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OVERVIEW

Headquartered in Phoenix, Ariz., Banner Health is one of the nation’s largest nonprofit health care systems and is guided by our mission: “We exist to make a difference in people’s lives through excellent patient care.”

This mission serves as the cornerstone of operations at our 24 hospitals and care facilities located in small and large, rural and urban communities spanning seven western states. Collectively, these facilities serve an incredibly diverse patient population and provide more than $149 million annually in charity care – treatment without the expectation of being paid. As a nonprofit organization, we reinvest revenues to add new hospital beds, enhance patient care and support services, expand treatment technologies, and maintain equipment and facilities. Furthermore, we subsidize medical education costs for hundreds of physicians in our residency training programs in Phoenix and Greeley, Colo.

With organizational oversight from a 15-member board of directors and guidance from both clinical and non-clinical system and facility leaders, our more than 35,000 employees work tirelessly to provide excellent care to patients in Banner Health hospitals, clinics, surgery centers, home care and hospice facilities.

While we have the experience and expertise to provide primary care, hospital care, long-term acute care and home care to patients facing virtually any health condition, some of our core services include: cancer care, emergency care, heart care, maternity services, neurosciences, orthopedics, pediatrics and surgical care. Specialized services include behavioral health, burn care, high-risk obstetrics, Level 1 Trauma care, organ and bone marrow transplantation and medical toxicology. We also participate in a multitude of local, national and global research initiatives, including those spearheaded by researchers at Banner Alzheimer’s and Banner Sun Health Research institutes.

Ultimately, our unwavering commitment to the health and well-being of our communities has earned accolades from an array of industry organizations, including distinction as a Top 5 Large Health System by Truven Health Analytics (formerly Thomson Reuters) and one of the nation’s Top 10 Integrated Health Systems according to SDI and Modern Healthcare Magazine. Banner Alzheimer’s Institute has also garnered international recognition for its groundbreaking Alzheimer’s Prevention Initiative, brain imaging research and patient care programs. Further, Banner Health, which is the second largest private employer in both Arizona and Northern Colorado, continues to be recognized as one of the “Best Places to Work.”

In the spirit of the organization’s continued commitment to providing excellent patient care, Banner Health conducted a thorough, system wide Community Health Needs Assessment (CHNA) within established guidelines for each of its hospital and healthcare facilities with the following goals at the heart of the endeavor:

- Effectively define the current community programs and services provided by the facility
- Assess the total impact of existing programs and services on the community
- Identify the current health needs of the surrounding population
- Determine any health needs that are not being met by those programs and services, and/or ways to increase access to needed services
- Provide a plan for future programs and services that will meet and/or continue to meet the community’s needs

Participants in the CHNA process include members of Banner Health’s leadership teams and strategic alignment team, public health experts, community representatives and consultants. A full list of participants can be viewed in Appendix B. The CHNA results have been presented to the leadership team and board members to ensure alignment with the system wide priorities and long-term strategic plan. One result of the CHNA process is Banner Health’s renewed focus on collaboration with governmental, nonprofit and other health-related organizations to ensure that members of the community will have greater access to needed health care resources.

Banner Health has a strong history of dedication to community and of providing care to the underserved populations. The CHNA process has helped identify additional opportunities to better care for populations within the community who have special and/or unmet needs; this has only strengthened our commitment to improving the health of the communities we serve.

For North Colorado Medical Center’s leadership team, this has resulted in a renewed commitment to continue working closely with community and health care leaders who have provided solid insight into the specific and unique needs of the community. United in the goal of ensuring that community health needs are met now and in the future, these leaders will remain involved in ongoing efforts to continuously assess health needs and subsequent services.
In addition to being one of the main employers within the community, North Colorado Medical Center (NCMC) is the primary medical facility for Weld County. The hospital originally opened its doors in 1904 as the Greeley Hospital; it was a 30 bed facility with a single operating room for surgeries and maternity cases. The name of the facility evolved over the years to Weld County Hospital to Weld County General Hospital and was eventually renamed North Colorado Medical Center. Through the years and name changes, the one constant has been the hospital’s commitment to meeting the needs of the growing community.

NCMC is now a fully accredited, private, nonprofit facility licensed to operate 378 beds. It serves as a regional medical center with community-based and specialty services in a service area including southern Wyoming, western Nebraska, western Kansas and northeastern Colorado. NCMC also has community care clinics in Eaton, Greeley, Johnstown and Windsor.

Summit View Medical Commons is an extension of NCMC; it is a state-of-the-art diagnostic facility in west Greeley, providing a wide variety of services for West Greeley residents, including a comprehensive pharmacy, anticoagulation clinic, medical imaging, mammograms, breast health and urgent care. Summit View Pharmacy is the only pharmacy in Greeley to offer custom prescription compounding and carries a broad selection of over-the-counter products and can special-order many additional items. Pharmacists also provide medication review and consultation services. The Anticoagulation Clinic manages and evaluates patients receiving Coumadin and other anticoagulation therapies. Close monitoring of these patients improve outcomes by diminishing clotting and bleeding episodes. Medical imaging services include MRI, CT, X-Ray, Ultrasound and PET/CT. The facility includes a Breast Center, which offers Mammography, Breast MRI, Breast Ultrasound, Stereotactic Biopsy, MRI Breast Biopsy and DEXA (diagnostic bone density). Additionally, Summit View offers a full array of outpatient lab services as a satellite of NCMC, including PKU testing, EKG and blood drawing. Banner Summit View Urgent Care is a walk-in urgent care center and is open to all patients. The facility also offers extended weekday and weekend hours for most services.

Helping deliver top notch care are approximately 2,900 employees, 250 physicians and more than 400 volunteers. In 2011, the hospital served more 15,000 inpatients, delivered close to 2,000 babies and provided emergency care to an additional 53,000 plus patients. The hospital provides a range of medical services; key service areas include:

- Bariatric Surgery - Center of Excellence
- Burn Care
- Cardiac Care/Cardiac Rehabilitation
- Cancer Care
- Emergency Care/Trauma Services
- Maternity Services/Women’s Health
- Medical Air Transport Services
• Surgical Care

NCMC professionals are nationally recognized for excellence in many programs such as burn and trauma care. The cardiac program was recently recognized as being in the Top 100 in the country. Additionally, the medical center is home to a highly-rated cancer care program and Cancer Institute. Designated as a Level II Trauma Center, NCMC has provided a medical air transport service to the region since the early 1980s.

