Coordinated Maricopa County Community Health Needs Assessment

Banner Thunderbird Medical Center

September 22, 2016
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Executive Summary

Community Health Needs Assessment (CHNA) Background

The Patient Protection and Affordable Care Act (ACA) added new requirements which nonprofit hospitals must satisfy in order to maintain their tax-exempt status under section 501(c)(3) of the Internal Revenue Code. One such requirement added by ACA, Section 501(r) of the Code, requires nonprofit hospitals to conduct a Community Health Needs Assessment (CHNA) and adopt implementation strategies to meet the identified needs of 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.

Beginning in early 2015, Banner Thunderbird Medical Center (Banner Thunderbird) in partnership with the Maricopa County Coordinated Health Needs Assessment (CCHNA) collaborative, the Health Improvement Partnership of Maricopa County (HIPMC) and the Maricopa County Department of Public Health (MCDPH) conducted an assessment of the health needs of residents of Maricopa County. The CHNA process undertaken and described in this report was conducted in compliance with federal requirements.

Purpose Statement

The purpose of this CHNA is to identify and prioritize significant health needs of the community served by Banner Thunderbird. The priorities identified in this report help to guide the hospital’s community health improvement programs and community benefit activities, as well as its collaborative efforts with other organizations that share a mission to improve health.

Community Description

The geographic area for this CHNA is Maricopa County, the common community for all partners participating in the CCHNA collaborative. Maricopa County is the fourth most populous county in the United States. With an estimated population of 4 million and growing, Maricopa County is home to well over half of Arizona’s residents. Maricopa County encompasses 9,224 square miles, includes 27 cities and towns, as well as the whole or part of five sovereign American Indian reservations. Maricopa County is ethnically and culturally diverse, home to almost 1.2 million Hispanics (30% of all residents), 192,000 African Americans, 142,000 Asian Americans, and 60,000 American Indians. According to the U.S. Census Bureau, 13% percent of the population does not have a high school diploma, 17% are living below the federal poverty level, and over 600,000 are uninsured.\(^1\)

Additional information may be provided for the primary service area (PSA) of Banner Thunderbird throughout this report. The Banner Thunderbird PSA includes the zip codes making up the top 75% of the total patient cases. The PSA includes all residents in a defined geographic area surrounding the hospital and does not exclude low-income or underserved populations.
Assessment, Process and Methods

The ACA requirements are mirrored in the Public Health Accreditation Board’s (PHAB) standard mandating that health departments participate in or conduct a community health assessment every three to five years. Federally funded community health centers must also ensure their target communities are of high need. The similar requirements from IRS, PHAB, and the federally funded health center requirements put forth by the United States Department of Health and Human Services provide an opportunity to catalyze stronger collaboration and better shared measurement systems among hospitals, health centers, and health departments. Additionally, limited resources for comprehensive health assessments and the move toward new population health models have created the need for an organized, collaborative, public-private approach for conducting assessments. As a result, Adelante Healthcare, Banner Health, Dignity Health, Health Care for the Homeless, Mayo Hospital, Mountain Park Health Center, Native Health, and Phoenix Children’s Hospital have joined forces with Maricopa County Department of Public Health (MCDPH) and the Maricopa County Health Improvement Partnership (HIPMC) to identify the communities’ strengths and greatest needs in a coordinated community health needs assessment.

In the spirit of Banner Health’s continued commitment to providing excellent patient care, Banner Thunderbird participated in a system-wide coordinated community health needs assessment for each of its hospitals 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.

Health needs were identified through the combined analysis of secondary data and community input. The process of conducting this assessment began with a review of over 100 indicators to measure health outcomes and associated health factors of Maricopa County residents. The indicators included demographic data, social and economic factors, health behaviors, physical environment, health care, and health outcomes. Based on the review of the secondary data, a consultant team developed a primary data collection guide used in focus groups which were made up of representatives of minority and underserved populations.

Summary of Prioritization Process

To be a considered a health need, a health outcome or a health factor had to meet two criteria; first, existing data had to demonstrate a worsening trend in recent years, or indicate an apparent health disparity; second, the health outcome or factor had to be mentioned in a substantial way in primary data collection sources. Participants in the CHNA process included members of Banner Health’s leadership teams and strategic alignment team, public health experts, community representatives and consultants. The CHNA results were 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.

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 included:

- 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

Summary of Prioritized Needs

Banner Health has a strong history of dedication to its community and of providing care to the 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 our commitment to improving the health of the communities we serve. The following statements summarize each of the areas of priority for Banner Thunderbird, and are based on data and information gathered through the CHNA.

1. **Access to Care**: Access to care is a critical component to the health and well-being of community members. Focus group participants overwhelmingly felt that access to care is an important issue for the community. In Maricopa County one out of every five residents lack health insurance and nearly 30% utilize publicly funded health insurance programs. Additionally, there are disparities experienced across members of certain racial/ethnic backgrounds, with Hispanics and American Indians being least likely to have health insurance. The number of adults reporting they have a usual source of health care is decreasing, with one out of every three reporting they do not have a regular doctor they see for care.

2. **Behavioral Health**: Mental health and behavioral health are terms often used interchangeably to refer to a spectrum of health conditions which are each distinct yet often co-occurring and overlapping. Behavioral health includes not only ways of promoting well-being by preventing or intervening in mental illness such as anxiety or depression, but also has an aim preventing or
intervening in substance abuse and suicide. Mental health and substance abuse were among the top concerns of focus group participants. Mental health as well as injury and poisoning are among the top ten leading causes of emergency department visits and inpatient admissions for Maricopa County. The suicide related mortality rate has been increasing in Maricopa County since 2008. The majority of people who experience a mental illness do not die by suicide. However, of those who die from suicide, more than 90% have a diagnosable mental disorder.

3. **Chronic Disease**: Chronic diseases such as cancer, heart disease, diabetes and obesity affect the health and quality of life of Maricopa County residents, but they are also a major driver of health care costs. Unfortunately, the overall rates of chronic disease in Maricopa County have remained stagnant since 2008. While advancements continue to be made in the fight against cancer, it remains the leading cause of death for residents in Maricopa County since 2010. The highest site-specific cancer mortality rate is due to lung cancer. Nationally, cancer mortality is higher among men than women with the highest rates in African American men and the lowest rates in Asian/Pacific Islander women which indicates a potential health disparity in cancer diagnoses, treatments, or preventative care. Heart disease is the second leading cause of death in Maricopa County. Although White non-Hispanics have the highest rates of cardiovascular disease-related mortality, African Americans have the highest rate of emergency department visits which indicates a potential health disparity in cardiovascular disease diagnoses, treatments, or preventative care. The primary risk factors for many chronic diseases include diabetes and obesity. In 2013, 10.2% of Maricopa County adults responding to the Behavioral Risk Factor Surveillance System survey (BRFSS) reported having been told they have diabetes by a healthcare professional. The percentage of adults that report being overweight and obese is decreasing. However, Hispanic residents continue to experience disparities related to obesity and in 2013, 34.1% reported being obese.

This CHNA report was adopted by the Banner Health’s board on December 3, 2016.

This report is widely available to the public on the hospital’s web site 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 e-mail to CHNA.CommunityFeedback@bannerhealth.com
Introduction

Community Health Needs Assessment (CHNA) Background

Banner Thunderbird Medical Center is dedicated to enhancing the health of the communities it serves. The findings from this Community Health Needs Assessment (CHNA) report will 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 law requirements set forth in Internal Revenue Code section 501(r) requiring hospital facilities owned and operated by an organization described in Code section 501(c)(3) to conduct a CHNA at least once every three years. With regard to the CHNA, the ACA specifically requires nonprofit hospitals to: (1) collect and take into account input from public health experts as well as 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; (4) and 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.

Purpose Statement

The purpose of this CHNA is to identify and prioritize significant health needs of the community served by Banner Thunderbird Medical Center. The priorities identified in this report help to guide the hospital’s community health improvement programs and community benefit activities, as well as its collaborative efforts with other organizations that share a mission to improve health.

Coordinated Maricopa County Health Needs Assessment collaborative

The ACA requirements are mirrored in the Public Health Accreditation Board’s (PHAB) standard mandating that health departments participate in or conduct a community health assessment every three to five years. Other PHAB standards require health departments to conduct a comprehensive planning process resulting in a community health improvement plan, and implement strategies to improve access to health care. Federally funded community health centers must ensure their target communities are of high need, and address the shortage of health services that are occurring within these communities. The similar requirements from IRS, PHAB, and the Federally funded health center requirements put forth by the United States Department of Health and Human Services provides an opportunity to catalyze stronger collaboration and better shared measurement systems among hospitals, health centers, and health departments. Additionally, limited resources for comprehensive health assessments and the move toward new population health models have created the need for an organized, collaborative public-private approach for conducting assessments.

