# Banner Health 2022 CHNA

## *Wyoming Medical Center*


***Making health care easier, so life can be better.***

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# EXECUTIVE SUMMARY

## Community Health Needs Assessment Background

The Patient Protection and Affordable Care Act (PPACA) outlines requirements that nonprofit hospitals must satisfy to maintain their tax-exempt status under section 501(c)(3) of the Internal Revenue Code. One such requirement added by the ACA, Section 5019(r) of the Code, requires nonprofit hospitals to conduct a Community Health Needs Assessment (CHNA) and adopt implementation strategies to address the identified needs for the community at least once every three years. As part of the CHNA, each hospital is required to collect input from individuals in the community, including public health experts as well as residents, representatives, or leaders of low-income, minority, and medically underserved populations.

## Summary of Prioritization Process

As part of the process for evaluating community need, a Banner Health formed a CHNA Steering Committee. This committee, which was commissioned to guide the CHNA process, was comprised of professionals from a variety of disciplines across the organization. This steering committee 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 in Appendix B.

In the spirit of the organization's continued commitment to providing excellent patient care, Banner Health established systemwide guidelines for each of its acute care hospitals and three inpatient rehab 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.

## Summary of Prioritized Needs

Banner Health has a strong history of dedication to its community and providing care to underserved populations. The CHNA process continues to help identify additional opportunities to better care for populations within the community who have special and/or unmet needs; this has only strengthened Banner's commitment to *"making health care easier, so life can be better"*. The following statements summarize each of the areas of priority for Wyoming Medical Center and are based on data and information gathered through the CHNA.

1. **Access to Care**
    a. Approximately 10% of survey respondents identified Access to Care as a primary health concern (BH Western Division Community Survey, 2022).
    b. Survey responses identified affordability and availability as the most significant barriers in accessing healthcare in their communities (BH Western Division Community Survey, 2022).
2. **Chronic Disease Management**
    a. Overweight, obesity, diabetes, and heart disease are all top health issues seen in Western Division communities (BH Western Division Community Survey, 2022).
    b. COPD is a top 5 condition for Emergency Department patients in Western Division (McKesson, 2019-2022)
    c. The majority of Western Division counties have a higher rate of adult obesity compared to the National rate (County Health Rankings, 2022).
3. **Behavioral Health**
    a. Substance and alcohol abuse was the number one community concern (BH Western Division Community Survey, 2022).
    b. Survey respondents identified mental health services as being a primary community resource need (BH Western Division Community Survey, 2022).
    c. The majority of key informants identified the community need and ongoing concerns as being related to access to mental health resources in their communities (BH Western Division Key Informant Interviews, 2022).

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*The CHNA Report was adopted by the Banner Health Board of Directors on December 9th, 2022*

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# INTRODUCTION

## Purpose of the CHNA Report

The purpose of this CHNA is to identify and prioritize significant health needs of the community served by Wyoming Medical Center (WyMC) The priorities identified in this report help to guide the hospital's ongoing community health improvement programs and community benefit activities. This CHNA report meets requirements of the ACA that nonprofit hospitals conduct a CHNA at least once every three years.

Wyoming Medical Center is dedicated to enhancing the health of the communities it serves. The findings from this CHNA report serve as a foundation for understanding the health needs found in the community and will inform the implementation strategies selected. This report complies with federal tax requirements set forth in Internal Revenue Code Section 501(r) requiring hospital facilities owned and operated by an organization described in Internal Revenue Code Section 501(c)(3) to conduct a CHNA at least once every three years. Regarding the CHNA, the ACA specifically requires nonprofit hospitals to:

1. Collect and take into account input from public health experts, community leaders, and representatives of high need populations – this includes minority groups, low-income individuals, medically underserved populations, and those with chronic conditions;
2. Identify and prioritize community health needs;
3. Document a separate CHNA for each individual hospital; and,
4. Make the CHNA report widely available to the public. In addition, each nonprofit hospital must adopt an implementation strategy that describes how the hospital will address the identified significant community health needs.

This is the fourth cycle for Banner Health, with the third cycle completed in 2019. Feedback on the previous CHNA and Implementation Strategy will be addressed later in the report.

This CHNA report was adopted by the Banner Health's board on December 9th, 2022.

This report is widely available to the public on the hospital's website bannerhealth.com, and a paper copy is available for inspection upon request at CHNA.CommunityFeedback@bannerhealth.com

Written comments on this report can be submitted by email to:
CHNA.CommunityFeedback@bannerhealth.com

## About Banner Health

Headquartered in Phoenix, Arizona, Banner Health is one of the nation's largest nonprofit health care systems and is guided by our nonprofit mission: "Making health care easier, so life can be better." This mission serves as the cornerstone of operations at our 30 acute care facilities located in small and large, rural and urban communities, spanning 6 western states. Collectively, these facilities serve an incredibly diverse patient population. In these communities, Banner Health provides more than $650M annually in charity care – treatment without expectation of being paid. As a nonprofit organization, Banner reinvests revenues to add new hospital beds, enhance patient care and support services, expand treatment technologies, and maintain equipment and facilities. Furthermore, Banner subsidizes medical education costs for hundreds of physicians in our residency training programs in Phoenix and Tucson, Arizona and Greeley, Colorado.

With organizational oversight from a 14-member board of directors and guidance from both clinical and non-clinical system and facility leaders, more than 52,000 employees work tirelessly to provide excellent care to patients in Banner Health acute care hospitals, rehabilitation hospitals, urgent cares, clinics, surgery centers, home care, hospice facilities, telehealth, and other care settings.

While Banner has the experience and expertise to provide primary care, hospital care, outpatient services, imaging services, rehabilitation services, long-term acute care, and home care to patients facing virtually any health conditions, an array of core services and specialized services are also provided. Some of the 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 our three Banner- University Medical Centers, Banner Alzheimer's Institute, and Banner Sun Health Research Institute.

Ultimately, Banner's unwavering commitment to the health and well-being of its communities has earned accolades from an array of industry organizations, Banner Health's Supply Chain was recognized as second in the nation in 2021, 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" by Becker's Hospital Review.

## Banner Health's COVID-19 Impact Statement

In December of 2019 SARS-CoV-2, also known as COVID-19, was discovered in Wuhan, China. The first case treated at a Banner facility was on March 7th, 2020. In March 2020, Banner implemented the following in response to the pandemic:

- Convened EOC Command Center to plan, monitor, and execute a response plan.
- Developed a digital dashboard to monitor all activity.
- Expanded Telemedicine services for Banner Urgent Care and all Banner Medical Groups.
- Leveraged Banner Innovation Group to address real time problems, defined by EOC, such as PPE supply.
- Banner paused elective surgeries, enacted a no visitor policy, and where possible, moved employees to work from home status.

Throughout the COVID-19 Pandemic, Banner was a leader in the communities they were located in, by treating patients with COVID-19 and providing consistent and ongoing communication to the public. Since March 2020, Banner has faced multiple COVID-19 surges, PPE shortages, staffing difficulty (involving shortages, staff safety, and employee health), however, Banner continues to be committed to *"Making health care easier, so life can be better."*

Banner Health leveraged technology to provide care and up to date information to community members throughout the pandemic. Through the BannerHealth.com website and Banner apps, Banner provided a trusted source of communication to our communities.

- Banner Website Page Views: From March 2020 to December 2022, there were over 8,310,000 total pageviews to COVID-related pages on Banner's website.
- Buoy App
    - Banner provided a symptom checking platform to its communities, patients went through a series of questions to determine if their symptoms were COVID influenced.
    - From March 2020 to December 2021, 138,659 patients were triaged through the symptom checker with COVID-19 results.
- Emails were used to both inform patients of COVID related information as well encourage the adoption of telehealth services
    - Over 6 million COVID related emails were opened
    - 340,000 telehealth related emails were opened by patients in the first year of the pandemic.

Within Banner Health acute care hospitals, Banner followed state and national guidelines to expand bed capacity, to serve both COVID and non-COVID patients in our facilities. In our Arizona facilities, we expanded bed capacity so that in total we had an over 50% increase of beds in preparation for the surge of COVID-19 patients, for our Western Region facilities we had a 28% increase in beds (bed increase includes ICU and Medical Surgical beds). Since the start of the pandemic, Banner has provided care to over 43,000 patients with COVID at Urgent Care facilities, more than 38,000 with COVID in our clinics, and

nearly 94,000 with COVID as patients in our hospitals. In all Banner has served 47% of all hospitalized COVID-19 patients in the state of Arizona throughout the pandemic.

From 2020 to 2022 Banner Health infused over 25,000 monoclonal antibody doses. While the acuity of patient who received a dose of monoclonal antibodies has varied throughout the COVID-19 pandemic, those with the highest acuity were triaged to receive priority scheduling in receiving a dose.

When vaccinations became available to the public, Banner Health partnered with county and state health agencies in administering vaccines. In Banner Health's larger markets, Maricopa and Pima County Arizona, Banner worked with county partners to set up vaccination pods, where Banner employees, county employees, and volunteers worked daily for over two months to provide initial and second dose vaccines to county residents. The two vaccine pods Banner supported in Maricopa County (Arizona Fairgrounds & Sun City) administered over 190,000 vaccines, including both initial and second dose. In Pima County, Banner also supported two vaccine pods, which administered over 160,00 initial and second vaccinations. In Banner Health's Western Division Market, a different approach was used, providing vaccinations on a smaller scale through hubs and clinic visits, with nearly 48,000 vaccinations, initial and second doses, administered. Hubs were set-up to provide efficient and physically distant vaccinations in the community on a smaller scale than the Arizona locations. Internally, Banner Health mandated employees were vaccinated for COVID-19 to protect our patients and staff.

As COVID-19 moves into the *Control Phase*, Banner Health continues to provide COVID-19 focused care in our communities. Banner maintains consistent communication with county and state partners, monitoring COVID-19 in the communities. A long COVID treatment plan was developed, to provide ongoing care to COVID-19 survivors suffering from long COVID symptoms. Physicians and providers from specialties ranging from pulmonology, neurology, sleep medicine, behavioral health, and more have partnered to provide the highest quality patient care and experience to support those with long COVID symptoms.