North Colorado Med Evac is the medical air transport program; the most experienced service in the region. Med Evac operates two helicopters available 24 hours a day, seven days a week to provide fast transport and quick care to trauma victims, individuals experiencing severe medical emergencies and high-risk obstetrical patients who need immediate, specialized care. The accredited critical care air transport service flies more than 1,500 missions a year, servicing a 300-mile radius of Greeley, including northern Colorado, southern Wyoming and western Nebraska. The staff includes 10 flight paramedics, 18 flight nurses and eight pilots serving the region. Additionally, the program boasts a high-risk obstetrics team that allows pregnant patients at risk for complications to either the mother or fetus to be safely transported by helicopter to hospitals that specialize in maternal fetal medicine.

Like other Banner Health hospitals, NCMC leverages the latest medical technologies to ensure safer, better care for patients. Physicians document patient care in electronic medical records, which they can access remotely. The campus is also part of the Banner iCare™ Intensive Care Program where specially trained physicians and nurses back up the bedside ICU team and monitor ICU patient information 24 hours a day, seven days a week. The hospital also offers robotic surgery which can lead to shorter recovery times for surgical patients. Yet another example is the medical center’s use of an intelligent OB program to help reduce the chances of complications during labor and delivery.

NCMC has been recognized repeatedly for their clinical excellence and quality outcomes; some of their more recent recognitions include Truven Health Analytics Top 100 Hospital 2013, Ranked No. 5 in Colorado and recognized among the Best Hospitals in northeastern Colorado by U.S. News and World Report (NCMC was also ranked high-performing in eight specialties.), Healthgrades® America’s 100 Best Hospitals, Healthgrades® 2012 Distinguished Hospital Award for Clinical Excellence™, Healthgrades® 2012 Emergency Medicine Excellence Award™, Healthgrades® 2011 Distinguished Hospital Award for Clinical Excellence™, Healthgrades® 2011 Emergency Medicine Excellence Award™, Colorado Performance Excellence (CPEx), Timberline Award, Union Colony Fire Authority Award to the Western States Burn Center, American Heart Association “Get with the Guidelines” recognition for Heart Failure and Coronary Arterial Disease, Cardiac Alert awarded Healthcare Hero Award and Banner Health Vision Award, Ranked top 1 percent in the United States for Heart Attack Care based on Medicare Core Measures, Care Science Select Practice National Quality Leaders in the category of Heart Failure, Ischemic Stroke, and Pneumonia, WELCOA, Well-Workplace Gold Award, Beacon Award for Critical Care Excellence - ICU, 2010, 2011, Beacon Award for Critical Care Excellence - CVCU, 2011 and the ‘Winners’ Circle Award, Greeley Chamber of Commerce for community involvement.
NCMC is one of two hospitals in Weld County; the other hospital is Northern Colorado Rehabilitation Hospital, a 40 bed hospital located in Johnstown. There are several hospital facilities in the counties immediately surrounding Weld County; they include: Children’s Hospital Colorado, University of Colorado Hospital Anschutz Inpatient Pavilion, Platte Valley Medical Center, Haven Behavioral Senior Care of North Denver, North Suburban Medical Center, Vibra Hospital and St. Anthony North Hospital (located in Adams County); Boulder Community Foothills Hospital, Boulder Community Hospital, Exempla Good Samaritan Medical Center, Longmont United Hospital, Avista Adventist Hospital and Centennial Peaks Hospital (located in Boulder County); McKee Medical Center (a Banner facility), Estes Park Medical Center, Poudre Valley Hospital, Northern Colorado Long Term Acute Hospital and Medical Center of the Rockies (located in Larimer County); Sterling Regional MedCenter (a Banner facility located in Logan County); and East Morgan County Hospital (a Banner facility located in Morgan County).
COMMUNITY DESCRIPTION

NCMC is located in Greeley, Colorado, within Weld County in the northern part of the state. Greeley is the county seat and is the 12th most populous city in the state of Colorado.

NCMC is the second largest employer in Greeley, second only to JB Swift & Company. Additional large employers within the city include Weld County School District, US Government, County of Weld, State Farm, City of Greeley, Wal-Mart, AIMS Community College and Star Trek.

According to the 2010 U.S. Census, Greeley has an estimated population of a little over 95,000. The census survey also indicates that women slightly outnumber men; 96 percent of the population is either white or Hispanic, and the median household income is $43,466, compared to a median household income of $57,685 for Colorado residents. The number of individuals living below the poverty line in the city of Greeley is just under 23 percent. The percentage of individuals living beneath the poverty level in the U.S. is 12.5 percent.

While the facility is located in Greeley, the hospital patient population extends further into Weld County; the hospital’s primary service area includes the cities/towns of Evans, Eaton, LaSalle, Windsor and Johnstown. According to Truven Health Analytics Market Expert tool (Market Expert), the hospital’s primary service is expected to experience growth at a rate considerably higher than the national average, over the next several years.
Market Expert shows the hospital’s primary service area’s population is evenly split between male and female population, 50.1 percent and 49.9 percent, respectively. Within the female population, approximately 43 percent are of child-bearing age (15 – 44).

NCMC has a slightly younger demographic than the national average, with less than 20 percent of the population over the age of 55.

The two largest age groups are the pediatric and adult (ages 35 to 54) populations. Based on the distributions, it would seem likely that families constitute a significant part of the community.

Eighty-three percent of the population, over the age of 25, has at least a high school education, which is just below the national average (85 percent).

Interestingly though, of the population who has at least a high school degree, the percentage who have also attended college is 3 percent above the national average.
Forty-eight percent of the population has a household income of $50,000 or greater, with the largest single segment of the population having an annual household income of between $25,000 and $50,000.

Twenty-four percent of the population has an annual household income below $25,000; on-par with the national average (24 percent).