Maricopa County hospitals and health centers play significant roles in the region’s overall economy and health. In addition to providing safe and high-quality medical care, these institutions work to improve regional health through programs that promote health in response to identified community needs. Additionally, health care partners are often serving the same or portions of the same communities.
across Maricopa County. As a result, Adelante Healthcare, Banner Health, Dignity Health, Health Care for the Homeless, Mayo Hospital, Mountain Park Health Center, Native Health, and Phoenix Children’s Hospital have joined forces with Maricopa County Department of Public Health (MCDPH) and the Maricopa County Health Improvement Partnership (HIPMC) to identify the communities’ strengths and greatest needs in a coordinated community health needs assessment.

About Banner Health

Headquartered in Phoenix, Arizona, Banner Health is one of the nation’s largest nonprofit health care systems. Guided by our mission “We exist to make a difference in people’s lives through excellent patient care.” Our mission serves as the cornerstone of operations at our 29 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 $84 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 Tucson and Phoenix, 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, our more than 47,000 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-University Medical Center, 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 largest private employer in Arizona and third largest in Northern Colorado, continues to be recognized as one of the “150 Best Places to Work” by Becker’s Hospital Review.
About Banner Thunderbird Medical Center

In 1960, the founders of present-day Banner Thunderbird Medical Center (Banner Thunderbird) opened a facility at Northern and 61st Avenue named Northwest Hospital. This hospital was the culmination of a decade-long struggle to build a community hospital to serve the health care needs of the Northwest Valley's more than 40,000 residents. In 1983, the hospital - then named Glendale Samaritan Hospital - moved north to its current location at 55th Avenue and Thunderbird Road, where a 150-bed facility was opened. At that time, the Northwest Valley population had swelled to 340,000 residents.

The growing need for services has never stopped and Banner Thunderbird has responded, growing to become the largest and most comprehensive health care provider in western metropolitan Phoenix. The hospital offers a full spectrum of medical services. These include:

- Pediatric Care
- Emergency Care
- Heart and Vascular Care
- Stroke Care and Neurosurgery
- Cancer Care
- Outpatient Services
- Obstetric Services and Advanced Neonatal Care
- Medical Imaging Services
- Behavioral Health Services, and
- Surgical services

Banner Thunderbird serves the northwestern part of metropolitan Phoenix, including west Phoenix, Glendale, Peoria and unincorporated areas of Maricopa County, a market area with more than 966,000 residents. There are three other hospitals within Banner Thunderbird’s immediate market segment. They are Arrowhead Hospital (owned and operated by for-profit company Abrazo, a division of Vanguard Health System), Honor Health-Deer Valley Medical Center and Honor Health-John C. Lincoln Medical Center (both owned and operated by nonprofit Honor Health System).

Like other Banner Health hospitals, Banner Thunderbird leverages technology to ensure safer, better care for patients. Physicians document in an electronic medical record and have the ability to remotely access patient records. 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.

Banner Thunderbird also offers robotic surgery, which allows for faster recovery times for patients. Robotic surgery is primarily used for gynecological, prostate and urological surgery at Banner Thunderbird. Additionally, the medical center is part of a pilot program leveraging telehealth to provide behavioral health consultations to their patients, ensuring patients receive the highest quality care in the least disruptive manner.
Banner Thunderbird’s immediate service area includes a diverse population, with greater than 25 percent of the population being pediatric (0-17) and approximately 12 percent of the population age 65 or older. There is still land being developed in the Northwest Valley with new housing, so Banner Thunderbird recently completed a $290 million expansion project to add new beds, programs and services to meet the growing healthcare needs of the area. With the expansion now complete, the hospital currently provides 561 licensed beds. It has the ability to add 40 more beds (located in shelled space in the new South Tower) when community need demands it. The expansion project also included funds to renovate existing areas, including its postpartum units. With the closure of maternity services at nearby John C. Lincoln-Deer Valley, Banner Thunderbird added several new OB/GYNs and has experienced an increase in the number of births.

The hospital has continued to build its presence in the area of pediatric care, an area that had been underserved in the past. Prior to the opening of inpatient pediatric services at Banner Thunderbird in 2002, West Valley families had to travel downtown or to the East Valley for care. Banner Health recognized the community’s need to improve pediatric services for the West Valley and, in 2002, opened the hospital’s first 16-bed inpatient pediatric unit. Over the years, the number of inpatient general pediatric beds has now grown to 40 beds. Additionally, the hospital’s Children’s Center now offers a dedicated pediatric Emergency department, a 17-bed pediatric intensive care unit, 35-bed level 3 NICU and pediatric surgery. The pediatric Emergency department was recently designated with “advanced prepared” status by the state, serving as further confirmation of the hospital’s robust capabilities for all ages.

The nonprofit hospital is currently ranked one of the top hospitals in the Phoenix metropolitan area by US News & World Report and is a recent recipient of a prestigious "Best of the West" award from Westmarc in recognition of the hospital's contributions to the region.

Community Profile

Definition of Community

The geographic area for this CHNA is Maricopa County, the common community for all partners participating in the Maricopa County Coordinated Health Needs Assessment collaborative (CCHNA). However, primary service area (PSA) information for Banner Thunderbird Medical Center will also be provided when available. The Banner Thunderbird PSA includes the zip codes making up the top 75% of the total patient cases. The PSA includes all residents in a defined geographic area surrounding the hospital and does not exclude low-income or underserved populations.

Description of Community

Maricopa County is the fourth most populous county in the United States. With an estimated population of four million and growing, Maricopa County is home to well over half of Arizona’s
residents. Maricopa County encompasses 9,224 square miles, includes 27 cities and towns, as well as the whole or part of five sovereign American Indian reservations.

Banner Thunderbird is located in Glendale, Arizona, within Maricopa County, approximately nine miles northwest of downtown Phoenix and within Maricopa County. The cities of Glendale, Peoria and Northwest Phoenix account for the majority of inpatient cases seen at Banner Thunderbird; however, the medical center also serves several of the other surrounding communities. According to Truven Health Analytics Market Expert tool (Market Expert), the cities included in Banner Thunderbird’s primary service area includes Glendale, Northwest Phoenix, El Mirage, Surprise, Sun City and Anthem.
Demographics of Community

Maricopa County is ethnically and culturally diverse, home to almost 1.2 million Hispanics (30% of all residents), 192,000 African Americans, 142,000 Asian Americans, and 60,000 American Indians. According to the U.S. Census Bureau, 13% percent of the population does not have a high school diploma, and 17% are living below the federal poverty level. According to the United States Census, Maricopa County had a 24% increase in population from 2000 to 2010.\(^{13}\)

Banner Thunderbird’s PSA has very similar demographics when compared to Maricopa County. Table 1 provides the specific age, sex, race/ethnicity, income and education distribution of the population in Banner Thunderbird’s PSA compared to Maricopa County and the state of Arizona.\(^{14}\)
Table 1. Banner Thunderbird PSA, Maricopa County and Arizona Resident Demographics

<table>
<thead>
<tr>
<th></th>
<th>Banner Thunderbird PSA</th>
<th>Maricopa County</th>
<th>Arizona</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population: estimated 2010-2014</strong></td>
<td>965,008</td>
<td>3,947,382</td>
<td>6,561,516</td>
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<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>48.8%</td>
<td>49.4%</td>
<td>49.7%</td>
</tr>
<tr>
<td>Female</td>
<td>51.2%</td>
<td>50.6%</td>
<td>50.3%</td>
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<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 to 9 years</td>
<td>13.8%</td>
<td>14.2%</td>
<td>13.6%</td>
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<tr>
<td>10 to 19 years</td>
<td>14.7%</td>
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<td>20 to 34 years</td>
<td>20.7%</td>
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<td>35 to 64 years</td>
<td>35.8%</td>
<td>37.4%</td>
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<td>65 to 84 years</td>
<td>12.9%</td>
<td>11.4%</td>
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<td>85 years and over</td>
<td>2.1%</td>
<td>1.6%</td>
<td>1.7%</td>
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<tr>
<td><strong>Race</strong></td>
<td></td>
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</tr>
<tr>
<td>White</td>
<td>58.8%</td>
<td>57.8%</td>
<td>56.9%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>3.0%</td>
<td>3.8%</td>
<td>3.0%</td>
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<tr>
<td>Black or African American</td>
<td>4.6%</td>
<td>4.9%</td>
<td>3.9%</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>1.2%</td>
<td>1.5%</td>
<td>4.0%</td>
</tr>
<tr>
<td>2 or more races</td>
<td>2.0%</td>
<td>2.0%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Other</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>30.3%</td>
<td>29.9%</td>
<td>30.1%</td>
</tr>
<tr>
<td><strong>Social &amp; Economic Factors</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Household Income</td>
<td>$49,787</td>
<td>$53,689</td>
<td>$49,928</td>
</tr>
<tr>
<td>Persons below poverty level</td>
<td>17.2%</td>
<td>17.1%</td>
<td>18.2%</td>
</tr>
<tr>
<td>No HS Diploma, Persons Age 25+</td>
<td>14.6%</td>
<td>13.4%</td>
<td>14.1%</td>
</tr>
<tr>
<td>Unemployment</td>
<td>8.7%</td>
<td>8.9%</td>
<td>9.9%</td>
</tr>
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</table>