## About Wyoming Medical Center

Wyoming Medical Center Central and East Campus have a combined 250 beds (with 217 at the Central Campus). The Central Campus is the primary facility for Natrona County residents and is a level 2 trauma center.

On Nov. 1, 1911, the Casper branch of Wyoming General Hospital opened its doors with just 35 beds. The square, two-story building, costing $22,500, stood between the eastern edge of Casper and a treeless prairie. More than 10 years later, the state allowed Natrona County to buy the hospital for $1. County commissioners took possession of the building, grounds, equipment, and supplies on Jan. 1, 1922, and renamed the facility Memorial Hospital of Natrona County. In 1986, a major corporate restructuring resulted in the creation of Wyoming Medical Center, a private, not-for-profit charitable corporation that leased the county-owned facilities. In October 2020, WMC partnered with Banner Health to become the

healthcare system's flagship hospital for the state of Wyoming. Since the partnership began, Wyoming Medical Center and Banner has strived to live the Banner Health mission of making a difference in people's lives through excellent patient care, "Making health care easier, so life can be better".

As Banner's regional referral center, WyMC is an expansion of Banner's existing Wyoming footprint that includes three rural hospitals in the state – Platte County Memorial Hospital in Wheatland, Community Hospital in Torrington and Washakie Medical Center in Worland.

Wyoming Medical Center is committed to providing a wide range of quality care, based on the needs of the community, including the following services:

- Cardiology
- Women and Infant Services
- Pediatrics
- Bariatric Surgery
- Sleep Medicine
- General Surgery
- Cancer
- Imaging
- Endocrinology
- Injury Prevention
- Neurology
- Pulmonary & Asthma
- Emergency
- Intensive Care
- Neurosurgery
- Rehabilitiation
- Wound Care
- Walk-in Care
- Primary Care
- Sleep Medicine
- Laboratory

The staff of 320 providers (including doctors, physician assistants, and nurse practitioners), 1,000 support staff, and 100 volunteers provide personalized care complemented by leading technology from Banner Health and resources directed at preventing, diagnosing, and treating illnesses. On an annual basis, Wyoming Medical Center health professionals render care to nearly 111,207 outpatients, 8,501 inpatients, and 30,279 patients in the ED. The staff also welcomes an average of 818 newborns into the world each year.

Wyoming Medical Center leverages the latest medical technologies to ensure safer, better care for patients. Physicians and clinical personnel document patient data in an electronic medical record rated at the highest level of implementation and adaptation by HIMSS Analytics, a wholly-owned nonprofit subsidiary of the Healthcare Information and Management Systems Society. Wyoming Medical Center continues to work to be fully aligned with Banner Health.

To help meet the needs of the uninsured and underinsured community members, Wyoming Medical Center follows the Banner Health process for financial assistance, including financial assistance and payment arrangements. Giving back to the people we serve through financial assistance is just one example of our commitment of the community. In 2021, Wyoming Medical Center reported $6,514,000

in Charity Care for the community, while $4,614,000 was written off as a bed debt or uncollectable dues owed to the facility.

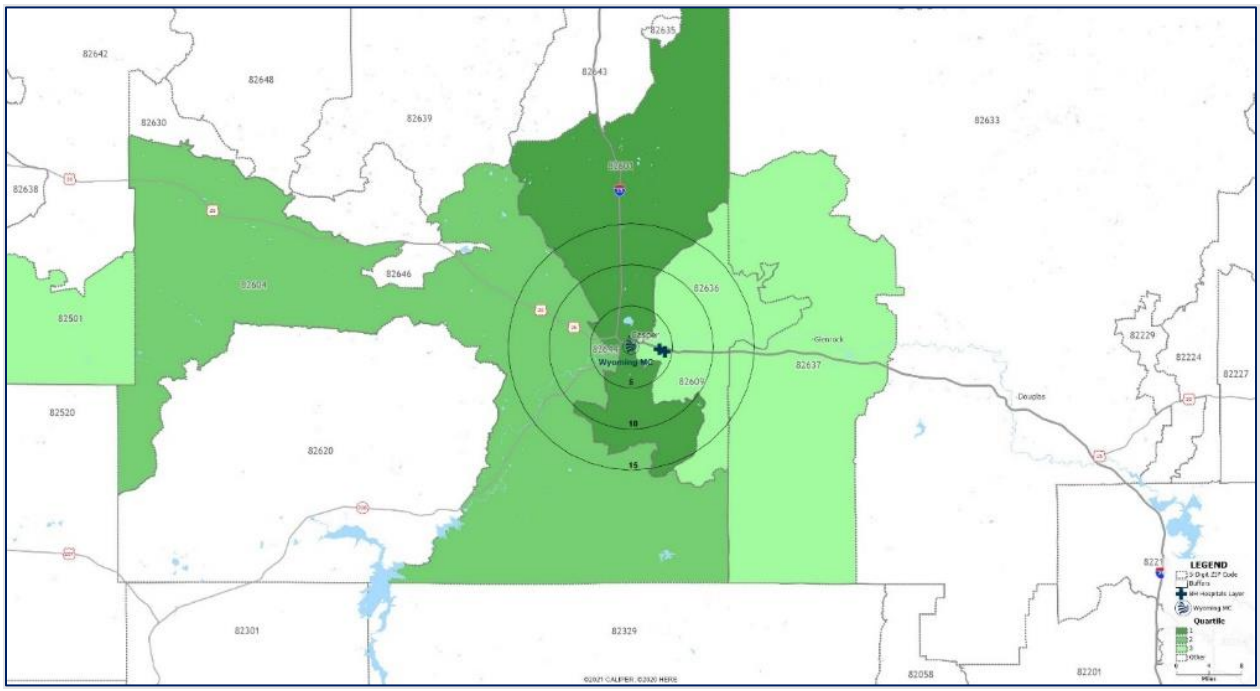
## Description of Community and Natrona County

Natrona County, located in the center of Wyoming, is the second most populous county in Wyoming, with a population of 80,000. European traders established themselves in the Natrona County area in 1812 as a series of trading posts to the Columbia River. The Cheyenne, Arapahoe, Shoshone, and Sioux claim ancestral ties to the land of Natrona Country.

Wyoming Medical Center is located in the county seat of Casper Wyoming and is the second most populous city in Wyoming. Settled and incorporated as a city in 1887, the area around Casper was being settled four decades earlier, as a place of trade, ferry locations, and military operations. Casper is named after Fort Caspar and Lt. Casper Collins – due to a typo when the town was founded the name became Casper as we know it today.

# Facility Inpatient Origin by Zip Code Map

January 1, 2020 through December 31, 2020 (Top 3 contiguous quartiles = 75% of total discharges)



## Community Demographics

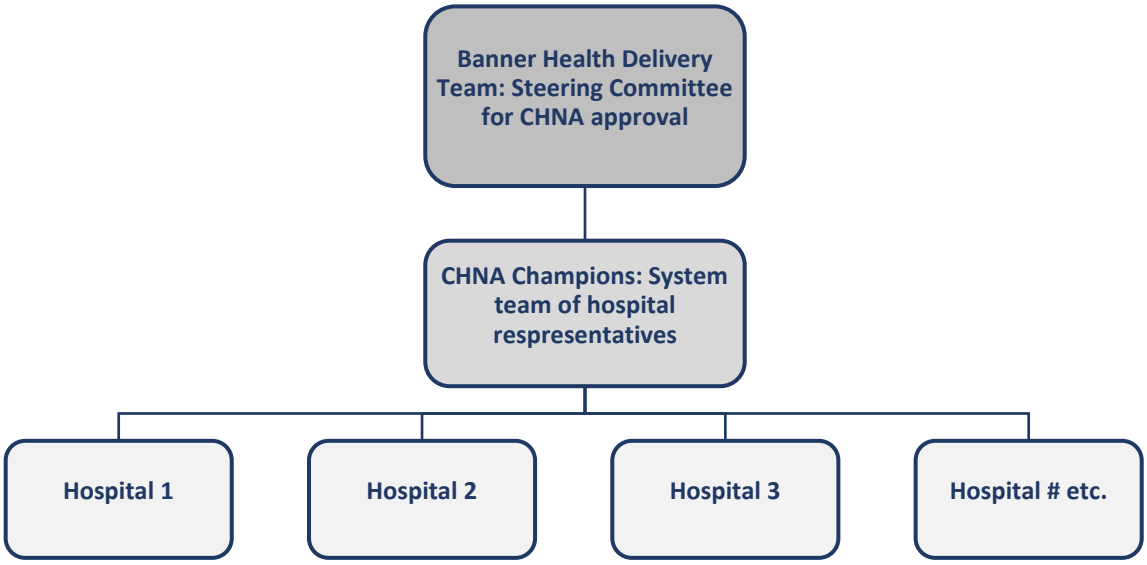
| | WyMC PSA | Natrona County | Wyoming |
|---|---|---|---|
| **Population (2021)** | 103,635 | 81,385 | 596,471 |
| Male | 52,107 | 40,947 | 303,344 |
| Female | 51,528 | 40,438 | 293,127 |
| **Age** | | | |
| Median Age | 43 | 39 | 39 |
| 0 to 17 years | 23,865 | 18,355 | 134,040 |
| 18 to 34 years | 22,964 | 18,095 | 135,401 |
| 35 to 64 years | 38,467 | 30,797 | 221,291 |
| 65 years and over | 18,339 | 14,138 | 105,739 |
| **Race** | | | |
| White | 90,812 | 73,442 | 529,077 |
| Black | 1,364 | 1,170 | 7,193 |
| American Indian | 4,481 | 1,107 | 14,869 |
| Asian/Pacific Islander | 900 | 789 | 7,361 |
| Other Race | 2,741 | 2,335 | 20,978 |
| **Ethnicity** | | | |
| Hispanic | 9,634 | 7,515 | 62,449 |
| **Social & Economic Factors** | | | |
| Median Household Income | 52,709 | 63,773 | 64,546 |
| No HS Diploma | 4,003 | 3,140 | 20,916 |

# PROCESS AND METHODS USED TO CONDUCT THE CHNA

Wyoming Medical Center process for conducting Community Health Needs Assessments (CHNAs) leverages a multi-phased approach to understanding gaps in services provided to its community, as well as existing community resources. In addition, a focused approach to understanding unmet needs, especially for those within underserved, uninsured, and minority populations included in a detailed data analysis of national, state, and local data sources is conducted, including obtaining input from leaders within the community.