The White (non-Hispanic), population is the largest ethnic group within the service area, with Hispanics constituting the second largest segment of the community. While not the largest ethnic group, the Hispanic population in the service area is significantly greater than the national average.

All other ethnicities, including the Black and Asian/Pacific Islander populations, account for approximately 4 percent of the population, combined, which is significantly below the national average (20 percent).
COMMUNITY HEALTH NEEDS ASSESSMENT METHODOLOGY

NCMC’s process for conducting their CHNA leveraged a multi-phased approach to understanding gaps in services provided to its community, as well as existing community resources. A focused approach to understanding unmet needs especially for those within underserved, uninsured and minority populations included a detailed data analysis of national, state and local data sources, as well as obtaining input from leaders within the community.

Banner Health CHNA Steering Committee:

As part of the process for evaluating community need, a Banner Health CHNA Steering Committee was formed. This committee, which was commissioned to guide the CHNA process, was comprised of professionals from a variety of disciplines across the organization. This steering community has provided guidance in all aspects of the CHNA process, including development of the process, prioritization of the significant health needs identified and development of the implementation strategies, anticipated outcomes and related measures. A list of the steering committee members can be found under Appendix A.

Assessment Process – Data Analytics:

The CHNA process started with an overview of the primary service area. The service area was defined as the market where at least 75 percent of inpatient admissions originated. Data analytics were employed to identify Inpatient and ED visits to NCMC, as well as health and socioeconomic trends within the community. Quantitative data reviewed included information around demographics, population growth, health insurance coverage, hospital services utilization, primary and chronic health concerns, risk factors and existing community resources.

The primary data sources that were utilized to access primary service information and health care trends include:

- American Cancer Society, Cancer Facts & Figures 2013
- American Diabetes Association, 2011 Fact Sheet
- American Lung Association
- America’s Health Rankings, 2012
- Behavioral Risk Factor Surveillance Survey, 2011
- County Health Rankings – Weld County, 2012
- Center for Disease Control Heart Disease Fact Sheet
- National Institute on Drug Abuse, 2011 Facts
- National Institute of Mental Health
- Outpatient Emergency department (ED) data, 2012
- Truven Health Analytics Market Expert, 2013
- U.S. Census, 2010
Although the data sources provided an abundance of information and insight, data gaps still exist, including determining the most appropriate depth and breadth of analyses to apply. Additional gaps include:

- Data are not available on all topics to evaluate health needs within each race/ethnicity by age-gender specific subgroups.
- Limited data are available on diabetes prevalence and health risk and lifestyle behaviors (e.g. nutrition, exercise) in children.

**Assessment Process – Community Input/Community Advisory Council:**

Data analytics, as identified above, were used to drive the Community Advisory Council (CAC) participation. Once gaps in access to health services were identified within the community, the steering committee worked with NCMC’s leadership to identify those impacted by a lack of health and related services. Individuals that represented these populations, including the uninsured, underserved and minority populations were invited to participate in a focus group to review and validate the data, provide additional health concerns and feedback as to the underlying issues and potential strategies for addressing. A list of the organizations that participated in the focus group can be found under Appendix B.

**Summary of Findings and Addressing Need:**

Upon the completion of NCMC’s needs assessment, a summary of findings was comprised for review by the steering committee, NCMC’s leadership team, Banner Health system Senior Management and the Banner Health Board of Directors. Needs assessments were then used to determine gaps in health-related services and services that were not reaching specific populations within the community, including children, seniors and minority populations. This summary also includes a synopsis of pressing issues impacting the community. Once significant health needs were highlighted, NCMC’s leadership team worked with the steering committee to make recommendations for how best to prioritize and address the needs identified.
SUMMARY OF COMMUNITY SIGNIFICANT HEALTH NEEDS

The summary of community health needs is comprised of two components – stakeholder feedback from the community and data analytics pulled from aforementioned data and health indicator sources. The CAC, comprised of hospital administrators, community leaders and other stakeholders, provided the insights necessary to complete a thorough CHNA. Many of the community leaders who participated in the CAC represent the underserved, underinsured and minority populations. The community health needs were then prioritized, based on a defined set of criteria; the prioritization criteria can be found under Appendix C.

Access to Care

According to the 2012 America’s Health Rankings, the uninsured population has increased 15 percent over the past 10 years. The data from Market Expert shows that within NCMC’s primary service area, 18.1 percent of the population is uninsured and an additional 12.8 percent are on Medicaid. That equates to approximately 31 percent of the population being either uninsured or on Medicaid. Additionally, 9.4 percent of the population is on Medicare.

These are important indicators as often individuals without insurance, and even those who are underinsured, experience greater difficulty readily accessing health care services, particularly preventive and maintenance health care. This can be very costly, both to the individuals and the health care system.
According to the CAC, access to care is an issue, particularly among the low income and uninsured populations. Insufficient providers and services is a significant contributor to this issue, across primary care, specialty care and behavioral health services. Additionally, financial resources and transportation pose serious barriers for many. Even where local resources are available, some community members struggle with transportation and financial constraints related to co-pays and deductibles, which only increases the individuals’ inability to seek preventive and maintenance care, even urgent care, leading them to the ED or in need of inpatient care.

The North Colorado Health Alliance conducted focus groups with individuals who had sought care through the ED on a consistent and/or frequent basis. The two main reasons that these individuals cited for presenting to the ED for treatment were that:

1. They had contacted their Primary Care Physician, but were unable to get an appointment that fit their availability and/or “emergent” need and were instructed by their provider’s office to go to the ED.
2. They had seen advertisements promoting the high quality of diagnostic equipment/procedures and level of care that were available through the ED and wanted to access the best care for themselves and/or their family members.

Not surprisingly, Banner Health’s internal data showed that a large percentage of uninsured, Medicaid and Medicare ED visits to NCMC that were treated and released were for primary care and behavioral health issues. Diagnoses groups with high volume of visits in 2012 for these populations include upper respiratory infections (URIs); ear, nose & throat (ENT) infections; abrasions/contusions/ wounds; mental health; substance abuse; abdominal pain/nausea; urinary tract infections (UTIs); heart attack/symptoms; pregnancy complications and skin conditions/rashes. While some of these diagnoses are truly emergent situations, the data clearly illustrates that all age groups are visiting the ED for services that could often be handled through a primary care provider (PCP).