Source U.S. Census Bureau
Process and Methods Used to Conduct the CHNA

The CHNA utilized a mixed-methods approach that included the collection of secondary or quantitative data from existing data sources and community input or qualitative data from focus groups, and meetings with internal leadership. The process was iterative as both the secondary and primary data were used to help inform each other. The advantage of using this approach is that it validates data by cross-verifying from a multitude of sources.

Secondary Data

Many of the challenging health problems facing the United States in the 21st century require an understanding of the health not just of individuals but also of communities. The challenge of maintaining and improving community health has led to the development of a “population health” perspective. Population health can be defined as “the health outcomes of a group of individuals, including the distribution of such outcomes within the group.” A focus on population health implies a concern for the determinants of health for both individuals and communities. The health of a population grows directly out of the community’s social and economic conditions as well as the quality of its medical care. As a result, the CHNA utilized a community health framework for this report to develop criteria for indicators used to measure health needs.

CCHNA partners selected over 100 data indicators to help examine the health needs of the community (Appendix B). These indicators were based on the Center for Disease Control and Prevention’s (CDC) Community Health Assessment for Population Health Improvement: Most Frequently Recommended Health Metrics report. While this report does not consistently identify the specific indicators that should be utilized, it does specify the categories of information that should be considered.

The following five data categories describe the type of health factor and health outcome indicators examined in the CHNA (See Table 2):

- **Health Outcomes** include: morbidity, which refers to how healthy people are by measuring disease burden and quality of life (e.g. obesity rates, asthma incidence, and low birth weight babies, etc.); and mortality, which measures causes of death by density rates (e.g. cancer mortality, motor vehicle deaths, etc.);
- **Health Care** includes access, which refers to factors that impact people’s access to timely, affordable clinical care (e.g. primary care physicians, number of federally qualified health centers, etc.); and health insurance coverage;
- **Health Behavior** refers to the personal behaviors that influence an individual’s health either positively or negatively (e.g. breastfeeding, physical activity, eating fruits and vegetables, etc.). This also includes delivery, which measures clinical care being delivered to the community (e.g. rate of preventive screenings, ambulatory care sensitive discharges, etc.).
- **Demographics and Social Environment** describe the population of interest by measuring its characteristics (e.g. total population, age breakdowns, limited English proficiency, etc.). Unlike other categories, demographic indicators are purely descriptive and not generally compared to benchmarks or viewed as positive or negative. This category also includes measures of social status, educational attainment, and income, all of which have a significant impact on an individual’s health and;
- **Physical Environment** measures characteristics of the built environment of a community that can impact the health of that community either positively or negatively (e.g. parks, grocery stores, walkability, etc.)

<table>
<thead>
<tr>
<th>Health Outcome Metrics</th>
<th>Health Determinants and Correlate Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality</td>
<td>Morbidity</td>
</tr>
<tr>
<td>Leading Causes of Death</td>
<td>Hospitalization Rates</td>
</tr>
<tr>
<td>Infant Mortality</td>
<td>Obesity</td>
</tr>
<tr>
<td>Injury-related Mortality</td>
<td>Low Birth Rates</td>
</tr>
<tr>
<td>Motor Vehicle Mortality</td>
<td>Cancer Rates</td>
</tr>
<tr>
<td>Suicide</td>
<td>Motor Vehicle Injury</td>
</tr>
<tr>
<td>Homicide</td>
<td>Overall Health Status</td>
</tr>
<tr>
<td>STDs</td>
<td>Immunizations &amp; Screenings</td>
</tr>
<tr>
<td>AIDS</td>
<td>Foreign Born</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>Homelessness</td>
</tr>
<tr>
<td>HIV</td>
<td>Language Spoken at Home</td>
</tr>
<tr>
<td>Homelessness</td>
<td>Marital Status</td>
</tr>
<tr>
<td>Domestic Violence and Child Abuse</td>
<td>Violent and Crime</td>
</tr>
<tr>
<td>Social Capital/Social Support</td>
<td>Social Capital/Spouse Support</td>
</tr>
</tbody>
</table>

Source CDC’s Community Health Assessment for Population Health Improvement: Most Frequently Recommended Health Metrics
Below is an overview of some of the findings from the indicator review (Table 3). Please note that Demographics, Social and Economic factors were reported in the Community Profile section of the report.

Table 3. Results of Indicator Review

<table>
<thead>
<tr>
<th>2013 Measures</th>
<th>Maricopa County</th>
<th>Arizona</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health Outcomes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mortality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of potential life lost</td>
<td>6,100</td>
<td>6,800</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>5.2</td>
<td>6</td>
</tr>
<tr>
<td><strong>Morbidity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of adults who report poor or fair health</td>
<td>15%</td>
<td>19%</td>
</tr>
<tr>
<td>Average number of poor physical health days</td>
<td>3.5</td>
<td>3.9</td>
</tr>
<tr>
<td>Average number of poor mental health days</td>
<td>3.4</td>
<td>3.7</td>
</tr>
<tr>
<td>Low birth weight infants</td>
<td>6.9%</td>
<td>7%</td>
</tr>
<tr>
<td>Diabetes prevalence</td>
<td>10.2%</td>
<td>10.7%</td>
</tr>
<tr>
<td>High blood pressure prevalence</td>
<td>28.1%</td>
<td>30.7%</td>
</tr>
<tr>
<td>HIV prevalence rate</td>
<td>284</td>
<td>237</td>
</tr>
<tr>
<td>Adult obesity</td>
<td>24.5%</td>
<td>26.8%</td>
</tr>
<tr>
<td><strong>Health Determinants</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to Care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uninsured adults (18-64)</td>
<td>23.7%</td>
<td>23.5%</td>
</tr>
<tr>
<td>Uninsured youth (&lt;18)</td>
<td>11.2%</td>
<td>11.9%</td>
</tr>
<tr>
<td>Medicaid/Medicare Patients</td>
<td>29.9%</td>
<td>33.9%</td>
</tr>
<tr>
<td>Primary care physicians ratio</td>
<td>1,410:1</td>
<td>1,510:1</td>
</tr>
<tr>
<td>Dentist ratio</td>
<td>1,570:1</td>
<td>1,720:1</td>
</tr>
<tr>
<td>Mental health providers ratio</td>
<td>800:1</td>
<td>800:1</td>
</tr>
<tr>
<td><strong>Health Behaviors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult smoking</td>
<td>15.5%</td>
<td>16.3%</td>
</tr>
<tr>
<td>Physical Activity (met guidelines)</td>
<td>59.8%</td>
<td>61.5%</td>
</tr>
<tr>
<td>Food insecurity</td>
<td>16%</td>
<td>18%</td>
</tr>
<tr>
<td>Sexually transmitted infections rate</td>
<td>480.4</td>
<td>466.4</td>
</tr>
<tr>
<td>Teen births rate (15-19)</td>
<td>43</td>
<td>45</td>
</tr>
<tr>
<td>Binge drinking</td>
<td>14%</td>
<td>13.4%</td>
</tr>
<tr>
<td><strong>Physical Environment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air pollution – particulate matter</td>
<td>9.9</td>
<td>10.1</td>
</tr>
<tr>
<td>Severe housing problems</td>
<td>20%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Additionally Banner Thunderbird considered the top ten leading causes of death for Maricopa County and their PSA in the secondary data review (Tables 4 & 5). While there are slight variations between the County and the Banner Thunderbird PSA, overall the trends are very similar. Heart disease, cancer, Alzheimer’s and chronic lower respiratory diseases are among the leading causes of death for both Maricopa County and the Banner Thunderbird PSA.18
Table 4. Top Ten Leading Causes of Death in Maricopa County, 2009-2013