Wyoming Medical Center eight-step process is based on Banner Health's experience from previous CHNA cycles, outlined below. The process involves continuous review and evaluation or CHNAs from previous cycles, through both the action plans and reports developed on a three-year cycle. Through each cycle Banner Health and Wyoming Medical Center has been able to provide consistent data to monitor population trends.

## Banner Health CHNA Organizational Structure




## Primary Data

Primary data, consists of new data that is obtained via direct means. For Banner health, primary data is created by rendering healthcare services to patients; the data includes inpatient or outpatient counts, visits, payer, etc. For the CHNA report, primary data was also collected directly from the community through surveys, focus groups, and key informant interviews.

The primary data for the Community Health Needs Assessment originated from Cerner (Banner's Electronic Medical Record) and McKesson (Banner's Cost Accounting / Decision Support Tool). These data sources were used to identify the health services currently being accessed by the community at Banner locations and provides indicators for diagnosis-based health needs of the community. This data was also used to identify the primary service areas (PSA = 75%), inform the Steering Committee Appendix B, and facility champions on what the next steps of research and focus group facilitation needed to entail.

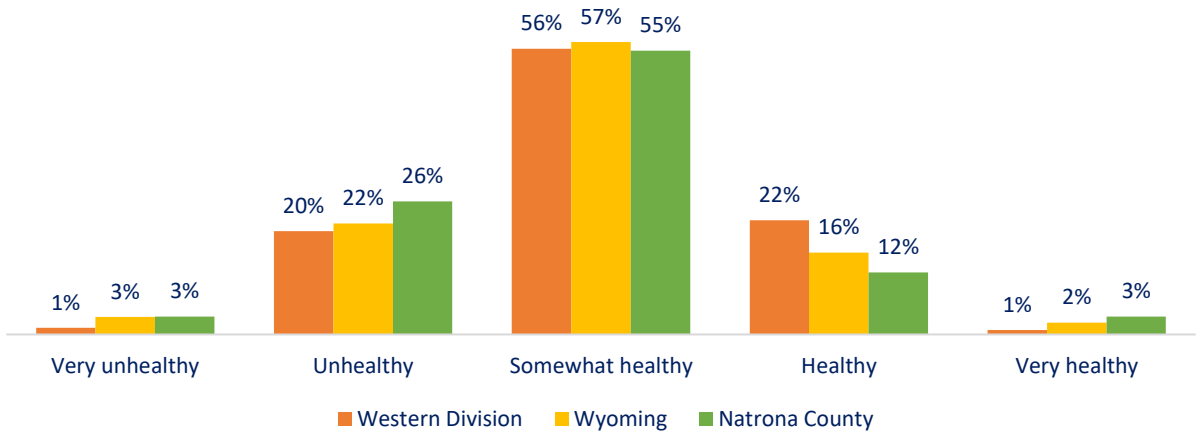
*Community Survey*

To understand community health needs, a community health assessment survey was administered to community members in Banner's Western Division markets. Community health assessment surveys were administered between May-July 2022. Surveys were intended to provide information about prominent health problems facing the community. The survey had a total of 15 questions to identify factors which contributed to overall quality of life, more important health issues and behaviors, rating scales, and impact COVID-19 had in their life and in the community. A total of 234 surveys were collected from our Western Division community partners, 88 from our Wyoming partners, and 58 from Natrona County.

Demographic detail of participants can be found under Appendix A.

The majority of respondents (55%) rated the community as being somewhat healthy, this is slightly lower than that of Wyoming and overall Western Division respondents. Natrona County respondents saw themselves as unhealthier compared to overall Wyoming – through higher than average scores of unhealthy, and lower than average scores as healthy. In Natrona County, 55% of respondents identified their personal health as Healthy, and 65% identified their mental health as Healthy.

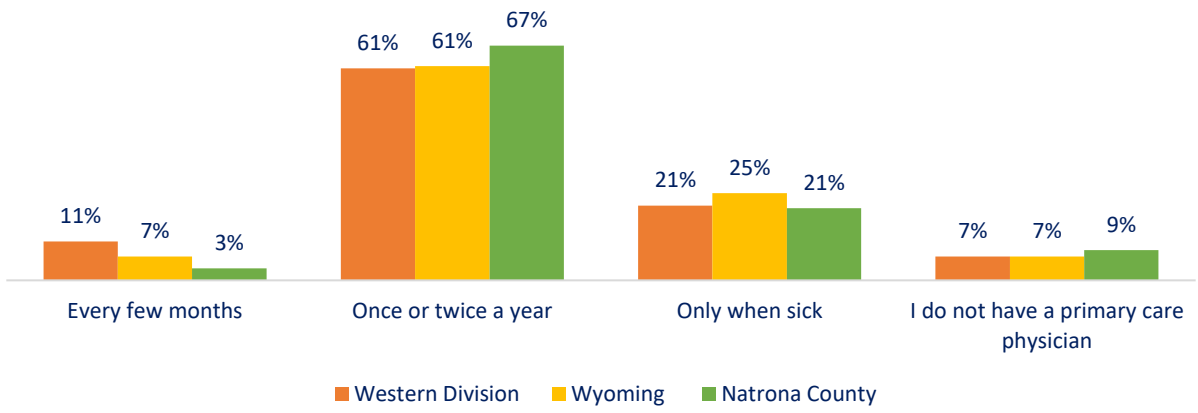
***Chart A.***
***How would you rate the overall health of your community?***




*Source: Banner Health Western Division CHNA Survey, 2022*

Natrona County had a higher response rate of visiting their Primary Care Physician once or twice a year compared to that of Western Division and Wyoming respondents. A combined total of 30% of responses did not utilize a Primary Care Provider in a routine manner or did not have one at all. In a recent study, regarding correlation to Primary Care Providers and patient health, results concluded that "patients who had a primary care physician … had a high mental health component score, and low physical health component score" (Yokokawa, Ohira, Ikegami, et al., 2021). This shows a correlation between routine visits with your Primary Care Physician (PCP) and a person's healthy – based on the results of the study those who visit a PCP when sick or do not have one, are at a higher risk for poorer health.

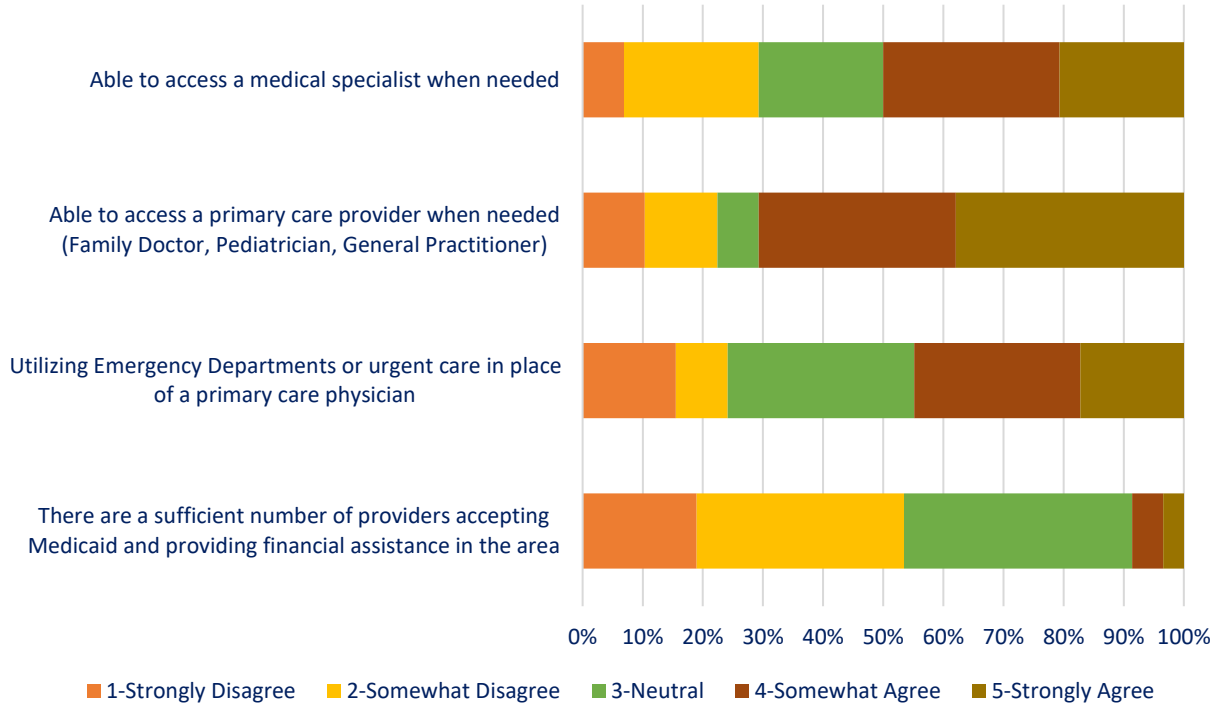
***Chart B.***
***How often do you visit your primary care physician?***




*Source: Banner Health Western Division CHNA Survey, 2022*

In Natrona County, were asked to rate their experience in accessing healthcare. The majority of respondents agreed that they were able to fine a primary care provider when needed. However there was a combined 53% of respondents agreeing that there is *not* a sufficient number of providers accepting Medicaid and or providing financial assistance in the community.