It was suggested that to prevent individuals from getting into the ED and inpatient settings, there needs to be more focus on providing preventive care that is no cost or very low cost and education of the community to help change behavior. To ensure the greatest likelihood of success, it was further suggested that the education should be provided at the initial point of care (i.e. when they present in the ED, not weeks later). The council also felt that since marketing has been such an effective means of driving people into the EDs, it may also be an effective way to educate and retrain them about how they access care and available resources in the community.

Additional suggestions discussed by the group included: an urgent care near the medical campus to provide a convenient alternative for patients seeking non-emergent care; a call line staffed by providers to help drive patients to the appropriate level of care; and home visits to better understand underlying issues that impact the overall health of patients with frequent ED visits.

Given the relatively high percentage of pediatric population within the community, it is not surprising that this was another topic of concern within the council. Within the Weld County School District, school nurses have become the primary healthcare providers for many students. However, as a result of
funding cuts, there is no longer a designated school nurse for each school; they now travel to the
schools within the district. When there is not a school nurse on-site, care is often provided by a school
secretary or “health clerk”, which is typically a volunteer parent. They are able to provide an initial
assessment, such as basic vitals and the nature of the problem, but are often unable to treat. On-site
clinics would increase attendance and decrease the time parents must take away from work. Sunrise
Clinic does currently have several school-based clinics, which provides huge relief to those sites, but
more are needed. One suggestion was implementing telemedicine in the schools, allowing the school
representative to connect to a provider in a real time way to do a more thorough assessment and
receive quick guidance as to the appropriate level of care needed.

Chronic Disease

Chronic diseases, such as cancer, diabetes and heart disease continue to cut short the lives of millions of
Americans each year and contribute significantly to health care costs.

Cancer: While advancements continue to be made in the fight against cancer, it remains one of the
leading causes of death across the nation. According to the American Cancer Society, lung cancer
continues to cause more deaths than any other cancer, regardless of gender, despite the prevalence of
breast cancer in women and prostate cancer in men.

The American Cancer Society also indicates that cancer in children under the age of 14 is very rare,
representing less than one percent of all new cancer diagnoses. While it is relatively uncommon, it still
remains the second leading cause of death in children, second only to accidents.

America’s Health Rankings 2012 State by State Comparison reports Colorado has the 6th lowest rate of
cancer related deaths across the nation.

Diabetes: According to the American Diabetes Association 2011 Fact Sheet, 8.3 percent of the
population of the United States has diabetes; this equates to 25.8 million children and adults. Of that
25.8 million, more than 25 percent are undiagnosed. There are an additional 79 million people who are
prediabetic and are poised to develop the disease. Complications from diabetes include heart disease,
stroke, high blood pressure, blindness, kidney disease, neuropathy, amputation and death. Sadly, this is
a type 2 diabetes is also increasing prevalence among the pediatric population.

The America’s Health Rankings 2012 State by State Comparison reports that Colorado has the lowest
prevalence of diabetes in the nation, with 6.7 percent of the population having diagnosed diabetes,
compared to 9.5 for the national average. While Colorado has the lowest incidence of diabetes within
the United States, the prevalence within the state has steadily increased over the past 15 years.

Heart Disease: Heart disease is the leading cause of death in the United States for both men and
women, and most racial/ethnic groups, as well. The primary risk factors include diabetes, overweight/
obesity, poor diet, physical inactivity and excessive alcohol use.

Colorado was ranked as 26th (with 1st being the best) for heart disease, according to the America’s
Health Rankings 2012 State by State Comparison.
As stated above, access to care is an issue for many in the service area and may be preventing members within the community from seeking the preventive and maintenance care they need to effectively manage their chronic conditions.

Also of note, the Centers for Disease Control and Prevention (CDC) report the link between chronic disease and mental health as an emerging trend nationwide. Chronic disease often leads to depression. Likewise, depression and other mental health issues make chronic disease management more challenging.

**Behavioral Health**

Behavioral Health encompasses both mental health conditions, such as depression and anxiety disorders, and substance abuse issues, including alcohol, prescription medication, illicit drugs and tobacco.

**Mental Health:** According to the National Institute of Mental Health, in a given year, an estimated 26.2 percent (57.7 million) Americans over the age of 18 have a diagnosed mental disorder, and nearly 6 percent suffer from serious mental illness. In fact, Major Depressive Disorder is the leading cause of disability in the United State for ages 15 to 44, and is more prominent in females than males.

Suicide has also begun to receive recognition as a serious, and preventable, public health issue. In 2007, suicide was the 11th leading cause of death in the United States, and it is estimated that for every suicide that results in death, there are an additional eight to 25 attempts. While men are nearly four times more likely to die from suicide, women attempt suicide two to three times more often than men. Elderly individuals are disproportionately more likely to die by suicide; in fact, the highest suicide rates in the United States are white men over the age of 85.

In the *2012 America’s Health Rankings*, Colorado was ranked 44th (50th being the worst) for suicide, with 18.9 deaths per 100,000; the national average is 12 per 100,000.

Behavioral health, encompassing mental health and substance abuse, was a topic of considerable discussion within the group, and is further illustrated as an issue through the ED data. While the council recognized there is good collaboration between North Range Behavioral Health and the Sunrise Clinics, integrating physical and behavioral health, those with mental health issues are often still hesitant to seek help. Despite the fact that many do not reach out for help until they are in crisis, there are still insufficient resources within the community to meet the current needs, particularly for the uninsured population. The same is true for those in need of substance abuse programs; the greatest gap exists among the uninsured population.

**Substance Abuse:** In 2011, a startling 8.4 percent of Americans needed treatment for a problem related to drugs or alcohol, but less than one percent received treatment at a specialty facility, according to the National Institute on Drug Abuse. The health care costs in that same time period associated to substance abuse, including alcohol, illicit drugs and tobacco, were approximately $137 billion.
According to *America’s Health Rankings 2012 State by State Comparison*, 20.1 percent of the adult population in Colorado reported binge drinking, placing them 37th in the nation (50th being the worst). As reported in the *2012 County Health Rankings*, Weld County’s percent of the adult population that reported excessive drinking (binge, plus heavy drinking) is considerably lower, at 17 percent. The council still indicated this is an issue within the community.