<table>
<thead>
<tr>
<th>Rank</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Heart Disease</td>
<td>Cancer</td>
<td>Cancer</td>
<td>Cancer</td>
<td>Cancer</td>
</tr>
<tr>
<td>2</td>
<td>Cancer</td>
<td>Heart Disease</td>
<td>Heart Disease</td>
<td>Heart Disease</td>
<td>Heart Disease</td>
</tr>
<tr>
<td>3</td>
<td>Alzheimer’s</td>
<td>Alzheimer’s</td>
<td>Alzheimer’s</td>
<td>Chronic Lower Respiratory</td>
<td>Chronic Lower Respiratory</td>
</tr>
<tr>
<td>4</td>
<td>Chronic Lower Respiratory</td>
<td>Chronic Lower Respiratory</td>
<td>Chronic Lower Respiratory</td>
<td>Alzheimer’s</td>
<td>Alzheimer’s</td>
</tr>
<tr>
<td>5</td>
<td>Unintentional Injury</td>
<td>Stroke</td>
<td>Stroke</td>
<td>Unintentional Injury</td>
<td>Stroke</td>
</tr>
<tr>
<td>6</td>
<td>Stroke</td>
<td>Unintentional Injury</td>
<td>Unintentional Injury</td>
<td>Stroke</td>
<td>Unintentional Injury</td>
</tr>
<tr>
<td>7</td>
<td>Diabetes</td>
<td>Diabetes</td>
<td>Diabetes</td>
<td>Diabetes</td>
<td>Diabetes</td>
</tr>
<tr>
<td>8</td>
<td>Suicide</td>
<td>Suicide</td>
<td>Suicide</td>
<td>Suicide</td>
<td>Suicide</td>
</tr>
<tr>
<td>9</td>
<td>Influenza and Pneumonia</td>
<td>Falls</td>
<td>Falls</td>
<td>Falls</td>
<td>Falls</td>
</tr>
<tr>
<td>10</td>
<td>Falls</td>
<td>Liver Disease</td>
<td>Liver Disease</td>
<td>Liver Disease</td>
<td>Liver Disease</td>
</tr>
</tbody>
</table>

Source: Arizona Department of Health Services, Vital Records and Statistics

Table 5. Top Ten Leading Causes of Death in Banner Thunderbird PSA, 2009-2013

<table>
<thead>
<tr>
<th>Rank</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Heart Disease</td>
<td>Cancer</td>
<td>Cancer</td>
<td>Cancer</td>
<td>Cancer</td>
</tr>
<tr>
<td>2</td>
<td>Cancer</td>
<td>Heart Disease</td>
<td>Heart Disease</td>
<td>Heart Disease</td>
<td>Heart Disease</td>
</tr>
<tr>
<td>3</td>
<td>Alzheimer’s</td>
<td>Alzheimer’s</td>
<td>Chronic Lower Respiratory</td>
<td>Chronic Lower Respiratory</td>
<td>Chronic Lower Respiratory</td>
</tr>
<tr>
<td>4</td>
<td>Chronic Lower Respiratory</td>
<td>Chronic Lower Respiratory</td>
<td>Alzheimer’s</td>
<td>Alzheimer’s</td>
<td>Alzheimer’s</td>
</tr>
<tr>
<td>5</td>
<td>Stroke</td>
<td>Stroke</td>
<td>Stroke</td>
<td>Stroke</td>
<td>Stroke</td>
</tr>
<tr>
<td>6</td>
<td>Unintentional Injury</td>
<td>Unintentional Injury</td>
<td>Unintentional Injury</td>
<td>Unintentional Injury</td>
<td>Unintentional Injury</td>
</tr>
<tr>
<td>7</td>
<td>Diabetes</td>
<td>Diabetes</td>
<td>Diabetes</td>
<td>Diabetes</td>
<td>Diabetes</td>
</tr>
<tr>
<td>8</td>
<td>Influenza and Pneumonia</td>
<td>Falls</td>
<td>Falls</td>
<td>Suicide</td>
<td>Suicide</td>
</tr>
<tr>
<td>9</td>
<td>Falls</td>
<td>Suicide</td>
<td>Suicide</td>
<td>Falls</td>
<td>Falls</td>
</tr>
<tr>
<td>10</td>
<td>Suicide</td>
<td>Liver Disease</td>
<td>Liver Disease</td>
<td>Liver Disease</td>
<td>Liver Disease</td>
</tr>
</tbody>
</table>

Source: Arizona Department of Health Services, Vital Records and Statistics
Quantitative data used in this report are high quality, population-based data sources and were analyzed by MCDPH, Office of Epidemiology. Data came from local, state, and national sources such as the Maricopa County Department of Public Health, Arizona Department of Health Services, U.S. Census Bureau, U.S. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System survey, and Youth Risk Behavior survey.

**Primary Data**

The broad interests of the community were incorporated through a series of focus groups held with members of minority and underserved populations. All primary data collection efforts were intended to obtain information on the most pressing community concerns, identification of community strengths and assets and areas of opportunity for health improvement strategies.

**Focus Groups**

Members of the community representing subgroups, defined as groups with unique attributes (race and ethnicity, age, sex, culture, lifestyle, or residents of a particular area of Maricopa County), were recruited to participate in focus groups. A standard protocol was used for all focus groups (See Appendix C) to understand the experiences of these community members as they relate to accessing health care, health disparities and chronic disease. In all, a total of twenty-three focus groups were conducted with 225 community members from the following groups: (1) older adults (50 years of age and up); (2) adults without children; (3) adults with children; (4) American Indian adults; (5) Lesbian, Gay, Bisexual, Transgender, and Questioning (LGBTQ) adults; (6) African American adults; (7) Hispanic/Latino adults; (8) low socio-economic status adults; (9) caregivers of senior parents; (10) Asian American adults; and (11) young adults (18-30 years of age).

Content analysis was performed on focus group interview transcripts to identify key themes and salient health issues affecting the community residents. The most common community health problems identified were:

- Access to Care
- Mental Health
- Substance Abuse
- Community Safety
- Diabetes (African American and Native American groups)

Barriers to healthcare discussed include:

- Cost/financial limitations
- Lack of access to existing resources
- Incomplete coverage
- Complex and confusing process/lack of consumer education
- Distrust/negative past experiences with healthcare system
- Lack of cultural competency among doctors
- Lack of services/stigma for mental illness
- Lack of transportation
- Lack of child care during community health programs

Recommended strategies for health improvement discussed amongst the participants included:

- Increased training/education of health care professionals (e.g., proper use of pronouns for transgendered individuals, updated technologies/medical research, alternative medicine options, etc.)
- Lower costs (e.g. insurance, copays, specialists)
- Provide and train more community health workers, navigators, advocates, and aides
- More educational resources/opportunities (e.g. better health education for children, improve online services)
- More transparency in health care (e.g. insurance, side effects, alternatives, toxins, etc.)
- Better access to healthy, and affordable food (e.g. accept SNAP benefits at farmers markets, offer nutrition and gardening classes, create community gardens)
- Improve access to physical fitness in low income communities
- Provide more affordable mental and oral healthcare services
- Improvements to services (e.g. shorten wait times, accommodate people who work late hours)

Data limitations and Gaps

The data used in this report are from various reliable sources, but there are limitations to the data that need to be considered. When reviewing birth and death records some of the fields in these records are filled in based on recall. Example, a mother is asked when she began prenatal care and may have an estimate but typically not the exact date. With death records a family member assists when filling in information on the death certificate. If the individual doesn’t know about an individual’s personal habits (like smoking) it may not get recorded on the death certificate. With Hospital Discharge Data (HDD) for Inpatient (IP) discharges and Emergency Department (ED) visits the data is from all licensed facilities, but does not include Federal, military, and the Department of Veteran Affairs. When reviewing this data we have to consider the fact that these are those individuals that are seeking care. There are various reasons why an individual does not go to a hospital for care (like lack of money to pay) or individuals may use the ED for routine care that they could receive if they had a primary care physician. The year we evaluated for HDD used the ICD-9 code, which is different from the death certificate coding which utilizes ICD-10.