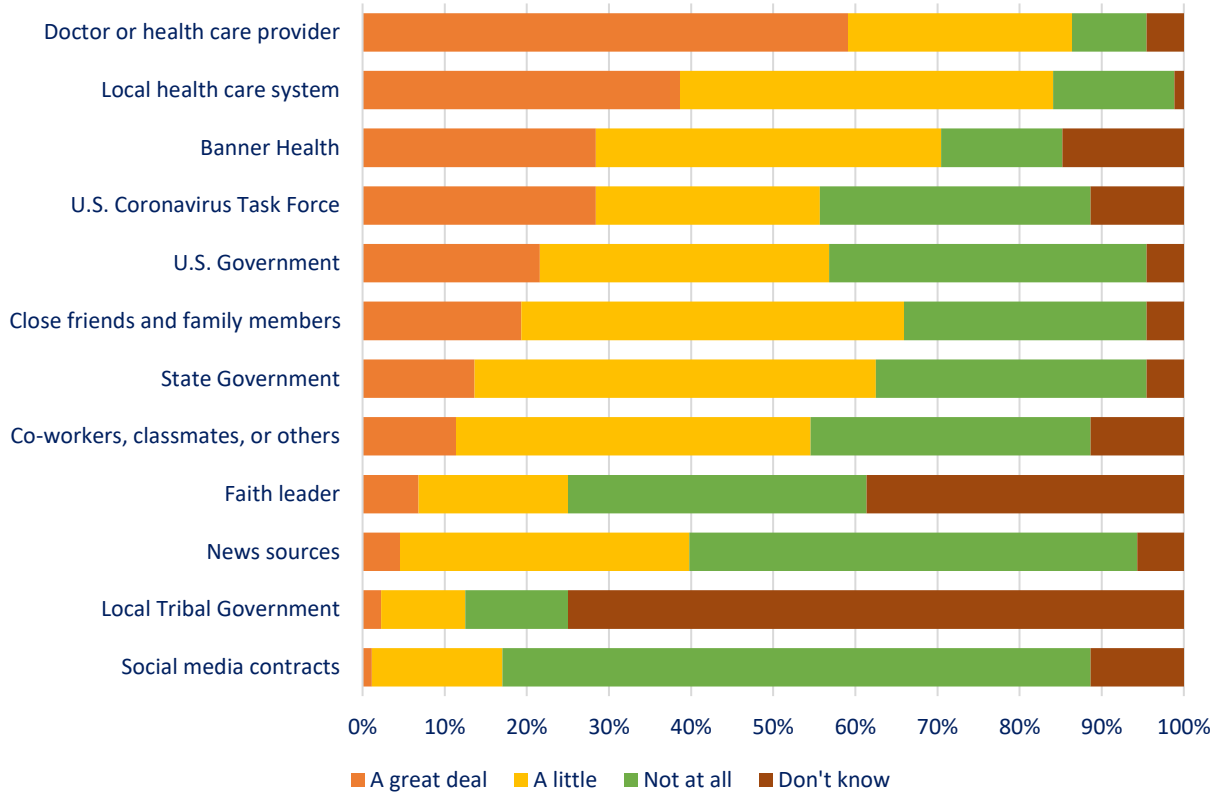
***Chart C.***
***On a scale of 1 through 5, please rate each of the following statements about your experience in accessing health care services.***




*Source: Banner Health Western Division CHNA Survey, 2022*

Survey participants were also asked two COVID related questions, the first related to their experience during COVID, the later their trust in COVID-19 related health communication. Overall, the majority of respondents identified increased stress or anxiety as a problem themselves or someone in their household is having as a result of COVID-19. In Wyoming, survey respondents noted that their greatest source of trust was in their Doctor/Health care provider, the local health care system, and Banner Health.

***Chart D.***
***Level of trust in COVID-19 information services:***




*Source: Banner Health Western Division CHNA Survey, 2022*

### *Key Informant Interviews*

Banner Health conducted a series of Key Informant Interviews with community members identified by Facility Champions. Key informants represented local health departments, fire departments, behavioral health centers, local community colleges, and social service departments. Through a series of eight questions, key informants defined their opinion of health and what quality of life meant, they identified top community needs, and discussed the impact COVID-19 continues to have in their community.

While the definition of health varied person by person, the primary theme was the ability to live a safe and productive life. Listed below are a few of the quotes on what respective key informants identified as being healthy:

- *"Having the ability to access preventative care and treatment as needed so that you can live a safe and productive life."*
- *"Having the necessary tools and information to make the best health decisions for self and families to thrive."*
- *"State of good physical, mental, and spiritual wellbeing."*

Themes of important issues that affect the health of people in their community involved the following:

- Access to providers confidently and timely
- Access to resources like childcare, housing, and healthcare
- Literacy in health education, and
- Mental health support

When it came to services that the needed in the communities, key informants identified two primary populations needing extra support – the elderly and youth. Both populations were recognized as needing additional mental and behavioral health support. Transportation was recognized as a foundational barrier in accessing health services. The primary health theme that came up was access to care that was both affordable and available during the weekend – examples of walk-in clinics open during the weekend, and urgent care were provided. Overall, key informants discussed the concerns of access to care that takes place in rural communities.

## Secondary Data

Wyoming Medical process for conducting their Community Health Needs Assessment CHNA) leveraged a multi-phased approach to understanding gaps in services provided to the community, as well as existing community resources. The CHNA utilized a mixed-methods approach that included the collection of secondary or quantitative data with review and input from key informants, and meetings with internal leadership. The advantage of using this approach is that it validates data by cross verifying from a multitude of sources.

Secondary data includes publicly available health statistics and demographic data. With input from stakeholders, champions, and the steering committee, additional health indicators of special interest were investigated. Comparisons of data sources were made to the county, state, and PSA if possible.

Data analytics were employed to identify demographics, socioeconomic factors, and health trends in the PSA, county, and state. 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. Several services of data were consulted to present the most comprehensive picture of Wyoming Medical Center's PSA's health status and outcomes.

Appendix A has data sources listed.

### *Top Leading Causes of Death*

Wyoming Medical Center considered the top five leading causes of death for Natrona County and Wyoming (Table 1) in the secondary data review.

*Table 1. Top 5 Leading Causes of Death*

| | **Natrona County** | **Wyoming** |
|---|---|---|
| **1** | Diseases of the heart | Diseases of the heart |
| **2** | Malignant neoplasms | Malignant neoplasms |
| **3** | COVID-19 | COVID-19 |
| **4** | Chronic lower respiratory diseases | Chronic lower respiratory diseases |
| **5** | Accidents (unintentional injuries) | Accidents (unintentional injuries) |

*Source: CDC, 2020; Note: Suppressed data indicates not enough volume to be confident in rankings*

### *County Health Rankings*

Banner Health leveraged County Health Rankings as a guiding light in understanding how counties Banner facilities were located in did compared to other counties. County Health Rankings are, "based on a model of community health that emphasizes the many factors that influence how long and how well we live" (County Health Rankings, 2022). The Rankings use more than 30 measures that help communities understand how healthy their residents are today (health outcomes) and what will impact their health in the future (health factors)." Additionally, data is provided that indicates Areas of Strength, where the county has health data that is stronger when compared to the state data, and Areas to Explore, where the county has health data that is not meeting state level of health – this is an area where counties can focus to improve the Health Outcome rankings.

***Table 2. Natrona County Areas of Strength and Areas to Explore***

| Areas of Strength | Areas to Explore |
|---|---|
| **Health Behaviors:**<br>Physical inactivity | **Health Behaviors:**<br>Adult smoking<br>Adult obesity<br>Sexually transmitted infections<br>Teen births |
| **Clinical Care:**<br>Primary care physicians<br>Mental health providers | **Clinical Care:**<br>Uninsured<br>Preventable hospital stays<br>Mammography screening |
| **Social & Economic Factors:**<br>High school completion<br>Some college<br>Children in poverty | **Social & Economic Factors:**<br>Unemployment<br>Children in single-parent households |

*Source: County Health Rankings, 2022*

### Health Outcomes Ranking and Map

2022 Wyoming County Health Outcomes Rankings: Natrona County ranked 17 out of 23 participating counties, a decrease from the 2019 health outcomes (19 of 23).

Health outcomes determine how healthy a county is by measuring how people feel while they are alive and how long they live. Health outcomes are influenced by health factors, which are thus influenced by programs and policies in place at the local, state, and federal levels. Health outcomes indicate whether health improvement plans are working. Listed below are the two areas that the study looked at when determining health outcomes:

- Length of Life: measuring premature death and life expectancy.
- Quality of Life: measures of low birthweight and those who rated their physical and mental health as poor. (County Health Rankings, 2022)

## Health Factors Ranking and Map

2022 Wyoming County Health Factors Rankings: Natrona County ranked 19 out of 23 of the participating counties, from the 2019 health outcomes (19 of 23).

Health factors represent things that can be modified to improve the length and quality of life and are predictors for how healthy communities can be in the future. While there are many factors, from education to the environment in which a person lives, this study focused on the following four factors:

- Health Behaviors: rates of alcohol and drug abuse, diet and exercise, sexual activity, and tobacco use.
- Clinical Care: showing the details of access to quality of health care.
- Social and Economic Factors: rating education, employment, income, family and social support, and community safety.
- Physical Environment: measuring air and water quality, as well as housing and transit. (County Health Rankings, 2022)

## Data Limitations and Information Gaps

Although the data sources provide 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:

***Table 3. Data Limitations and Information Gaps***

| Data Type | Data Limitations and Data Gaps |
|---|---|
| **Primary Data** | • Data collection hit a barrier, due to COVI-19, data was forced to be collected in a virtual format via online surveys or virtual focus groups.<br>• Survey respondents were under included in a few demographic areas – age of those 12-24, Hispanic ethnicity, and men. |
| **Secondary Data** | • Due to COVID-19 the national and state reporting cycle on public health data is behind, while normally this data has been published with a 1–2-year age, some data posted, like that of cancer incidence, was posted 5+ years ago at this time.<br>• 2020 Census data was expected to be utilized at this time, however due to COVID and data issues from its collection process, much of the data has yet to be released.<br>• Behavioral Risk Factor Surveillance system (BRFSS) and American Community Surveys (ACS), both yearly national surveys were conducted in both 2019 and 2020, due to COVID-19 there were delays in data collection and reporting out. |

