



Arizona General Hospital MESA

Community Health Needs Assessment 2019







Maricopa County Coordinated Community Health Needs Assessment

Dignity Health Arizona General Hospital Mesa, AZ

This community health needs assessment report is a customized version of the coordinated community health needs assessment that the Maricopa County Department of Public Health (MCDPH) conducted in partnership with Adelante Healthcare, Banner Health, Dignity Health, Mayo Hospital, Native Health, and Phoenix Children's Hospital.

December 20, 2018





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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.

Synapse is a coalition of non-profit and federally-qualified health care partners who collaborate to conduct a coordinated community health assessment to identify needs for both individual hospitals, health care centers, and the county overall. Beginning in 2018, Arizona General Hospital Mesa, in partnership with Synapse worked collaboratively and conducted an assessment of the health needs of residents of Maricopa County as well as those in their Primary Service Area. The CHNA process undertaken and described in this report was conducted in compliance with federal requirements.

Purpose Statement

The purpose of this community health needs assessment (CHNA) is to identify and prioritize significant health needs of the community served by Arizona General Hospital Mesa. 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. This CHNA report meets requirements of the Patient Protection and Affordable Care Act that not-for-profit hospitals conduct a community health needs assessment at least once every three years.

Community Definition

The geographic area for this CHNA is Maricopa County, the common community for all partners participating in the Synapse 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 more than 1.2 million Hispanics (30% of all residents), 197,000 African Americans, 156,000 Asian Americans, and 65,000 American Indians. According to the U.S. Census Bureau, 14% 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.

Dignity Health defines the community served by a hospital as those individuals residing within its primary and secondary service areas. For this report the focus will be on the Primary Service Area of Arizona General Hospital in Mesa. The Primary Service Area includes all residents in a defined geographic area surrounding the hospital and does not exclude low-income or underserved populations. Arizona General Hospital Mesa is located in Mesa, Arizona. The city of Mesa is located in Maricopa County, about 20 miles from Phoenix, Arizona. Mesa is the central city of the East Valley section of the Phoenix Metropolitan Area. It is bordered by Tempe, Arizona on the west, the Salt River Pima-Maricopa Indian Community on the north, Chandler and Gilbert, Arizona on the south along Queen Creek, and Apache Junction on the east. Primary Service Area zip code areas include 85209 and 85212ⁱⁱ.

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, Mayo Hospital, Native Health, and Phoenix Children's Hospital have joined forces with Maricopa County Department of Public Health (MCDPH) to identify the communities' strengths and greatest needs in a coordinated community health needs assessment.

The process of conducting this assessment began with a review of approximately 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. Health needs were identified through the combined analysis of secondary data and community input. 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 who identified community concerns and assets. Surveys were collected from key informants to help determine community needs and priorities. Additionally, meetings were held with stakeholders from the Community Health Integration Network (CHIN) and Arizona's Communities of Care Network (ACCN) to assist with the analysis and interpretation of data findings.

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 that the Primary Service Area had a health outcome or factor rate worse than the average Maricopa County rate, demonstrate a worsening trend when compared to Maricopa County data in recent years, or indicate an apparent health disparity; second, the health outcome or factor had to be mentioned in a substantial way in at least two sources from primary data collection sources which were focus groups, surveys, or stakeholder meetings.

The process for prioritization included engagement with both internal Dignity Health stakeholders and community partners. The first step of the process was a comprehensive presentation by MCDPH that included an overview of the CHNA findings and key emerging health needs. The second step in the process involved review and prioritization of the key emerging health needs outlined in the MCDPH presentation by the CHIN and ACCN. Participants discussed each health need, consideration was given to the size of the problem, disparity and equity, known effective interventions, resource feasibility and sustainability, and community salience. Through a voting process, participants made final recommendations to AGHM for priority health needs.

Summary of Prioritized Needs

The following statements summarize each of the areas of priority for Arizona General Hospital Mesa, and are based on data and information gathered through the CHNA.

1. Access to Care

Community members and key informants overwhelmingly felt that access to care is an important issue for the community. When AGHM 2015 community survey respondents were asked, what was the most important "Health Problem" impacting their community, access to care was number one top concern. Within AGHM's Primary Service Area, the unemployment rate is 5.0%, which is slightly higher than Maricopa County, iii and the sources of pay with the highest percentages of insurance are private insurance and Medicare payer. Additionally, there are disparities experienced across members of certain racial/ethnic backgrounds in Maricopa County, with Hispanics and American Indians being least likely to have insurance iv.

2. Mental/Behavioral Health

Mental 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 the most important health problem impacting the community by key informants. This was echoed by participants in the focus groups who believe mental health is one of top health issues impacting community residents.