The survey data used from our state and national partners also have limitations since they are self-reported surveys. The Behavioral Risk Factor Surveillance System survey (BRFSS) is a survey of adults within Maricopa County. The survey questions can be personal in nature and individuals have the option of not responding, or they may answer what they feel the best answer is, causing issues with the data. The Youth Risk Behavior Survey (YRBS) is a survey of students in 8th, 10th, and 12th grades of school. The survey is done every other year and cannot be drilled down to the county level. All data from the YRBS is for the entire state. The Arizona Youth Survey (AYS) is done every other year, opposite of the YRBS, and is of 8th, 10th, and 12th grade students in Arizona schools.
Identification and Prioritization of Community Health Needs

**Identifying Community Health Needs**

To be considered a health need, a health outcome or a health factor had to meet two criteria; first, existing data had to demonstrate a worsening trend in recent years, or indicate an apparent health disparity; second, the health outcome or factor had to be mentioned in a substantial way in primary data collection sources.

**Process and Criteria for Prioritization**

Participants in the CHNA process included members of Banner Health’s leadership teams and strategic alignment team, public health experts, community representatives and consultants. The CHNA results were 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.

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 included:

- 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
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 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 our commitment to improving the health of the communities we serve. The following statements summarize each of the areas of priority for Banner Thunderbird, and are based on data and information gathered through the CHNA.

Access to Care

Access to care is a critical component to the health and well-being of community members. 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. Focus group participants overwhelmingly felt that access to care is an important issue for the community.

The American Community Survey (ACS) shows the number of people without insurance is decreasing (Graph 1). However within Maricopa County, one out of every five residents lacks health insurance which is higher than the state and national averages. Twelve percent of children under the age of 18 are not insured. Additionally, nearly 30% utilize publicly funded health insurance programs.19

There are disparities experienced across members of certain racial/ethnic backgrounds, with Hispanics and American Indians being the least likely to have insurance. Additionally, Hispanics and American Indians are also the only racial/ethnic group to see the number of uninsured individuals increase since 2009 (Graph 2).20
There is still a large portion of undocumented citizens that do not qualify for health care coverage under the Affordable Care Act (ACA). Additionally, foreign born residents are much less likely to have health insurance coverage than native born residents (Graph 3).\(^{21}\)
Despite the increase in the ability to purchase health insurance through the federal marketplace, this does not appear to be translating to more people receiving care. The number of adults reporting they have a usual source of health care has decreased from 2011, with one out of every three Maricopa County residents saying they do not have a regular doctor they see for care (Graph 4). Women are more likely to report having a regular source of care when compared to men.

Graph 4. Percentage of Adults Who Report Having a Usual Source of Health Care, Maricopa County, AZ, 2011-2013

Source Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System survey

The most frequently identified barriers to health care discussed amongst focus group participants included financial limitations, long wait times for services, complication of navigating the system, incomplete coverage, lack of cultural competency, and respect among healthcare providers. Focus group participants also discussed the need to educate the community and increase awareness of available resources, such as free or low cost clinics, financial aid for medical bills, and other community programs.

Mental/Behavioral Health

Mental health and behavioral health are terms often used interchangeably to refer to a spectrum of health conditions which are each distinct yet often co-occurring and overlapping. Behavioral health includes not only ways of promoting well-being by preventing or intervening in mental illness such as anxiety or depression, but also has an aim preventing or intervening in substance abuse and suicide.

Mental health was ranked as one of the most important health problems impacting the community by focus group participants. Mental health is among the top ten leading causes of emergency department visits and inpatient admissions for Maricopa County. Of those adults that participated in the Behavioral Risk Factor Surveillance System survey in Maricopa County, they reported an average of three days each month where their mental health was “not good”. According to the National Institute of Mental Health, as of 2013, an estimated 43.8 million Americans over the age of 18 had a diagnosed...
mental disorder, and nearly 6% suffer from serious mental illness. In fact, Major Depressive Disorder is the leading cause of disability in the United States for individuals ages 15 to 44, and is more prominent in females than males.26

The PSA for Banner Thunderbird has an inpatient admission rate of 427.4 per 100,000 residents for Other Psychoses. This diagnostic code includes mental health disorders such as Schizophrenia and Bipolar disorder. This is a 185% percent increase since 2008.27 Youth ages 15 to 19 have the highest rate of Other Psychoses related inpatient admissions within Maricopa County (Graph 5).28

The PSA for Banner Thunderbird has an inpatient admission rate of 107.0 per 100,000 residents for Organic Psychotic Disorders. This diagnostic code includes mental health disorders associated with substance use such as alcohol withdrawal delirium and drug withdrawal. This is a 94% percent increase since 2008.29 Young adults ages 20 to 24 have the highest rate of Organic Psychotic Disorder related inpatient admissions in Maricopa County (Graph 6).30 The disproportionate effects of mental illness on youth and young adults suggest a potential health disparity in mental illness diagnoses, treatments, or preventative care.
It is important to note that a significant percentage of individuals are paying for mental health related hospital visits out of pocket which indicates a high severity of need for treatment (Graphs 7 and 8).
According to the Centers for Disease Control and Prevention, substance abuse cost our nation $700 billion dollars annually in costs related to crime, lost productivity, and health care.\textsuperscript{32} According to the Substance Abuse and Mental Health Service Administration’s (SAMHSA’s) National Survey on Drug Use and Health, 23.5 million persons aged 12 or older needed treatment for an illicit drug or alcohol abuse problem in 2009. Of these, only 2.6 million—11.2% of those who needed treatment—received it at a specialty facility.\textsuperscript{33}

Substance abuse was frequently mentioned as a concern amongst focus group participants. According to the Behavioral Risk Factor Surveillance System survey 15% of adults 18 years of age and older report binge drinking (defined as having 5 or more drinks for men and 4 or more drinks for women on one occasion) in the last 30 days.\textsuperscript{34} Furthermore, according to the Arizona Youth Survey, in 2014, 23% of high school seniors reported binge drinking in the last 2 weeks (Graph 9).\textsuperscript{35} The most common substances used by youth throughout Maricopa County include alcohol, tobacco, marijuana, and prescription drugs.\textsuperscript{36} For the majority of substances there has been a decrease in use with the exception of marijuana use which is increasing. This is likely due in part to the passing of medical marijuana legislation in the state of Arizona.

\textbf{Graph 9. Percentage of Youth Who Had 5 or More Alcoholic Drinks in a Row in the Past 2 Weeks, Maricopa County, AZ, 2013}

- County Grade 8: 5.9%
- State Grade 8: 6.3%
- County Grade 10: 14.3%
- State Grade 10: 14.4%
- County Grade 12: 23.0%
- State Grade 12: 22.7%

Source Arizona Criminal Justice Commission, Arizona Youth survey

Injury and poisoning are the leading cause of emergency department visits for Maricopa County.\textsuperscript{37} The rate of emergency department visits related to opiates and alcohol are increasing for the Banner Thunderbird PSA which indicates a potential opportunity for screening, brief intervention and referral to substance abuse treatment (Graph 10).\textsuperscript{38}
The majority of people who experience a mental illness do not die by suicide. However, of those who die from suicide, more than 90% have a diagnosable mental disorder. Individuals with a substance use disorder (i.e., either a diagnosis of abuse or dependence on alcohol or drugs) are almost six times more likely to report a lifetime suicide attempt than those without a substance use disorder. Suicide was among the top ten leading causes of death for Maricopa County and the Banner Thunderbird PSA in 2013 and has been increasing since 2008 (Graph 11).
The 2013 suicide mortality rate for Maricopa County was 15.2 deaths per 100,000 individuals, which is better than the state average; however, it still exceeds both the national average and is considerably higher than the Healthy People 2020 goal of 10.2 deaths per 100,000. Although women are more likely to attempt suicide, men have higher rates of death by suicide. Rates of suicide are also higher in the elderly and American Indian population indicates a potential health disparity in identification, referral or treatment of suicidal ideation.\textsuperscript{42}

**Chronic Disease**

Chronic diseases such as cancer, heart disease, diabetes and obesity affect the health and quality of life of Maricopa County residents, but they are also a major driver of health care costs. Unfortunately, the overall rates of chronic disease in Maricopa County have remained stagnant since 2008.

