagle, and Edwards and are free of charge.

## **V. Conclusion**

Creation of the Community Health Needs Assessment involved the critical appraisal of services provided by Vail Valley Medical Center, the health profile of Eagle County residents, and contemporary public health prioritization methodologies. The results of this assessment yield important findings related to the health needs of the community served by VVMC. Through this process, it became clear that some needs are currently part of the mission and vision of VVMC, while others are not yet addressed or are not feasible within the constraints of the current healthcare climate of the county or the organization. Although VVMC currently provides community benefits in excess of previously published national averages for tax-exempt hospitals, this report will serve as scaffolding around which Vail Valley Medical Center will continue to build its vision of providing superior health services to the residents and guests of Eagle County.<sup>14, 64</sup>

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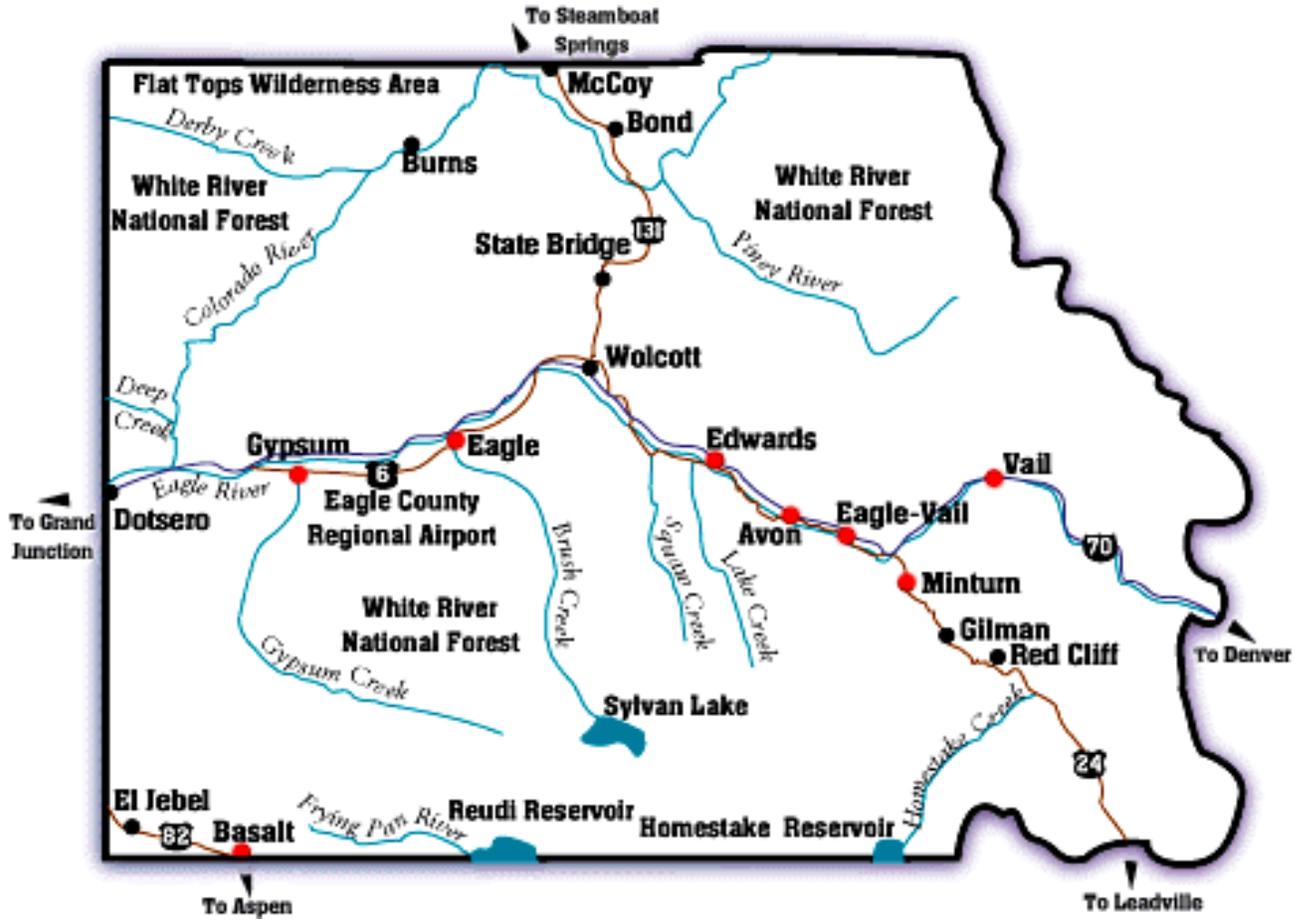
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**Appendix A. Map of Eagle County**



## Appendix B. Vail Valley Medical Center Service Locations