## Prioritization of Community Health Needs

Building on Banner Health's past three CHNA reports, the steering committee and facility champions worked with Banner Health corporate planners to prioritize health needs for Cycle 4 of the CHNA. Facility stakeholders, community members, and public health professionals were among major external entities involved in identifying health needs, which were then brought to the steering committee. Both Banner Health internal members, and external entities were strategically selected for their respective understanding of community perspectives, community-based health engagement, and health care expertise. To be considered a health need the following criteria was taken into consideration:

- The PSA had a health outcome or factor rate worse than the average county / state rate
- The PSA demonstrated a worsening trend when compared to county / state data in recent years
- The PSA indicated an apparent health disparity
- The health outcome or factor was mentioned in the focus group
- The health need aligned with Banner Health's mission and strategic priorities

Using the previous CHNAs as a tool, the steering committee reviewed and compared the health needs identified in 2022 to the previous health needs. The group narrowed the community health needs to three. It was determined that Banner Health, as a health system would continue to address the same health needs from Cycle 3, the 2019 CHNA, due to the continued impact these health needs have on the overall health of the community. These needs and the strategies to address the needs align with the short- and long-term goals the health system has, specific strategies can be tailored to the regions Banner Health

serves, and the health needs can address many health areas within each of them. The graphic below lists the three health needs, and the areas addressed by the strategies and tactics.

| Improving the health of the communities we serve | Chronic Disease Management | Behavioral Health |
|---|---|---|
| •Access to and navigating healthcare services<br>•Access to supportive care after hospital discharge<br>•Access to care post-COVID<br>•Employee wellness<br>•Integrating Social Determinants of Health with Banner | •Health Literacy<br>•Health Management<br>•Diabetes and heart disease management<br>•Diagnosing and managing dementia<br>•Ongoing care for those with long-COVID<br>•Preventative cancer education<br>•Cancer screenings | •Access to mental health resources<br>•Mental health care for those affected by COVID related experiences<br>•Substance and alcohol abuse and misuse prevention |

### *COVID-19 in the Prioritization Process*

While prioritizing needs, COVID-19 was a consistent theme that arose in all forms of primary data collection. COVID-19 has had an impact on the measurement of health needs, socioeconomic factors, facility volumes, and health behaviors to name a few. Banner Steering Committee and facility leadership determined that for Banner Health's CHNA process, rather than adding a fourth community health need, Banner would incorporate COVID-19 into each of the three community health needs. Banner Health will continue to provide ongoing care for those affected physically and mentally by COVID-19 throughout Cycle 4 of the CHNA process.

# DESCRIPTION OF PRIORITIZED COMMUNITY HEALTH NEEDS

Banner Health has a strong history of dedication to its community and of providing care to the underserved populations. The CHNA continues to help 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. The following statements summarize each of the areas of health needs for Wyoming Medical Center and are based on data and information gathered through the CHNA process.

## Community Health Need #1: *Improving the health of the communities we serve*

To "*Improve the health of the communities we serve",* it is essential to understand the factors that affect our communities in improving their health. These factors range from insurance status, Social Determinants of Health (SDoH), utilization of hospitals and emergency departments, and access to providers, to name a few. Based on the areas of focus for this health priority SDoH, poverty level, insurance status, and access to primary care providers are covered.

Social determinants of health are the conditions in the environment where people are born, live, learn, work, play, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks (Healthy People2030 via HHS, 2022). Health People 2030 a national 10-year plan identifies public health priorities to improve the health and well-being across the United States, their key focus is SDoH. These SDoH have a foundational role in our lives, such as safe housing, racism, violence, access to nutritious foods, job opportunities, polluted air, and literacy skills. To further understand these determinants of health, they have been grouped into five key areas:

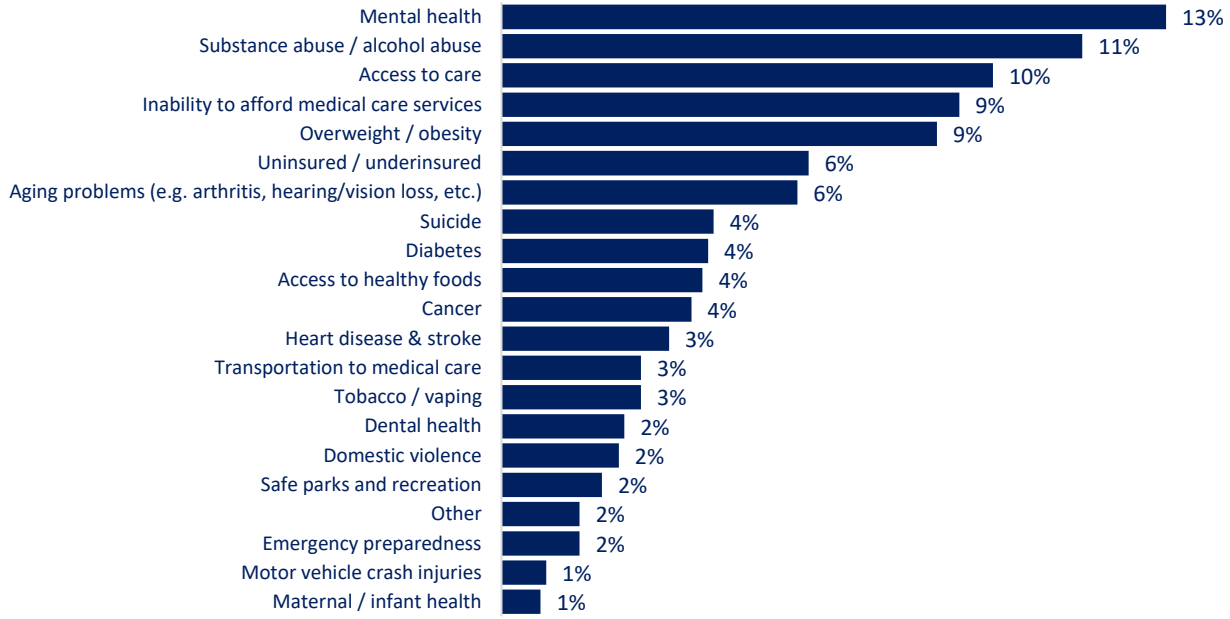
- Economic stability
- Education Access and Quality
- Health Care Access and Quality
- Neighborhood and Built Environment
- Social and Community Context

In the context of health care access and quality, Healthy People 2030 has identified a series of areas to focus on to address SDoH. These areas all reflect the foundational problem of people in the United States not getting the health care services they need. Areas of focus include: uninsured populations, PCP access, navigating health care, and preventative health (Healthy People2030 via HHS, 2022). For Healthy People 2030, the two primary objectives to address health care access and quality are listed below:

- Reduce the proportion of emergency department visits with a longer wait time than recommended
- Increase the proportion of adults who get recommended evidence-based preventative health care

Via the community survey conducted with all of our Western Division facilities, this includes our hospitals in California, Nevada, Nebraska, Colorado, Wyoming, and Norther Arizona, themes that reflect access to care were prevalent as top community health issues. This includes access to care (10%), Inability to afford medical care services (9%), uninsured/underinsured (6%), and transportation to medical care (3%).

**Chart E.**
**What are the top health issues you see in your community?**




*Source: Banner Health Western Division Community Survey, 2019-2020*

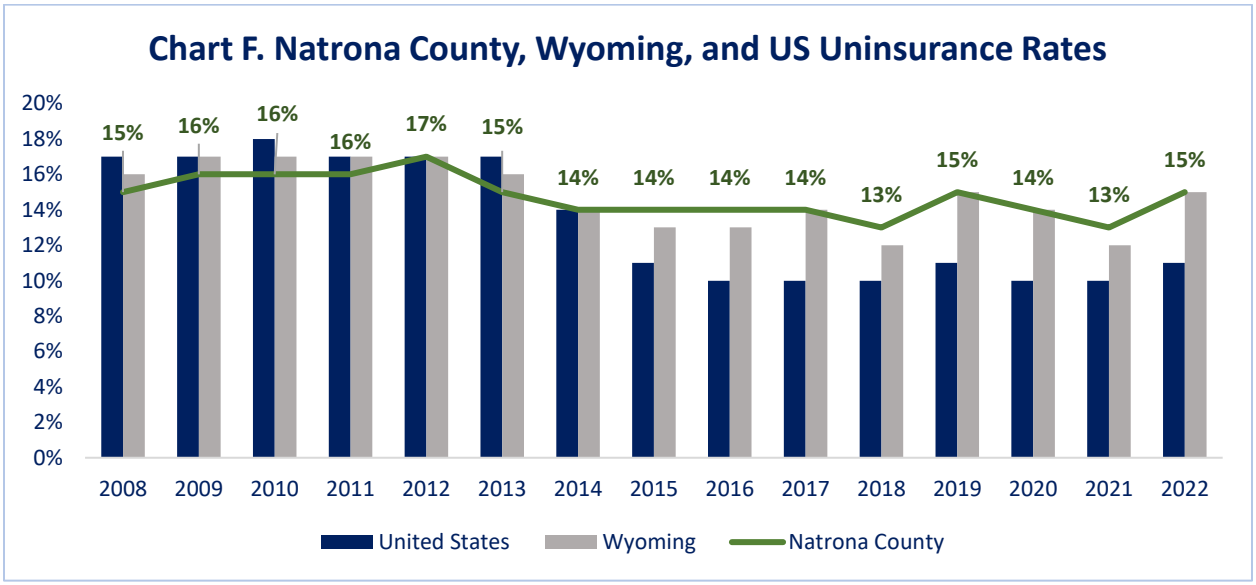
When it comes to the populations in Natrona County living under the poverty level, Natrona County has a lower poverty level than the United States, but greater than Wyoming. Poverty level is a factor in understanding insurance types and barriers in accessing health care services. For example, Medicaid is based on federal poverty level, for children and adults it is at least 133% below the federal poverty level, some states provide the option to raise that level to expand coverage (Medicaid, 2022).