While advancements continue to be made in the fight against cancer, it remains the leading cause of death in Maricopa County.\textsuperscript{43} It is estimated that approximately 39\% of men and women will be diagnosed with cancer at some point during their lifetime.\textsuperscript{44} The highest site-specific cancer incidence rates in Arizona include breast, prostate, lung and bronchus, colon and rectum and uterine cancer.\textsuperscript{45} The highest site-specific cancer mortality rate in Maricopa County is due to lung cancer (Graph 12).\textsuperscript{46}

![Graph 12. Rate (per 100,000 residents), Cancer Related Mortality, Maricopa County, 2008-2013](source)

Source Arizona Department of Health Services, Vital Records and Statistics

Nationally, cancer-related mortality is higher among men than women with the highest rate in African-American men and lowest in Asian/Pacific Islander women.\textsuperscript{47} Specific to Breast Cancer incidence in Maricopa County, the highest rate can be attributed to White non-Hispanics, followed by African-Americans (Graph 13).\textsuperscript{48}
Prostate cancer as well as lung cancer are impacting African-Americans at the highest rate, while the highest rate of colorectal cancer can be attributed to American Indians; which indicates a potential health disparity in cancer screening, diagnoses, or treatments for these populations (Graphs 14-16).\textsuperscript{49}
Heart disease costs the United States about $207 billion each year. This total includes the cost of health care services, medications and lost productivity. Heart disease is the second leading cause of death for Maricopa County. Overall the number of deaths related to cardiovascular disease in the Banner PSA have remained stagnant since 2011 (Graph 17). Additionally, adults age 75 and older have a high rate of cardiovascular disease-related inpatient discharges (Graph 18).
Although White non-Hispanics have the highest rate of cardiovascular disease-related mortality, African Americans have the highest rate of cardiovascular disease-related emergency department visits which indicates a potential health disparity in cardiovascular disease diagnoses, treatments, or preventative care (Graphs 19-20).
The primary risk factors for most chronic diseases include diabetes and obesity. According to the American Heart Association, in 2010 19.7 million Americans over the age of 20 had physician diagnosed diabetes. An estimated 8.2 million Americans have undiagnosed diabetes. Complications of diabetes include heart disease, stroke, high blood pressure, blindness, kidney disease, neuropathy, amputation and death. The number of deaths related to diabetes is decreasing in Maricopa County, but it is still the seventh leading cause of death for Maricopa County residents. The number of people reporting they have been told they have diabetes is also increasing. In 2013, 10.2% of adults responding to the Behavioral Risk Factor Surveillance System survey reported having been told they have diabetes by a healthcare professional (Graph 21). It is unclear if this increase truly reflects an increase in prevalence.
or if it can be attributed to the increased numbers of people with health insurance that are now accessing care.

![Graph 21. Percentage of Adults who have been told they have Diabetes, Maricopa County, AZ, 2011-2013]

Source Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System survey

The African American and American Indian adults that participated in the focus groups identified diabetes as one of the most concerning health problems within their communities. This is supported by the rates of hospital visits for these populations within Maricopa County (Graphs 22-23). The higher rates of inpatient discharges and emergency department visits for these populations indicate a potential health disparity in diabetes diagnoses, treatments, or preventative care.

![Graph 22. Rate (per 100,000 residents), Diabetes-related Inpatient Discharges, by Race and Ethnicity, Maricopa County, AZ, 2013]

Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting
Adults age 75 and older have the highest rate of diabetes-related emergency department visits, however this is closely followed by adults ages 35-64 which indicates a need for earlier screening and prevention of diabetes (Graph 24).\textsuperscript{57}

The percent of obese adults is an indicator of the overall health and lifestyle of a community and can have significant impact on health care spending. Obesity increases the risk of several chronic health conditions such as Type 2 diabetes, heart disease, cancer, hypertension, stroke, liver and gallbladder disease, respiratory problems, and osteoarthritis.

According to the 2013 Youth Risk Behavior survey, the number of overweight high school students is increasing (Graph 25).\textsuperscript{58} However, the number of high school students who report being obese is
decreasing. The amount of high school students in Arizona that are obese now accounts for 10.9% of all students (Graph 25).\textsuperscript{59}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{graph25.png}
\caption{Graph 25. Weight Classification among High School Students, Arizona, 2009-2015}
\end{figure}

Source Centers for Disease Control and Prevention, Youth Risk Behavior survey (note that YRBS is administered every other year)

The percentage of adults in Maricopa County that report being overweight and obese on the Behavioral Risk Factor Surveillance System survey is decreasing (Graph 26).\textsuperscript{60} However, Hispanic residents continue to experience disparities related to obesity, and in 2013, 34.1% reported being obese (Graph 27).\textsuperscript{61}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{graph26.png}
\caption{Graph 26. Percentage of Adults Who are Overweight/Obese, Maricopa County, 2011-2013}
\end{figure}

Source Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System survey
Graph 27. Percentage of Obese Adults, by Ethnicity, Maricopa County, AZ, 2013

Source Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System survey
Resources Potentially Available to Address Needs

Resources potentially available to address identified needs include services and programs available through hospitals, government agencies, and community based organizations. Resources include access to hospital emergency and acute care services, Federally Qualified Health Centers (FQHC), food banks, homeless shelters, school-based health clinics, churches, transportation services, health enrollment navigators, free or low cost medical and dental care, and prevention-based community education. Below is a listing of some potential resources to address prioritized community health needs:

Hospital Systems providing emergency care, acute care, outpatient services, and community programs:
- Abrazo Community Health Network
- Banner Health
- Dignity Health
- Honor Health
- Maricopa County Integrated Health System
- Mayo Clinic
- Phoenix Children’s Hospital

Community-Based Agencies:

<table>
<thead>
<tr>
<th>Organization Name</th>
<th>Services Provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Cancer Society</td>
<td>Patient Navigators, support groups, financial assistance, and medication assistance.</td>
</tr>
<tr>
<td>Anthony Bates Foundation</td>
<td>Affordable cardiac screening for youth and families.</td>
</tr>
<tr>
<td>Arizona Living Well Institute</td>
<td>Chronic Disease Self-Management Education</td>
</tr>
<tr>
<td>Catholic Charities Community Services</td>
<td>Social services and behavioural health treatment.</td>
</tr>
<tr>
<td>Organization</td>
<td>Services</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Circle the City</td>
<td>Medical care and respite for homeless.</td>
</tr>
<tr>
<td>Clinica Adelante</td>
<td>Primary medical care for uninsured and underserved.</td>
</tr>
<tr>
<td>Community Bridges</td>
<td>Supportive services for homeless, mental health and substance abuse treatment.</td>
</tr>
<tr>
<td>Esparanca Women’s Health Center</td>
<td>Women’s Health.</td>
</tr>
<tr>
<td>Faith Community/Churches</td>
<td>Parish Nurse programs.</td>
</tr>
<tr>
<td>Keogh Health Connection</td>
<td>Health insurance enrollment and navigation.</td>
</tr>
<tr>
<td>Healthcare for the Homeless and Dental Clinic</td>
<td>Health and dental care for the homeless population</td>
</tr>
<tr>
<td>Mission of Mercy</td>
<td>Primary medical care for uninsured and underserved.</td>
</tr>
<tr>
<td>Mountain Park Health Center</td>
<td>Primary medical care for uninsured and underserved.</td>
</tr>
<tr>
<td>Native Health Center</td>
<td>Medical, Dental Behavioral health for urban Native Americans.</td>
</tr>
<tr>
<td>Neighborhood Christian Clinic</td>
<td>Free and reduced health services.</td>
</tr>
<tr>
<td>Parson’s Family Health Center</td>
<td>Homeless Healthcare and Federally Qualified Health Center.</td>
</tr>
<tr>
<td>Phoenix Indian Center</td>
<td>Support to American Indians for education and employment.</td>
</tr>
<tr>
<td>Southwest Human Development</td>
<td>Services for children and families.</td>
</tr>
<tr>
<td>St. Mary’s Food Bank</td>
<td>Food bank.</td>
</tr>
<tr>
<td>Terros Health Center</td>
<td>Primary medical care and behavioral health treatment for uninsured and underserved.</td>
</tr>
<tr>
<td>The Society of St. Vincent De Paul</td>
<td>Medical, dental, food, clothing, housing for underserved.</td>
</tr>
<tr>
<td>Touchstone Behavioral Health</td>
<td>Behavioral Health services.</td>
</tr>
<tr>
<td>United Food Bank</td>
<td>Food bank.</td>
</tr>
<tr>
<td>Valle dal Sol</td>
<td>Primary healthcare services are offered for children and adults, in addition to behavioral health services.</td>
</tr>
</tbody>
</table>

The Health Improvement Partnership of Maricopa County (HIPMC) is a collaborative effort between MCDPH and a diverse array of public and private organizations addressing healthy eating, active living, linkages to care and tobacco-free living. The HIPMC provides a forum to share ideas and resources as well as a data-driven process to identify gaps and barriers to health improvement, especially among vulnerable populations. With more than 100 partner organizations, this is a valuable resource to help Banner Health connect to other community based organizations that are targeting many of the same health priorities. 62
Feedback on Preceding CHNA and Implementation Strategy

Banner Thunderbird did not formally track any written feedback for Cycle 1 of the CHNA. However, the link to the 2013 report was posted on the Bannerhealth.com website and made widely available to the public.