While tobacco use has declined considerably over the past several years, it is still a considerable problem and has been classified as, “the agent most responsible for avoidable illness and death in America today,” according to Healthy Communities Institute. They also state, “Approximately, one-third of all tobacco users in this country will die prematurely because of their dependence on tobacco.” Additionally, tobacco use has been linked to other adverse health effects, including cancer, respiratory infections and asthma. *America’s Health Rankings* reports that the percent of adults who smoke in Colorado is lower than the national average, 18.3 percent and 21.2 percent of the population, respectively. According to the *County Health Rankings*, Weld County is on par with Colorado, with 18 percent of adults reporting they smoke.

**Women and Infant Services**

The infant mortality rate is considered one of the most widely utilized indicators of the overall health status of a community. The leading causes of death among infants are birth defects, pre-term delivery, low birth weight, Sudden Infant Death Syndrome (SIDS) and maternal complications during pregnancy. According to the *2012 America’s Health Rankings*, infant mortality has decreased 36 percent from 1990 to 2012, with the greatest occurrences in the African-American population. In the *State by State Comparison*, Colorado is ranked as having the 22nd lowest rate in the nation, with a rate of 6.2 deaths per 1,000 live births; on-par with the national average (6.5 deaths per 1,000 live births).

Not only can low birth weight contribute to infant mortality, but low birth weight babies are more likely to require specialized medical care. Low birth weight is often associated with premature birth and certain risky behaviors by the mothers such as not taking prenatal vitamins, smoking, use of alcohol and/or drugs and not receiving appropriate prenatal care. Unlike Infant Mortality, Colorado’s rate of low birth weight babies is slightly higher than the national average, at 8.8 percent of births classified as low birth weight, compared to the national average of 8.1 percent. According to the *County Health Rankings*, 2012, Weld County is relatively on-par with the national average, at 7.8 percent.

Preterm births has been identified as one of the biggest contributors to low birth weight babies, as noted above. However, despite their higher rate of low birth weight babies, Colorado actually has an incidence of preterm birth rates (10.8 percent) that is lower than the national average (12 percent), according to the *2012 America’s Health Rankings State by State Comparison*.

Teen births are also a significant health concern, as they pose potential risks to both the mother and the baby, including preterm deliveries and low birth weight. Colorado ranks 27th out of the 50 states in teen birth rate (1st being the best), at 33.4 per 1,000 births; the national average is 34.2. According to the *2012 County Health Rankings*, Weld County is significantly lower at 21.
Behavioral Risk Factors (Health Behaviors)

The 2003 Health Affairs publication broke Determinants of Health into five categories: Health Care, Environmental Exposure, Social Circumstances, Genetic Predisposition and Behavioral Patterns. Interestingly enough, it was Behavioral Patterns that came out the big winner, with Health Care a distant fourth place.

As demonstrated in this graphic, a strong correlation has been identified between health status and obesity, nutrition, physical inactivity, tobacco use and alcohol/drug use. It’s not surprising then that as the rate of obesity, poor nutrition and physical inactivity have increased so has the rate of diabetes, with both obesity and diabetes soaring to the ranks of a national epidemic. In fact, according to America’s Health Rankings, 2011 is the first year where every state reported an obesity rate of 20 percent or greater. They further report that if the current obesity trend continues, 43 percent of the population will be obese by 2018.

Healthy Communities Institute states that the percent of obese adults is an indicator of the overall health and lifestyle of a community and can have a significant impact on health care spending. Additionally, as noted above, obesity increases the risk of several chronic conditions such as Type 2 diabetes, heart disease, cancer, hypertension, stroke, liver and gallbladder disease, respiratory problems and osteoarthritis. According to the 2011 Behavioral Risk Factor Surveillance Survey (BRFSS), as report through the County Health Rankings, 25 percent of adults in Weld County are obese. The state average, as reported in 2012 America’s Health Rankings is 20.7 percent, which is better than both the national average (27.8 percent) and the Healthy People 2020 national health target (30.6 percent). In fact, Colorado has the lowest obesity rate in the nation. While recognized as having the lowest prevalence of
obesity in the nation, the prevalence within the state has tripled over the past 20 years and disparately impacts the non-Hispanic black population (28.5 percent), compared to non-Hispanic whites at 18.7 percent.

Alcohol, drug and tobacco use were discussed under Behavioral Health.
RESPONSE TO COMMUNITY SIGNIFICANT HEALTH NEEDS

Prioritization

The Banner Health Community Health Needs Steering Committee developed a prioritization process and criteria for evaluating the significant health needs identified through the CHNA. The process and criteria can be reviewed in further detail in Appendix C. Each steering committee member was afforded an opportunity to independently, as well as collectively prioritize the health needs. Through consensus discussion, the steering committee narrowed the top ranked priority areas to the following:

- Access to Care
- Chronic Disease Management, with a focus on Diabetes and Heart Disease
- Behavioral Health, including mental health and substance abuse
- Obesity, with a focus on nutrition and physical activity
- Smoking/Tobacco Use

Strategies for Addressing Priority Areas

The steering committee, along with other key stakeholders, devised strategies and tactics for addressing the prioritized health needs identified through the CHNA. Banner Health’s Senior Leadership Team also reviewed the strategies and tactics to ensure alignment with Banner Health’s strategic plan for the coming years. Ultimately, the full CHNA Report, including the Implementation Strategies, was reviewed and approved by the Banner Board of Directors on December 7, 2013.

Across these priority health concerns, there were several consistent contributing factors, such as lack of awareness of services and resources available in the community, ease of accessing the services, coordination of care and community engagement. As such, while each of the strategies and supporting tactics is aligned to a specific health concern, many of them truly cut across several or all of the priority areas. Additionally, these common themes are evident in many of the strategies and supporting tactics across each of the five priority areas.