***Table 4. Populations living below the poverty level***

| | United States | Wyoming | Natrona County |
|---|---|---|---|
| **Population** | 12.8% | 11.0% | 9.4% |
| | | | |
| **Under 18** | 17.5% | 12.6% | 10.5% |
| | | | |
| **Male** | 11.6% | 9.7% | 8.5% |
| **Female** | 14.0% | 12.3% | 10.4% |
| | | | |
| **White** | 10.6% | 10.5% | 9.1% |
| **Black/African American** | 22.1% | 15.3% | 25.3% |
| **American Indian/Alaskan Native** | 24.1% | 23.8% | 12.2% |
| **Asian** | 10.6% | 13.0% | 9.0% |
| **Native Hawaiian/Pacific Islander** | 16.8% | 8.6% | 0.0% |
| **Other** | 10.3% | 10.3% | 10.3% |
| **Hispanic** | 18.3% | 19.2% | 13.9% |

*Source: American Community Survey, 2019-2020*

Over a 14-year span, you can see the slight decrease in uninsurance rates, most notably the drop from 2013 to 2015 when the Affordable Care Act went into place. Data indicates Natrona County uninsurance rate declining slightly, but remaining flat overall, post ACA. Health insurance is recognized as a contributing factor to health outcomes, contributing to the affordability of health services and the utilization of primary care/preventative health care services (KFF, 2013).




*Source: County Health Rankings, 2008-2022*

Another contributing factor to health access and a social determinant of health is access to a primary care provider (PCP). A PCP makes it possible for a person to get preventative health services as well as provides tools to better maintain a healthy lifestyle. In Wyoming and Natrona County, the rate of the population per primary care provider (PCP) is higher than the national rate, this means for Natrona County residents and Wyoming residents; it is harder for people to find and access a PCP than in other parts of the country.

***Table 5. Ratio of Population to Primary Care Physicians***

| | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|
| **United States** | 1,050:1 | 1,030:1 | 1,030:1 | 1,010:1 |
| **Wyoming** | 1,470:1 | 1,470:1 | 1,470:1 | 1,400:1 |
| **Natrona County** | 1,290:1 | 1,370:1 | 1,320:1 | 1,270:1 |

*Source: County Health Rankings, 2019-2022*

## Community Health Need #2: *Chronic Disease Management*

Chronic Disease was identified as another Health Priority; Banner Health decided to focus on how to support the management of chronic diseases. When looking at state, county, and hospital data the prevalence of chronic diseases was present as a top ten condition for Emergency Department visits, Inpatient admits, and incidence of death. When indicating community health concerns, many respondents identified obesity and lack of physical activity – these are both themes that are known to be correlated to chronic diseases. Access to safe places to recreate, access to affordable and healthy foods, and the financial freedom to focus on physical health are all factors that are correlated to SDoH as well as chronic disease management.

According to the National Center for Chronic Disease Prevention and Health Promotion, an offset of the CDC, many chronic diseases are caused by key risk behaviors. Avoiding many of these key risk behaviors can reduce the likelihood of getting a chronic disease. Overall, they recommend eight preventative measures a person can take to prevent chronic diseases, they are listed below:

1. Quit smoking: stopping smoking (or never starting) lowers the risk of serious health problems, such as heart disease, cancer, type 2 diabetes, and lung disease, as well as premature death—even for longtime smokers.
2. Eat healthy: eating healthy helps prevent, delay, and manage heart disease, type 2 diabetes, and other chronic diseases. A balanced, healthy dietary pattern includes a variety of fruits, vegetables, whole grains, lean protein, and low-fat dairy products and limits added sugars, saturated fats, and sodium.
3. Get regular physical activity: regular physical activity can help you prevent, delay, or manage chronic diseases.
4. Avoid drinking too much alcohol: over time, excessive drinking can lead to high blood pressure, various cancers, heart disease, stroke, and liver disease.
5. Get screened: to prevent chronic disease or catch them early, visit your doctor for preventative services like cancer screening tests and prediabetes and diabetes testing.
6. Get enough sleep: Insufficient sleep has been linked to the development and poor management of diabetes, heart disease, obesity, and depression.
7. Know your family history: if you have a family history of a chronic disease, like cancer, heart disease, diabetes, or osteoporosis, you may be more likely to develop that disease yourself. Share your family health history with your doctor, who can help you take steps to prevent these conditions or catch them early.
8. Make health choices in school and at work: by making healthy behaviors part of your daily life, you can prevent conditions such as high blood pressure or obesity, which raise your risk of developing the most common and serious chronic diseases.

When thinking of chronic disease management, especially from the viewpoint of Social Determinants of Health, factors such as being able to afford groceries, physical activity, and living in a food desert all can influence a person's chronic disease risk. These factors can influence a persons' risk for developing a chronic disease and/or their ability to manage a chronic disease diagnosis.

In Natrona County 32,896 homes, or 25.5% of the population live in cost burdened households (US Census). This means 25.5% of Natrona County homeowners and renters are affected by being able to afford their homes. In Wyoming 23.39% of homes are cost-burdened, and in the United States 30.35% of homes are cost-burdened. Access to affordable stable living is a foundational need to living a healthy life that is preventative of chronic diseases.

The National Center for Chronic Disease Prevention and Health Promotion data indicates that adults (20+ years old) in Natrona County live more sedentary lives (22.5%) compared to Wyoming (21.6%) and national (22.0%) rates. Data is based on the question, "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"

Access to foods is another factor for preventative chronic disease management. A food desert is a neighborhood defined as low-income with low access healthy food. In Natrona County it is estimated over 6% of the population live in a food desert (USDA,2019). Natrona County has a lower rate compared to Wyoming (10%) and the United States (14%). Higher rates of chronic diseases have been correlated to low-income and food insecurity, a USDA report indicates food security can be a predictive factor to chronic illnesses (Gregory, et al., 2017).

Insufficient sleep has been linked to a number of chronic diseases including type 2 diabetes, cardiovascular disease, and obesity. For type 2 diabetes sufficient sleep can improve blood sugar control and for obesity the metabolism can be negatively affected by poor or lack of sleep. Sleep apnea and other sleep abnormalities has been correlated to the hardening of arteries and irregular heartbeats – all factors for cardiovascular and heart disease. Data from Behavioral Risk Factor Surveillance indicates that 33% of Natrona County adults 18 and older are getting less than 7 hours of sleep a night, this lower than both Wyoming (22.9%) and national rates (36.2%).

In Natrona County, the rate of death for heart disease is based on those 35+ on a three-year average (2018-2020). Natrona County's rate is 318.4 per 100,000, this is slightly lower than the national rate (319.9 per 100,000), and higher than Wyoming's rate (299.9 per 100,000). When viewed by racial groups, American Indian/Alaskan Natives have a rate in Wyoming higher than the national rate (382.6 per 100,000), whites have a rate that is nearly equal to the counties average (318.1 per 100,000), and Hispanics non-white have the lowest rate (298.9 per 100,000).

In the table below, three-year trends for Natrona County, Wyoming, and the United States are listed by different heart disease and stroke acuity and events.

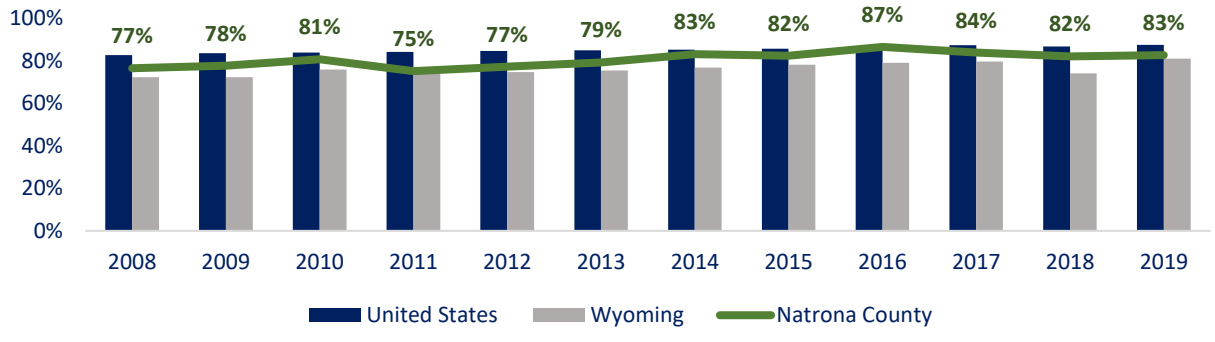
***Table 6. Heart Disease and Stroke, deaths per 100,000***
***2018-2020, 35+, All Genders, All Race/Ethnicities***

| | Natrona County | Wyoming | United States |
|---|---|---|---|
| **Total Cardiovascular Disease** | 410.0 | 385.1 | 422.4 |
| **All Heart Disease** | 318.4 | 299.9 | 319.9 |
| **Coronary Heart Disease** | 174.8 | 160.6 | 176.4 |
| **Heart Attack** | 49.1 | 68.8 | 51.2 |
| **High Blood Pressure** | 355.1 | 286.2 | 268.4 |
| **All Stroke** | 65.5 | 61.2 | 73.1 |

*Source: CDC*

Diabetes management involves a routine test of blood sugar levels – of hemoglobin A1c (HbA1c). HbA1c management indicative of access to preventative care, health knowledge, provider access, and barriers in utilizing health care services. Medicare data shows the year over year rate of persons with diabetes having a yearly exam to monitor their blood sugar levels – which is indicative of diabetes management. Twelve-year trends indicate Wyoming and Natrona County have lower rates diabetics on Medicare getting yearly HbA1c tests than that of the national rate. This data indicates opportunities for health education and program implementation to educate and encourage Medicare diabetics to have routine blood sugar checks with their medical provider.

**Chart G. Yearly Diabetic Compliance of HbA1c Testing, Medicare Patients 2008-2019**




*Source: Center for Medicare and Medicaid Services, 2008-2019*

Cancer screenings are a preventative measure for identifying cancers before there are symptoms. Breast, cervical, colorectal, and occasionally lung cancer are all cancer types that it is recommended to get cancer screenings. In 2019, Natrona County had a lower breast cancer (mammography) screening rate (33% of females 35+ have an annual breast exam) than that of Wyoming (29%) and the United States (33%) (CMS, 2019).