In order to comply with the revised regulations, feedback from Cycle 2 will be solicited and stored going forward. Comments can be sent to CHNA.CommunityFeedback@bannerhealth.com
## Impact of Actions Taken Since Preceding CHNA

<table>
<thead>
<tr>
<th>Community Health Need</th>
<th>Action</th>
</tr>
</thead>
</table>
| Access to Care        | - Promoted participation in MyBanner (online patient portal)  
- Offered educational materials and links to community resources related to the insurance marketplace  
- Promoted internal and external community resources that support preventative and maintenance care via the facility website  
- Offered and participate in free health activities (screenings, health fairs, blood drives) |
| Chronic Disease       | - Developed a Chronic Disease webpage on the facility website to increase on-line educational opportunities and resource awareness  
- Expanded Diabetic Education and Nutrition programs  
- Provided health screenings and educational materials |
| Tobacco/Smoking        | - Partnered with the State Quit Line to build the Proactive Referral into the Banner Medical Group clinic workflows  
- Supported a Tobacco Free campus |
| Obesity/Nutrition      | - Sponsorships focused on wellness, healthy eating |
| Behavioral Health      | - Created a webpage with information and resources related to Mental Health and Substance Abuse  
- Added Electroconvulsive Therapy (ECT)  
- Offered Post-Partum Support Groups  
- Added 12 Inpatient Behavioral Health beds |
Appendix A – List of Data Sources

- Arizona Youth Risk Behavior survey (YRBS)
- Area Health Resource File/American Medical Association
  http://ahrf.hrsa.gov/download.htm
- Behavioral Risk Factor Surveillance System survey (BRFSS)
- CDC Wonder – Environmental Data
  http://wonder.cdc.gov/nasa-pm.html
- Centers for Medicare and Medicaid Services, National Provider Identification
- Centers for Disease Control and Prevention (CDC) National Environmental Public Health Tracking
  http://ephtracking.cdc.gov/showCancerMain.action
- Comprehensive Housing Affordability Strategy (CHAS) data
  https://www.huduser.gov/portal/datasets/cp/CHAS/data_querytool_chas.html
- County Health Rankings and Roadmaps
  http://www.countyhealthrankings.org/
- Maricopa County Hospital Discharge Data (HDD)
  - Emergency Department visits (ED)
  - Inpatient discharges (IP)
- Maricopa County Vital Statistics data
  - Birth Certificates
  - Death Certificates
- National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention
  http://www.healthindicators.gov/Indicators/Selection
- U.S. Census Bureau, American Community Survey (ACS), Bureau of Labor Statistics, United States Department of Agriculture, Centers for Medicare and Medicaid Services
Community Focus Groups

Twenty-three focus groups were conducted between September 25, 2015 and April 2, 2016. A total of 225 adults, ranging in age from 18 to 91 years participated. See Table 4 for additional participant characteristics.

Table 4 Summary of Participant Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>58</td>
<td>26%</td>
</tr>
<tr>
<td>Female</td>
<td>153</td>
<td>69%</td>
</tr>
<tr>
<td>Transgender</td>
<td>10</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Identifies as LGBTQ</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Race/ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>41</td>
<td>18%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>10</td>
<td>5%</td>
</tr>
<tr>
<td>Black/African American</td>
<td>28</td>
<td>12%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>96</td>
<td>43%</td>
</tr>
<tr>
<td>White</td>
<td>50</td>
<td>22%</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than high school</td>
<td>45</td>
<td>21%</td>
</tr>
<tr>
<td>High school/GED</td>
<td>35</td>
<td>16%</td>
</tr>
<tr>
<td>Some college/Associates degree</td>
<td>83</td>
<td>38%</td>
</tr>
<tr>
<td>Bachelor degree or higher</td>
<td>55</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>95</td>
<td>43%</td>
</tr>
<tr>
<td>Widowed, separated, or divorced</td>
<td>50</td>
<td>23%</td>
</tr>
<tr>
<td>Never married</td>
<td>46</td>
<td>21%</td>
</tr>
<tr>
<td>Living with partner</td>
<td>28</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Parent of child under age 18</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualified for free/reduced lunch</td>
<td>131</td>
<td>58%</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>81%*</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>61</td>
<td>28%</td>
</tr>
<tr>
<td>Part-time</td>
<td>34</td>
<td>16%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>73</td>
<td>33%</td>
</tr>
<tr>
<td>Retired</td>
<td>30</td>
<td>14%</td>
</tr>
<tr>
<td>Unable to work</td>
<td>20</td>
<td>9%</td>
</tr>
</tbody>
</table>

Note: Due to some missing data (e.g., skipped or unanswered questions) and multiple response options, numbers do not always add to 127 or 100 percent. Percentages reported are calculated from the total number of participants who answered that specific question.
*Of those with children in grades K-12.
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Population</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/25</td>
<td>9:30-11:30am</td>
<td>Older adults (65-74) [n=10]</td>
<td>Sun City Branch Library (16828 N 99th Ave, Sun City, AZ 85351)</td>
</tr>
<tr>
<td>9/28</td>
<td>5:30-7:30pm</td>
<td>Native American adults [n=24]</td>
<td>Phoenix Indian Center (4520 N Central Ave #250, Phoenix, AZ 85012)</td>
</tr>
<tr>
<td>9/29</td>
<td>5:30-7:30pm</td>
<td>Adults without children [n=10]</td>
<td>Mesa Main Library (64 E. 1st St., Mesa, AZ 85201)</td>
</tr>
<tr>
<td>9/30</td>
<td>6:00-8:00pm</td>
<td>LGBTQ adults [n=6]</td>
<td>Phoenix Pride LGBT Center (801 N 2nd Ave, Phoenix, AZ 85003)</td>
</tr>
<tr>
<td>10/2</td>
<td>9:00-11:00am</td>
<td>Adults with children under age 18 [Spanish; n=15]</td>
<td>Maryvale Community Center (4420 N. 51st Avenue, Phoenix, AZ, 85031)</td>
</tr>
<tr>
<td>10/2</td>
<td>6:00-8:00pm</td>
<td>Low-income Adults [Spanish; n=15]</td>
<td>Sojourner Center (2330 E Fillmore St, Phoenix, AZ 85006)</td>
</tr>
<tr>
<td>10/4</td>
<td>2:00-4:00pm</td>
<td>Hispanic/Latino adults [English; n=8]</td>
<td>Cesar Chavez Library (3635 W Baseline Rd, Laveen Village, AZ 85339)</td>
</tr>
<tr>
<td>10/5</td>
<td>5:30-7:30pm</td>
<td>Adults with children under age 18 [n=10]</td>
<td>Embry Riddle Aeronautical University, Phoenix Mesa Campus (5930 S. Sossaman Rd., Ste. #102, Mesa, AZ 85212)</td>
</tr>
<tr>
<td>10/6</td>
<td>5:30-7:30pm</td>
<td>Young adults (18-30) [n=10]</td>
<td>Pendergast Community Center (10550 W. Mariposa St., Phoenix, AZ 85037)</td>
</tr>
<tr>
<td>10/7</td>
<td>6:00-8:00pm</td>
<td>African American adults [n=10]</td>
<td>Southwest Behavioral Health Services (4420 S. 32nd St., Phoenix, AZ 85040)</td>
</tr>
<tr>
<td>10/8</td>
<td>11:30-1:30pm</td>
<td>LGBTQ adults [n=9]</td>
<td>ASU/SIRC (502 E. Monroe St., Phoenix, AZ 85004)</td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Population</td>
<td>Location</td>
</tr>
<tr>
<td>-------</td>
<td>--------------</td>
<td>-------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2/27</td>
<td>10:00-12:00pm</td>
<td>Older adults (50-64) [Spanish; n=8]</td>
<td>Guadalupe Town Office (9241 S Avenida del Yaqui Guadalupe, AZ 85283)</td>
</tr>
<tr>
<td>3/5</td>
<td>11:30-1:30pm</td>
<td>Adults with children [Spanish; n=12]</td>
<td>Dysart Community Center (14414 N El Mirage Rd, El Mirage, AZ 85335)</td>
</tr>
<tr>
<td>3/12</td>
<td>9:30-11:30am</td>
<td>Adult males [Spanish; n=8]</td>
<td>Glendale Community College (6000 W Olive Ave, Glendale, AZ 85302)</td>
</tr>
<tr>
<td>3/12</td>
<td>1:00-3:00pm</td>
<td>Adult females [Spanish; n=12]</td>
<td>Open Door Fellowship Church (8301 N 19th Ave, Phoenix, AZ 85021)</td>
</tr>
<tr>
<td>3/15</td>
<td>5:30-7:30pm</td>
<td>Lower income adults [n=9]</td>
<td>Escalante Community Center (2150 E Orange St, Tempe, AZ 85281)</td>
</tr>
<tr>
<td>3/19</td>
<td>9:30-11:30am</td>
<td>Caregivers [n=8]</td>
<td>Red Mountain Multigenerational Center (7550 E Adobe Rd, Mesa, AZ 85207)</td>
</tr>
<tr>
<td>3/19</td>
<td>9:30-11:30am</td>
<td>Older adults [75+] [n=10]</td>
<td>Red Mountain Multigenerational Center (7550 E Adobe Rd, Mesa, AZ 85207)</td>
</tr>
<tr>
<td>3/22</td>
<td>5:30-7:30pm</td>
<td>African American adults [n=9]</td>
<td>Tanner Community Development Corporation [TCDC] (700 E Jefferson St # 200, Phoenix, AZ 85034)</td>
</tr>
<tr>
<td>3/24</td>
<td>5:30-7:30pm</td>
<td>Native American adults [n=6]</td>
<td>Mesa Community College (1833 W Southern Ave, Mesa, AZ 85202)</td>
</tr>
<tr>
<td>3/29</td>
<td>5:30-7:30pm</td>
<td>Adults with children [n=8]</td>
<td>Paradise Valley Community College (18401 N 32nd St, Phoenix, AZ 85032)</td>
</tr>
<tr>
<td>4/2</td>
<td>9:30-11:30am</td>
<td>Asian American adults [n=8]</td>
<td>Chandler Downtown Library (22 S Delaware St Chandler, AZ 85225)</td>
</tr>
</tbody>
</table>
Appendix B – List of Data Indicators