PRIORITY NEED #1: ACCESS TO CARE

Recognizing the need for increased access to services for the uninsured and underinsured populations within the community, Banner Health has partnered with Sunrise Community Health, a Federally Qualified Health Center (FQHC), to construct another Sunrise clinic in the nearby community of Loveland. Additionally, as transportation is such an issue within the community, Banner Health also advocated for a bus stop to be placed near the clinic, helping to not only ensure the care is available, but also that it is easily accessible.

Further, Banner Health is dedicated to providing system-wide community health events and services to the public. Health events include health screenings, support groups, blood drives and health fairs in addition to many other events that bring value to nearby communities and encourage preventive health care.
Banner North Colorado Medical Center fulfills this community benefit through ongoing events and programs that cater to the health needs of the surrounding population. The medical center places great importance on the inclusion of uninsured and low-income individuals in free health events and other services. The facility provides numerous health fairs and classes aimed at hard-to-reach populations and spreads word of such events through social media outreach, print advertising and other broad-based communications efforts. Some examples include: diabetes education classes; cardiovascular classes; prenatal education classes; family life education; pulmonary rehabilitation; wellness screenings and classes; community health fairs and support groups for bariatric surgery, burn survivors, cancer, diabetes, breastfeeding and sleep apnea.

Additionally, the hospital offers the following programs and outreach to help support the community:

- **Spirit of Women Events** - Spirit of Women is a growing network of premier hospitals and health centers across the country that motivate women to make positive changes in their lives and the lives of their families through total well-being: mind, body and spirit. The underlying belief is that knowledge and support are the keys to wellness. North Colorado Medical Center regularly presents Spirit of Women programs that include up-to-date health information for women and the important people in their lives. These events also feature fun activities that enhance a healthy lifestyle.

- **Hospitality House** – Housing available for families and friends who need a place to stay while their loved one is a patient at North Colorado Medical Center. Approximately $10,000 of charity lodging provided to guests at Hospitality House or a community hotel, annually.

- **Turkey Trot** – A 5k run/walk event with close to 3,000 participants annually. Funds raised by the event go to provide cardiac-rehabilitation services.

Throughout its facilities’ community outreach efforts, Banner Health’s priorities are in alignment with national health priorities. For example, many community health events and classes are aimed towards helping participants adopt healthy behaviors, improve their health status, and reduce their use of hospital services and emergency room visits.

The total amount spent on charity care, community benefit and other financial assistance for patients at NCMC for 2012 was close to $32 million.

<table>
<thead>
<tr>
<th><strong>Strategy #1: Increase access to preventive and maintenance care</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anticipated Outcome:</strong> Reduce the use of the Emergency department for non-emergent care, as measured through Banner McKee’s outpatient ED utilization</td>
</tr>
<tr>
<td><strong>Tactics</strong></td>
</tr>
<tr>
<td>- Promote participation in MyBanner (online patient portal)</td>
</tr>
<tr>
<td>- Implement Patient Centered Medical Homes in the community (Banner Medical Group)</td>
</tr>
</tbody>
</table>
**Priorities**

- Offer extended hours for Primary Care Provider (PCP) clinics within Banner Medical Group
- Offer educational materials and links to community resources related to the insurance marketplace
- Promote both internal and external community resources that support preventive and maintenance care via the facility website
- Offer and participate in free health activities (e.g. screenings, health fairs, blood drives)
- Partner with Sunrise to open a new Federally Qualified Health Center

**Priority Need #2: Chronic Disease Management (with a focus on diabetes & heart disease)**

As noted above, NCMC offers a rich variety of programs that provide education, support and resources for those with chronic conditions, including support groups for cancer and diabetes. Additionally, Patient Centered Medical Homes should further increase the coordination of care, which is so critically important to this population. PCMH is a way of practicing medicine that actively engages the patient in their health management and takes care of them in a more comprehensive manner through a team-based approach, including case managers and pharmacists. This team-based model of care, led by a primary care physician, provides continuous and coordinated care to ensure the highest level of health care is being offered to the patient. Medication management is also a key part of the PCMH, with dedicated pharmacy resources to evaluate and advise providers and patients regarding medication regimens, as well as provide education on generic prescription alternatives.

In 2011, Banner Health Network (BHN) was selected to participate in the Pioneer Accountable Care Organization (ACO) model, a transformative new initiative sponsored by the Centers for Medicare and Medicaid Services (CMS) to provide Medicare beneficiaries with higher quality care, while reducing growth in Medicare expenditures through enhanced care coordination. BHN is a comprehensive provider network that accepts patient care and financial accountability for those served by the network. It is one of a few networks in Arizona serving patients in a population health management model. As part of this innovative model, BHN has implemented several strategies, including education and awareness materials and events, as well as a Lifestyle Management Program, that target chronic disease. BHN’s Lifestyle Management Program primarily serves patients who have been newly diagnosed with a chronic disease and is focused on helping the patient understand their disease and how they can best care for themselves to achieve the best outcomes. While this primarily impacts Arizona at this time, some of the strategies and best practices can translate across the system.

Additionally, while a separate priority area, with the correlation of healthy lifestyle choices and chronic disease, the strategies and supporting tactics we employ around obesity, nutrition and physical inactivity would support our efforts around chronic disease, particularly as they relate to diabetes and heart disease. Similarly, the strategies around tobacco use would also support prevention of lung and bronchial cancers. Further, while mental health is also addressed separately, we recognize the connection, both from a behavioral change standpoint and from the potential impact a chronic disease can have on one’s mental health. Again, one of the intents of Patient Centered Medical Homes and
increased case management functions are to ensure the coordination of care across these closely aligned areas that contribute to the overall well-being of our community.

**Strategy #1: Engage the community in education on prevention, maintenance and taking a proactive approach to Chronic Disease Management**

**Anticipated Outcome:** Increased community engagement, accountability and compliance with preventive and maintenance strategies, as measured through a survey on the Chronic Disease webpage

**Tactics**

- Develop a Chronic Disease webpage on the facility website to increase on-line educational opportunities and resource awareness

**PRIORITY NEED #3: BEHAVIORAL HEALTH**

Not only is there a correlation between physical chronic disease conditions and healthy lifestyle choices, but there is also a strong relationship to certain behavioral conditions, such as stress and depression. Therefore, it’s anticipated, and intended, that the strategies aligned to addressing healthy lifestyle choices, particularly obesity, nutrition and physical activity would also have a positive impact on behavioral health.