Cancer incidence rates, age adjusted and based on a five-year average indicates a higher prevalence of cancer in Natrona County compared to Wyoming, with the national rate being higher than both state and county. In Natrona County, females have a higher rate of lung cancer than the state and national rates, and prostate cancer has a higher prevalence rate compared to the national rate, with Wyoming having a higher rate than that of Natrona County. A limitation to understanding the trends of Cancer incidence is due to COVID-19 and data collection priorities from county to federal levels.

***Table 7. Natrona County Age Adjusted Cancer Incidence Rate***

| | United States | Wyoming | Natrona County |
|---|---|---|---|
| All Cancer Sites | 448.6 | 402.1 | 410.6 |
| Females | 422.7 | 382 | 390.5 |
| Males | 487.4 | 429.4 | 442.7 |
| | | | |
| Breast (Females) | 126.8 | 114.3 | 112.5 |
| | | | |
| Cervical (Females) | 7.7 | 7.4 | 0 |
| | | | |
| Colon & Rectal | 38.0 | 32.9 | 28.9 |
| Females | 33.4 | 30.2 | 23 |
| Males | 43.5 | 35.7 | 35.5 |
| | | | |
| Lung & Bronchus | 57.3 | 42 | 53.6 |
| Females | 50.8 | 40.5 | 51.5 |
| Males | 65.7 | 44 | 55.4 |
| | | | |
| Prostate (Males) | 106.2 | 111.4 | 110 |

*Source: National Institute of Health: National Cancer Institute, State Cancer Profiles, 5-Year Average*

## Community Health Need #3: *Behavioral Health*

Community feedback gathered through surveys and focus groups indicated a rise in Behavioral Health as a primary concern. Specific behavioral health concerns highlighted by participants include mental health issues and alcohol/substance abuse. An outcome of the COVID-19 Pandemic has been a rise in the focus of health care provider mental health – a result of the emotional and psychological trauma of providing care to patients with COVID-19. The occurrence of burnout for physicians and nurses, manifesting through anxiety, depression, and stress has been attributed to COVID-19 and the pressures put on them to treat patients battling COVID-19 (Sung, Chen, Fan, et al. 2021). Measures to understand the prevalence of behavioral health concerns include *Mental and Behavioral Health Disorders* and *Opioid Drug Use.*

Mental health disorders are prevalent throughout the world, one in eight people in the world live with a mental disorder, anxiety and depressive disorders being the most common (Institute of Health Metrics and Evaluation, 2022). "A mental disorder is characterized by a clinically significant disturbance in an individual's cognition, emotional regulation, or behavior." (WHO, 2022) It is estimated that there was an over 25% increase in anxiety and depressive disorder in 2020 because of the COVID-19 pandemic (WHO – Mental Health and COVID-19,2022).

In 2022, Natrona County adults reported their mental health was not good ~4 days in the previous 30-days. Natrona County has an equal day of incidence to the state and a slightly lower than the national days of incidence (4.5 days per 30 days). From 2019 to 2022, days of has incidence has increased from ~3 days in Natrona County to the currently reported mental health days (County Health Rankings, 2019-2022).

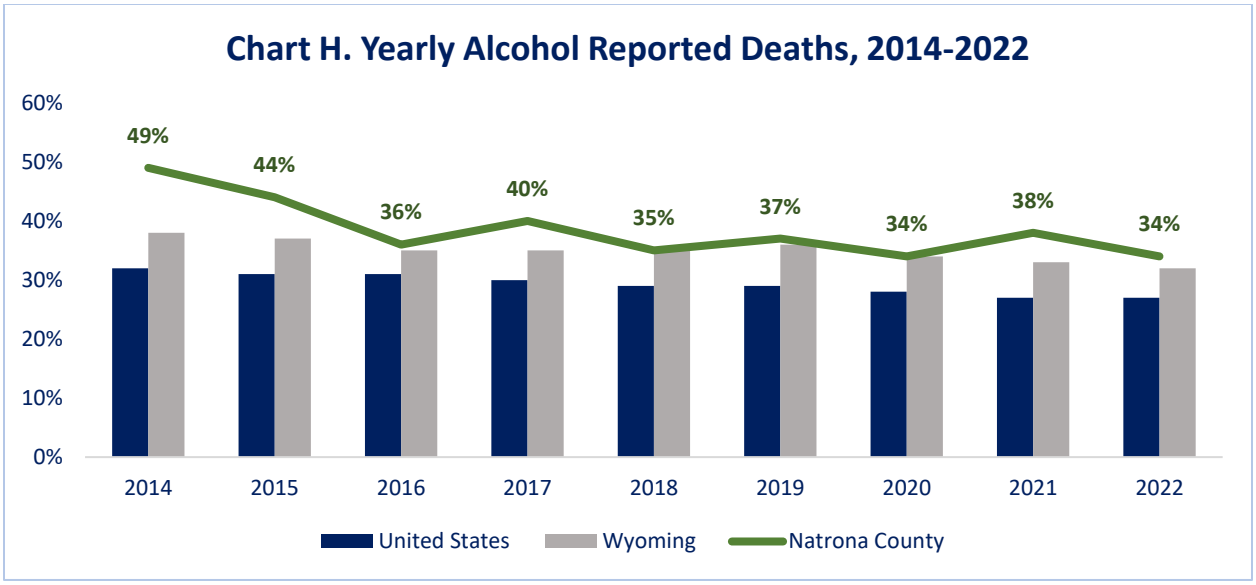
Similar to the importance of access to a primary care provider, access to a mental health provider is equally important. For Natrona County, access to a mental health provider is easier than that of the state and United States.

***Table 8. Ratio of Population Mental Health Provider***

| | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|
| **United States** | 440:1 | 400:1 | 380:1 | 350:1 |
| **Wyoming** | 310:1 | 300:1 | 290:1 | 270:1 |
| **Natrona County** | 260:1 | 240:1 | 230:1 | 220:1 |

*Source: County Health Rankings, 2008-2022*

Nationally, excessive use of alcohol is responsible for over 140,000 deaths every year (CDC, 2022). Alcohol responsible deaths include, shortened lives, adverse health effects from alcohol consumption (cancer, liver disease, and heart disease), and premature death (motor vehicle crashes, alcohol poisonings, and suicides). In Natrona County, the rate of deaths related to alcohol has steadily declined over eight years, with the national and state rate remaining relatively flat.




*Source: County Health Rankings, 2008-2022*

In Natrona County, cigarette smoking data shows a higher rate of smokers than that of the state. Via the BRFSS survey Wyoming adults were asked to report if they have "smoked at least 100 cigarettes in their lifetime and are currently smoking every day or some days". Based on that survey question, 21.1% of Natrona adults indicated yes, which is a higher rate than that of the state 18.4%. When looking at overall tobacco use, which would include cigarettes, chewing tobacco, and tobacco vape pens – Natrona County (27.1%) had a higher rate than the state (24.8%).

Overall, CDC data indicates that drug overdose rates increased from 2019 to 2020.

***Table 9. Drug Overdose Rates per 100,000***

| | 2019 Age-Adjusted | 2020 Age-Adjusted |
|---|---|---|
| **United States** | 21.6 | 28.3 |
| **Wyoming** | 14.1 | 17.4 |

*Source: CDC, Drug Overdose, 2019-2020*

## Needs Identified but Not Prioritized

Additional needs identified through data collection and community input were age related health concerns, aging problems, cancer, and access to healthy foods. In many of Banner's facilities a high percentage of the aged population is served, as a result tactics have been developed that acknowledge and address concerns of the aged populations. It was determined to group cancer into Chronic Disease Management as opposed to having it stand along Significant Health Need, as a result a specific strategy has been developed to educate and create access to cancer screenings.

COVID-19 remains an ongoing health concern in many communities. While Banner Health decided to not develop a Significant Health Need that is specific to COVID-19, health priorities have been developed that are related to the effects of COVID-19 and have developed tactics to address these health priorities.

# 2019 CHNA FOLLOW-UP AND REVIEW

Banner Health acquired Wyoming Medical Center in 2020, and was not a participant in the development of the previous CHNA report, that report can be found here.

Banner Health monitors the Community Feedback email account and responds to emails in a timely manner. Comments can be sent to CHNA.CommunityFeedback@bannerhealth.com. Table 8 has a summary of topics of emails received since 2020, all emails were responded to in a timely manner with answers or directions on where to receive an answer.

***Table 10**. Community Feedback Summary*

| Submission Year | Message Topics |
|---|---|
| **2020** | *Topics covered guidance on scheduling an appointment, support in identifying substance abuse treatment centers, schools reaching out to support hospitals during the pandemic, guidance on COVID protocol once diagnosed, community event participation, direction on how to be a volunteer at Banner Health, smoking cessation, and communication on health mobile events.* |
| **2021** | *Topics covered information on how to get a mentally unstable person the health support they need, how to navigate COVID hospital and clinic protocols, where to donate blood, navigation of insurance, and how to schedule a COVID-19 vaccine appointment.* |
| **2022** | *Topics covered smoking cessation, scheduling a doctor's appointment, what hospital protocol was pertaining to partners being with the mother during delivery, as well as a positive review on the quality of food during recovery.* |

Wyoming Medical Center developed Implementation Strategies during their CHNA process, pre-Banner Health acquisition, they can be found here. The implementation of those strategies and the measurement of the impact were difficult to measure due to COVID-19, as a result Banner applied the strategies and tactics developed during Cycle 3 to Wyoming Medical Center.

Table 10 indicates what actions have been taken by Banner Health and Wyoming Medical Center since 2020. COVID-19 has had an ongoing impact on the Wyoming Medical Center's Strategies and Tactics due to the impact it had on overall system health priorities and focus. Data collection and monitoring had gaps in the data collected for certain tactics, and in some cases, data was no longer collected or focused on by Banner Health.