1. Leading causes of death, Vital Records and Statistics
2. Mortality rates (Substance use related, injury related, chronic disease related, cancer, and suicide), Vital Records and Statistics
3. Years of potential life lost before age 75 per 100,000 population (age adjusted), Vital Records and Statistics
4. Number of infant deaths (within 1 year), per 100,000 births, Vital Records and Statistics
5. Percentage of adult respondents who rate their health “fair” or “poor,” BRFSS
6. Average number of days adult respondents report that their physical health was not good, BRFSS
7. Average number of days adult respondents report that their mental health was not good, BRFSS
8. Percentage of live births where the infant weighed less than 2,500 grams (approximately 5lbs., 8 oz.)
9. Percentage of pre-term births (<37 weeks gestation), Vital Records and Statistics
11. Percentage of births, by age of mother, Vital Records and Statistics
12. Percentage of adult respondents who report they were told they had diabetes by a doctor, BRFSS
13. Percentage of adult respondents who report they were told they had high blood pressure by a doctor, BRFSS
14. Number of persons living with a diagnosis of human immunodeficiency virus (HIV) infection per 100,000 population
15. Percentage of the adult population (age 18 and older) who reports a body mass index (BMI) greater than 25 kg/m² but less than 30 kg/m², BRFSS
16. Percentage of high school students who report a body mass index (BMI) greater than 25 kg/m² but less than 30 kg/m², YRBS
17. Percentage of the adult population (age 18 and older) who reports a body mass index (BMI) greater than or equal to 30 kg/m², BRFSS
18. Percentage of high school students who report a body mass index (BMI) greater than or equal to 30 kg/m², YRBS
19. Inpatient admissions and emergency department visits related to substance use (opiates, heroin, benzodiazepine, alcohol), HDD
20. Inpatient admissions and emergency department visits related to mental health (organic psychotic, neurotic, other psychoses, suicide), HDD
21. Inpatient admission and emergency department visits related to injury (motor vehicle occupant, motorcycle, pedestrian, bicycle, falls and interpersonal violence), HDD
22. Inpatient admissions and emergency department visits related to chronic disease (asthma, cardiovascular disease, congestive heart failure, diabetes, stroke), HDD
23. Inpatient admissions and emergency department visits related to cancer (breast, lung, uterine and ovarian, prostate and brain), HDD
24. Inpatient admissions related to neurological disorders, HDD
25. Percentage of the population between the ages of 18 and 64 that has no insurance coverage, ACS
26. Percentage of the population under the age of 18 that has no insurance coverage, ACS
27. Percentage of the population that has Medicare/Medicaid for health insurance, ACS
28. Ratio of population to primary care physicians, Area Health Resource File/American Medical Association
29. Ratio of population to dentists, Area Health Resource File, National Provider Identification File
30. Ratio of population to mental health providers, CMS, National Provider Identification
31. Primary payer type of Emergency Department and Inpatient Visits, HDD
32. Percentage of births by when prenatal care began, Vital Records and Statistics
33. Percentage of women ages 50 and older who report having had a mammogram within the past 2 years, BRFSS
34. Percentage of men ages 40 and older who report having had a PSA test within the past 2 years, BRFSS
35. Percentage of women ages 18 and older who report having had a pap test within the past 3 years, BRFSS
36. Percentage of adults who report being current smokers, BRFSS
37. Percentage of high school students who report using tobacco, YRBS
38. Percentage of adults who report meeting at least one of the physical activity guidelines, BRFSS
39. Percentage of high school students who report physical inactivity, YRBS
40. Percentage of the population who lack adequate access to food, ACS
41. Percentage of adults who report fruit and vegetable consumption, BRFSS
42. Percentage of adults who report eating out, BRFSS
43. Percentage high school students who report fruit consumption, YRBS
44. Percentage of high school students who consume soda, YRBS
45. Percentage of high school students who do not eat breakfast, YRBS
46. Number of newly diagnosed chlamydia cases per 100,000 population, National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention
47. Number of births per 100,000 female population ages 15-19, Vital Statistics
48. Percentage of adults that report either binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, BRFSS
49. Percentage of high school students who report binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 2 weeks, YRBS
50. Percentage of high school students who have ever used drugs or alcohol, YRBS
51. Number of people residing in Maricopa County (broken out by gender, age, race and ethnicity), ACS
52. Median household income, ACS
53. Percentage of persons in poverty, ACS
54. Percentage of households in poverty, ACS
55. Percentage of children under age 18 in poverty, ACS
56. Percentage of households with 1 or more individuals with a disability, ACS
57. Percentage of adults ages 25 and older that do not have a high school diploma, ACS
58. Percentage of population ages 16 and older who are unemployed, Bureau of Labor Statistics
59. Percentage of adults who report speaking English “not well,” or “not at all,” ACS
60. Percentage of adults with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities, CHAS
61. Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5), CDC Wonder
Appendix C – Primary Data Collection Tools

CHNA Focus Group Questions

*Community = where you live, work, and play*

1. What does quality of life mean to you?
2. What makes a community healthy?
3. Who are the healthy people in your community?
   [Prompts]
   a. What makes them healthy?
   b. Why are these people healthier than those who have (or experience) poor health?
4. What do you believe are the 2-3 most important issues that must be addressed to improve health and quality of life in your community?
   [Prompt]
   a. What are the biggest health problems/conditions in your community?
5. What types of services or support do you (your family, your children) use to maintain your health?
   [Prompt]
   a. Why do you use them?
6. Where do you get the information you need related to your (your family’s, your children’s) health?
7. What keeps you (your family, your children) from going to the doctor or from caring for your health?
8. What are some ideas you have to help your community get or stay healthy?
9. What else do you (your family, your children) need to maintain or improve your health?
   [Prompts]
   i. Services, support or information to manage a chronic condition or change health behaviors such as smoking, eating habits, physical activity, or substance use
   ii. Preventive services such as flu shots or immunizations
   iii. Specialty healthcare services or providers
10. What resources does your community have that can be used to improve community health?
Appendix D- References

4. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
10. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.


24. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.


27. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.

28. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.

29. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.

30. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.

31. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-
11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.


33. NSDUH (formerly known as the National Household Survey on Drug Abuse) is an annual survey of Americans aged 12 and older conducted by the Substance Abuse and Mental Health Services Administration, Department of Health and Human Services


37. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.

38. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.


48. National Cancer Institute. State and County Profiles, Centers for Disease Control and Prevention (CDC)
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