Also, as noted under Chronic Disease, one aim of implementing Patient Centered Medical Homes in the community is to improve the coordination of care, including integration of physical and mental health. Additionally, some of the education offered around chronic disease self-management also has application to those who have chronic behavioral health conditions. Additionally, the support groups also have implications for this population, providing valuable psycho-social connections.

**Strategy #1: Increase identification of behavioral health needs and access to early interventions**

**Anticipated Outcome:** Increase the number of community members who seek early interventions and decrease those who present in crisis, as measured through patient data within Banner Medical Group and a survey on the Mental Health and Substance Abuse webpage

**Tactics**

- Deploy depression screening tool in Primary Care Provider (PCP) clinics within Banner Medical Group
- Create a webpage with information and resources related to Mental Health and Substance Abuse
**Priority Need #4: Obesity/Nutrition/Physical Inactivity**

NCMC currently offers several classes, programs and resources around this important topic, having already recognized the importance of this issue within the community. A key part of the strategy below is to bring greater awareness to and education around the issue and the valuable resources that exist within the community.

As the strategies around obesity, nutrition and physical inactivity are intended to support efforts around improving self-management, and reduction of incidence of certain chronic conditions, so do the strategies around chronic disease education support and align to our efforts to improve education and awareness around making healthy lifestyle choices. Also as noted above, these strategies should also help support an overall sense of well-being, including stress and other mental health related conditions.

Further, it is envisioned that the Patient Centered Medical Homes will play a crucial role in keeping our communities healthy, in addition to caring for them when they are sick. A big part of wellness is educating people on and engaging them in making healthy choices.

<table>
<thead>
<tr>
<th>Strategy #1: Engage the community in making healthy choices and maintaining a healthy lifestyle through education and awareness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anticipated Outcome:</strong> Percentage of adults, seniors and pediatrics in the community that are overweight and obese trends down over the next 3 years, as measured through the County Health Rankings and a survey on the Healthy Living and Wellness webpage</td>
</tr>
<tr>
<td><strong>Tactics</strong></td>
</tr>
<tr>
<td>- Partner with the FitKids program to promote healthy lifestyle choices and physical activity for kids and families within the community</td>
</tr>
<tr>
<td>- Create a webpage dedicated to healthy living, including articles, tips, recipes, calendar of related events, links to internal and external resources</td>
</tr>
<tr>
<td>- Provide educational offerings around healthy living &amp; physical activity events (e.g. Ask the Expert)</td>
</tr>
<tr>
<td>- Promote the importance of breastfeeding</td>
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</tbody>
</table>

**Priority Need #5: Smoking/Tobacco Use**

The focus on tobacco use will also be further supported through inclusion in educational offerings and healthy living web-based education, resources and support, as living tobacco free is a key part of maintaining a healthy lifestyle. Therefore, several of the strategies noted above around obesity, nutrition and physical activity would also include information on tobacco cessation and education around the importance of being tobacco free.

Additionally, some of the strategies and supporting tactics under Behavioral Health could also provide additional support to the following strategies, aimed at helping tobacco users quit and maintain a tobacco free lifestyle.
Strategy #1: Increase community education and awareness around personal benefits to achieving and maintaining a healthy lifestyle free of tobacco

**Anticipated Outcome:** Increase participation in the State Quit Line, reducing the number of individuals who utilize tobacco, as measured through the County Health Rankings and a survey on the Healthy Living and Wellness webpage

<table>
<thead>
<tr>
<th>Tactics</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Partner with the State Quit Line to build the Proactive Referral into the Banner Medical Group clinic workflows</td>
</tr>
<tr>
<td>• Include a link to the State Quit Line website from the Banner Healthy Living webpage</td>
</tr>
<tr>
<td>• Incorporate education around the risks and complications from tobacco use into the Healthy Living webpage</td>
</tr>
<tr>
<td>• Support a Tobacco Free campus</td>
</tr>
</tbody>
</table>

There are also other community partners who offer great resources towards improving the health of our community, such as: NCMC Paramedics; North Colorado Health Alliance; North Range Behavioral Health; Sunrise Community Health; United Way of Weld County; Weld County Department of Health & Environment and Weld Food Bank. We will continue to facilitate dialogue with our community partners, as well as others to continue exploring opportunities for how best to collaborate in caring for our community.

**Significant Health Needs Not Prioritized**

We recognize that we do not have the resources nor in some cases the expertise to pursue all of the significant health needs identified through the CHNA. Therefore, the steering committee, in concert with Banner Health leadership worked diligently to ensure the strategies and tactics we selected would be impactful, foundational for future efforts and in alignment with our strengths, mission, vision and strategic plan.

The significant health needs that were not prioritized, at this time, are:

**Specialty Providers:** While not specifically called out as a strategy under Access to Care, Banner Health is constantly evaluating the provider needs within the communities it serves and strives to meet those needs as best as possible. Additionally, the conversation with the CAC reflected the need for focused efforts on increasing awareness of the available services within the community, which has been integrated into the strategies across the priority health concerns.

**Women and Infant Services:** The data indicates that there are opportunities for improvement within the community related to certain aspects of Women and Infant Services. While we recognize this is a health concern within the community and will continue to look for opportunities to help improve the health status for this population, it was not prioritized as one of the greatest areas of need within the community. Additionally, we recognize that there are other organizations in the community that are focusing on this issue. As we simply do not have the resources to develop a strategy for all of the areas
of significant health needs, we feel resources would be better aligned to influence the other significant health concerns identified above. While not focused on prevention, NCMC will continue to offer childbirth education classes and promoting healthy lifestyle choices.
APPENDIX A – STEERING COMMITTEE MEMBERS

Banner Health CHNA Steering Committee, in collaboration with NCMC’s leadership team and Banner Health’s Strategic Planning and Alignment department were instrumental in both the development of the CHNA process and the continuation of Banner Health’s commitment to providing services that meet community health needs.