***Table 11. Western Division Implementation Strategies Outcomes***

| Strategies | Outcomes |
|---|---|
| **Significant Health Need: Access to Care** | |
| *Strategy #1: Increase access points for primary care services* | • Employed additional Primary Care Providers and Advanced Practice Providers to increase access to care. |
| *Strategy #2: Increase access to ambulatory care settings.* | • Grew access to ambulatory services for our community through Urgent Care, Ambulatory Surgical Centers, and Physical Therapy. |
| *Strategy #3: Deploy care models and tools that improve affordability of care for Banner Health Network members.* | • Promoted access to Banner Medical Group, to reduce utilization of the Emergency Room<br>• Identified 22 core measures for annual wellness visits to set quality measures – including chronic disease management, cancer screenings, and immunizations. |
| **Significant Health Need: Chronic Disease Management (Diabetes/Heart Disease/Cancer)** | |
| *Strategy #1: Continue to improve the coordination of care for patients with chronic disease diagnosis* | • Utilized pharmacists to assist in chronic disease management via telephone consultations.<br>• Offer cancer screenings through clinics.<br>• Provided education and assistance with medication adherence, including cost of medication. |
| *Strategy #2: Growth of preventative care and wellness programs in the communities we serve.* | • Provided Medicare Advantage Wellness visits through deploying MDs, NPs, and PAs.<br>• Offered same day mammography access in ambulatory settings (health centers and Imaging locations). |
| *Strategy #3: Continued enhancement of measurement /oversight of clinical quality measures for chronic disease patients.* | • Decreased hypertension through an increase in clinical measures for BP control.<br>• Decreased HbA1cs through an increase in clinical measures for diabetic patients.<br>• Monthly clinical performance meetings focusing on diabetes and hypertension for Quality Improvement. |
| **Significant Health Need: Behavioral Health** | |
| *Strategy #1: Provide services to increase awareness and access to address general psychiatric health needs.* | • Continue to partner with community outpatient behavioral health providers to provide coordinated care.<br>• Encouraged patients to get initial behavioral screenings in the Emergency Department. |

| | |
|---|---|
| *Strategy #2: Utilize internal and external resources to address opioid addiction in Banner Health communities.* | • Implemented a system wide primary care strategy to identify opioid use disorder. |
| *Strategy #3: Utilize internal and external resources to improve clinical quality for suicide, depression patients in Banner Health communities.* | • Working to be a "Zero Suicide" health system, where all non-clinical hospital employees are trained to Question, Persuade, and Respond when interacting with a person having a suicidal crisis.<br>• Provided depression screenings during Clinic Appointments. |

# APPENDIX A. LIST OF DATA SORUCES

## Primary and Secondary Data Sources

- Stratasan via ESRI Demographic
- Stratasan via ESRI Insurance Estimates
- County Health Rankings
- WHO
- CDC
- USDA
- McKesson

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## Survey Flyer

## Survey

1. **Zip code where you live: _____**

2. **Sex:**
   a. Male
   b. Female
   c. Non-binary or non-identifying
   d. Other: _____

3. **Age**
   a. 0-17
   b. 18-25
   c. 26-39
   d. 40-54
   e. 55-64
   f. 65+

---

1. **How would you rate the overall health of your community?**
   a. Very unhealthy
   b. Unhealthy
   c. Somewhat healthy
   d. Healthy
   e. Very healthy

2. **What makes a community healthy? _____**

3. **What are the top health issues you see in your community? (Choose 3)**
   - Access to care
   - Access to healthy foods
   - Aging problems (e.g. arthritis, hearing/vision loss, etc.)
   - Cancer
   - Dental health
   - Diabetes
   - Domestic violence
   - Emergency preparedness
   - Firearm related injuries
   - Heart disease & stroke
   - Homicide
   - Inability to afford medical care services
   - Mental health
   - Maternal / infant health
   - Motor vehicle crash injuries
   - Overweight / obesity
   - Safe parks and recreation
   - Sexually transmitted infections
   - Substance abuse / alcohol abuse
   - Suicide
   - Teenage pregnancy
   - Tobacco / vaping
   - Transportation to medical care
   - Uninsured / underinsured
   - Other _____

4. **What are the most important factors that will improve the quality of life in your community? (Choose 3)**

- Low crime / safe neighborhoods
- Low level of child abuse
- Safe parks and recreation
- High performing schools
- Access to health care (e.g., family doctor)
- Clean environment
- Affordable housing
- Arts and cultural events
- Access to healthy foods
- Positive race / ethnic relations
- Good jobs and healthy economy
- Healthy behaviors and lifestyles
- Low adult death and disease rates
- Low infant deaths
- Emergency preparedness
- Access to public transportation

5. Other _____

6. **What health and quality of life resources or services do you think are missing in your community? (Choose 3)**
    - Affordable housing
    - Free / low-cost medical care
    - Free / low-cost dental care
    - Primary care providers
    - Medical or surgical specialists
    - Mental health services
    - Substance abuse services
    - Bilingual services
    - Transportation
    - Prescription assistance
    - Health education / information / outreach
    - Health screenings
    - None
    - Other _____

7. **What the most significant barriers that keep people in the community from accessing health care when they need it? (Choose 3)**
    - Availability of providers / appointments
    - Difficulty to navigate health care system
    - Difficulty to pay out-of-pocket expenses (co-pays, prescriptions, etc.)
    - Lack of childcare
    - Lack of health insurance coverage
    - Lack of transportation
    - Lack of trust
    - Language / cultural barriers
    - Time limitations (e.g. long wait times, time off work, etc.)

8. **How would you rate your physical health?**
    a. Very unhealthy
    b. Unhealthy
    c. Somewhat healthy
    d. Healthy
    e. Very healthy

9. **How would you rate your mental health?**
    a. Very unhealthy
    b. Unhealthy
    c. Somewhat healthy
    d. Healthy
    e. Very healthy

10. **How often do you visit your primary care physician?**
    a. Every few months
    b. Once or twice a year
    c. Only when sick
    d. I do not have a primary care physician

11. **On a scale of 1 (strongly disagree) through 5 (strongly agree), please rate each of the following statements about your experience in accessing health care services (1 – Strong Disagree; 2 – Somewhat Disagree; 3 – Neutral; 4 – Somewhat Agree; 5 – Strongly Agree)**
    a. Able to access a primary care provider when needed (Family Doctor, Pediatrician, General Practitioner)
    b. Able to access a medical specialist when needed (cardiologist, Dermatologist, Neurologist, etc.)
    c. Utilizing Emergency Departments or urgent care in place of a primary care physician
    d. There are a sufficient number of providers accepting Medicaid and providing financial assistance in the area

12. **As a result of COVID-19, are you or people in your household currently having any of the problems listed below? (Select all that apply)**
    - Job loss or working fewer hours
    - Trouble paying your bills
    - Loss or change in your housing
    - Not having enough food
    - Increased medical needs
    - Problems accessing health care services
    - Increased family caregiving demands
    - Loss of connection to faith or social groups
    - Increased stress or anxiety
    - Increased loneliness
    - None of the above
    - Other_____

13. **Level of trust in COVID-19 information sources (A great deal, a little, not at all, don't know)**
    a. Doctor or health care provider
    b. U.S. Coronavirus Task Force
    c. Close friends and family members
    d. U.S. Government
    e. State Government
    f. Local health care system
    g. Faith leader
    h. News sources
    i. Co-workers, classmates, or others
    j. Local Tribal Government
    k. Social media contracts
    l. Other

## Key Informant Interview Questions

1. Can you give us a brief description of your specialized knowledge, expertise, and representative role?
    a. What populations/communities do you serve?
2. How do you define health?
    a. What do you think is necessary to live a healthy life?
3. What does quality of life mean to you?
4. What are the most important issues that affect the health of people in your community?
    a. Who is most affected by those?
5. How has the recent COVID-19 pandemic affected the health of the people you work with in your community?
    a. What new or unexpected health issues arose throughout the pandemic?
    b. How has your organization responded to communities in need during the pandemic?
    c. In what ways have you seen community resilience throughout the current pandemic? Can you provide any specific examples?
6. This question is being used to understand community assets and strengths of the communities/populations you work with. Part of the CHNA will list existing community resources and programs.
    a. What are some of the programs that exist in your community to promote:
        i. Physical health or exercise?
        ii. Mental health or psychosocial wellbeing?
        iii. Health for specific populations (infants, youth, seniors, minorities, LGBTQ+, etc.)?
        iv. Resilience in vulnerable communities?
7. What services are needed in the community? Who most needs them?
8. Is there anything else you would like us to know?

## Western Division Community Survey Demographics

*Table 12. Western Division Community Survey Demographics*

| | # | % |
|---|---|---|
| **Total Responses** | 234 | |
| | | |
| **Gender** | | |
| Male | 50 | 21.4% |
| Female | 181 | 77.4% |
| Non-binary or non-identifying | 2 | 0.9% |
| Other | 1 | 0.4% |
| | | |
| **Age** | | |
| 0-17 | 1 | 0.4% |
| 18-25 | 3 | 1.3% |
| 26-39 | 53 | 22.6% |
| 40-54 | 85 | 36.3% |
| 55-64 | 48 | 20.5% |
| 65+ | 44 | 18.8% |

# APPENDIX B. STEERING COMMITTEE AND COMMUNITY ADVISORY COUNCIL MEMBERS

Banner Health's CHNA Steering Committee is comprised of leaders from throughout Banner Health's system. These leaders represent our Arizona Community Delivery, Wester Division and Rural Facilities, as well as our Academic Medical Centers. In collaboration with Wyoming Medical Center's leadership team and Banner Health's Strategy Planning department, the Steering Committee is 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 13**. Banner Health Steering Committee*

| Steering Committee Member | Title |
|---|---|
| Todd Werner | Senior Vice President, Acute Care Delivery |
| Sarah Frost | CEO, Banner University Medical Center – Tucson & South |
| Margo Karsten | Division President, Western Division |
| Daniel Post | CEO, Banner University Medical Center – Phoenix |
| Lamont Yoder | Division President, Arizona Community Delivery |

## CHNA Facility Based Champions

A working team of CHNA Champions from each of Banner Health's hospitals meets on a monthly basis to review the ongoing process of community stakeholder meetings, report creation, and action plan implementation. This group consists of membership made up of CEOs, CNOs, COOs, facility directors, quality management personnel, volunteer services leaders, and other clinical stakeholders.