<table>
<thead>
<tr>
<th>STEERING COMMITTEE MEMBER</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candace Hoffmann</td>
<td>Public Relations Director</td>
</tr>
<tr>
<td>Dave Cheney</td>
<td>Chief Executive Officer, Banner Boswell Medical Center</td>
</tr>
<tr>
<td>Kathy Townsend</td>
<td>Chief Nursing Officer, Banner Boswell Medical Center</td>
</tr>
<tr>
<td></td>
<td>Chief Nursing Officer, Banner Ironwood Medical Center - formerly</td>
</tr>
<tr>
<td>Kim Schraven</td>
<td>Strategic Alignment Project Consultant</td>
</tr>
<tr>
<td>Kristin Davis</td>
<td>Consultant</td>
</tr>
<tr>
<td>Laura Snow</td>
<td>Planning Senior Director</td>
</tr>
<tr>
<td>Laura Valenzuela</td>
<td>Systems Consultant – Strategic Planning</td>
</tr>
<tr>
<td>Linda Stutz</td>
<td>Care Coordination Senior Director</td>
</tr>
<tr>
<td>Lisa Davis</td>
<td>Payroll and Tax Senior Director</td>
</tr>
<tr>
<td>Lynn Chapman</td>
<td>Planning Senior Director</td>
</tr>
<tr>
<td>Megan Christopherson</td>
<td>Child Health/Wellness Director</td>
</tr>
<tr>
<td>Rhonda Anderson</td>
<td>Chief Executive Officer, Banner Cardon Children’s Medical Center</td>
</tr>
<tr>
<td>T.J. Grassetti</td>
<td>Strategic Alignment Senior Director</td>
</tr>
<tr>
<td>Vince DiFranco</td>
<td>Chief Executive Officer, Banner Community Hospital – Torrington</td>
</tr>
</tbody>
</table>
Appendix B – Community Advisory Council

NMCIC’s leadership team, in collaboration with members of the steering committee, created a Community Advisory Council (CAC) of community leaders that represent the underserved, uninsured and minority populations. CAC participants were identified based on their role in the public health realm of the hospital’s surrounding community. Emphasis was placed on identifying populations within the service area that are considered minority and/or underserved. Each CAC participant is vested in the overall health of the community and brought forth a unique perspective with regards to the population’s health needs. The CAC provided Banner Health with the opportunity to gather valuable input directly from the community.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Name and Title</th>
<th>Area of Expertise/Organizational Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banner Health</td>
<td>Sheldon Stadnyk, M.D., Chief Medical Officer, Western Region</td>
<td>Health care industry; hospital management and utilization trends; clinical and ancillary services</td>
</tr>
<tr>
<td>Banner Health</td>
<td>Rick Sutton, Chief Executive Officer, Northern Colorado</td>
<td>Health care industry; hospital management and utilization trends; clinical and ancillary services</td>
</tr>
<tr>
<td>Banner North Colorado Medical Center</td>
<td>Dave Bressler, Director of Paramedic Services</td>
<td>Emergency service trends within the community, including non-medically necessary transfer and continuum of care</td>
</tr>
<tr>
<td>Banner North Colorado Medical Center</td>
<td>Michelle Joy, Associate Administrator</td>
<td>Health care industry; hospital management and utilization trends; clinical and ancillary services</td>
</tr>
<tr>
<td>Banner North Colorado Medical Center Board of Directors</td>
<td>Al M. Dominguez, Jr., Chair</td>
<td>Health care industry; hospital management and utilization trends</td>
</tr>
<tr>
<td>Banner North Colorado Medical Center Board of Directors</td>
<td>Ken Schultz, Board Executive Officer</td>
<td>Health care industry; hospital management and utilization trends; housing and economic trends within the community</td>
</tr>
<tr>
<td>Banner North Colorado Medical Center Foundation</td>
<td>Chris Kiser, President</td>
<td>Health care industry; community needs and resources; economic trends within the community</td>
</tr>
<tr>
<td>North Colorado Health Alliance &amp; Weld County Department of Public Health and Environment</td>
<td>Mark E. Wallace, MD, MPH, Founder &amp; Executive Director, respectively</td>
<td>Public health trends, programs and policy; community needs, resources and partners; Healthcare needs within the low-income population</td>
</tr>
<tr>
<td>North Range Behavioral Health</td>
<td>Larry Potterff, Executive Director</td>
<td>Behavioral health needs, trends and resources within the community</td>
</tr>
<tr>
<td>Organization</td>
<td>Name and Title</td>
<td>Area of Expertise/Organizational Focus</td>
</tr>
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</tr>
<tr>
<td>Sunrise Community Health</td>
<td>Mitzi Moran, President/CEO</td>
<td>Healthcare needs, trends and resources for the low-income, uninsured and under-insured populations</td>
</tr>
<tr>
<td>United Way of Larimer County</td>
<td>Jeannine Truswell, President/CEO</td>
<td>Community needs, trends and resources for the low-income and underserved populations</td>
</tr>
<tr>
<td>Weld County School District 6</td>
<td>Dr. Rachelle Lang, Superintendent</td>
<td>Healthcare needs and trends within the student and family populations</td>
</tr>
<tr>
<td>Weld County Food Bank</td>
<td>Bob O’Connor</td>
<td>Provides food to low-income residents; trends and resources within the community for the low-income population</td>
</tr>
</tbody>
</table>
APPENDIX C – PRIORITIZATION CRITERIA

The significant health needs identified through the CHNA were prioritized based on the below criteria, which took into account the quantitative data, focus group discussion with the Community Advisory Council (CAC) and Banner’s mission, vision and strategic plan. Each significant health need was evaluated based on the criteria, using a ranking of low (1), medium (3) or high (5) for each criterion; all criteria were equally weighted. The criterion scores for each health need were compiled to determine the overall prioritization.

Criteria:

- Data indicates a clear need
- Priority within the community
- Clear disparities exist
- Cost of not addressing is high
- Desired outcome can be clearly defined
- Measures can be identified
- Public would welcome the effort
- Banner has the ability to impact
- Alignment with Banner’s mission, vision and strategic plan