Substance abuse was one of the top concerns for both focus group participants and key informants. Key informants listed alcohol and drug abuse as two of the riskiest health behaviors community members are engaging in. In 2017, the United States Health and Human Services Department declared a public health emergency and announced a plan to combat the opioid crisis. In 2016, 790 Arizonians died from opioid overdoses and trends show an increase of a startling 74% over the past four years.

Suicide was the eighth leading cause of death for Maricopa County residents in 2016. Suicide rates across Maricopa County have slightly increased from 2012-2016, with male rates 3 times higher than female suicide rates. In Maricopa County, rates of suicide are highest among age groups 45-54 and 75+, and in the AGHM Primary Service Area, American Indians, Blacks, and Whites have the highest rates of inpatient and emergency department hospitalizations for suicide^{vi}, which could indicate a potential health disparity in identification, referral or treatment of suicidal ideation.

Alzheimer's is a type of dementia that causes problems with memory, thinking, and behavior^{vii} In Arizona, 2,943 deaths occurred in 2015 due to Alzheimer's and it is the fifth leading cause of death, which is a 182% increase since 2000^{viii}. In Maricopa County, Alzheimer's is the fourth leading cause of death^{ix}.

3. Overweight/Obesity

Arizona has the 30th highest adult obesity rate in the nation, and the 32rd highest obesity rate for youth ages 10-17^x. In Maricopa County, males have higher rates of being overweight, and Hispanics have higher rates of obesity when compared to non-Hispanic whites^{xi}. Key informants felt that being overweight, poor eating habits and lack of exercise were among the top five risky health behaviors community members were engaging in.

4. Cancer

While advancements continue to be made in the fight against cancer, it remains the leading cause of death in Maricopa County and the AGHM's Primary Service Area and was identified as one of the top five areas of concerns from key informants. Colorectal cancer death rates in Maricopa County and AGHM Primary Service Area has fluctuated over the last five years^{xii} and breast cancer mortality rates are highest in the AGHM Primary Service Area.

5. Trauma/Injury Prevention

Injuries are not accidents, they are predictable and preventable. Unintentional injuries, including traffic-related, injuries, falls, burns, poisonings, and drowning were responsible for lost lives in the AGHM Primary Service Area^{xiii}. Unintentional injury is the fifth leading cause of death in Maricopa County and males are more likely to suffer from an unintentional injury with the exception of falls which are more prevalent among females^{xiv}.

In the AGHM Primary Service Area, inpatient and emergency department rates due to those injured in a motor vehicle traffic accident are lower than Maricopa County rates, although young adults 15-34 have the highest rates of emergency room visits than any other age group, and the rates tend to be higher than Maricopa County^{xv}.

6. Social Determinant of Health

Social determinants of health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks^{xvi}. Dignity Health AGHM is dedicated to making a positive impact on the social determinants of health, particularly on the health of those economically-disadvantaged communities. Resources that enhance quality of life can have a significant influence on population health outcomes. AGHM will focus on addressing homelessness, food insecurity, transportation, and problems related to psychosocial circumstances.

Resources Potentially Available

Resources potentially available to address identified needs include services and programs available through hospitals, government agencies, and community based-organizations. Resources include access to over 40 hospitals for emergency and acute care services, over 10 Federally Qualified Health Centers (FQHC), over 12 food banks, 8 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.

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. With more than 100 partner organizations, this is a valuable to resource to help ASJH connect to other community based organizations that are targeting many of the same health priorities^{xvii}.

This CHNA report was adopted by the AGHM community board in April 25, 2019.

This report is widely available to the public on the hospital's web site, and a paper copy is available for inspection upon request at Arizona General Hospital Mesa's Department of Community Health Integration.

Written comments on this report can be submitted to the Arizona General Hospital Mesa's Department of Community Health Integration, by e-mail to CommunityHealth-SHJMC@DignityHealth.org or by phone to 602-406-2288.

Assessment Purpose and Organizational Commitment

Community Health Needs Assessment (CHNA) Background

Arizona General Hospital Mesa 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 Arizona General Hospital Mesa. 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. This CHNA report meets requirements of the Patient Protection and Affordable Care Act that not-for-profit hospitals conduct a community health needs assessment at least once every three years.

Organizational Commitment

Arizona General Hospital Mesa is an affiliate of St. Joseph's Hospital and Medical Center (SJHMC). Since 1895, SJHMC has delivered high-quality, affordable, health care services in a compassionate environment that meets each patient's physical, mental and spiritual needs. Upholding the core values of dignity, justice, stewardship, collaboration, and excellence, our healing philosophy serves not just our patients, but our staff, our communities, and our planet.

Rooted in Dignity Health's mission, vision and values, SJHMC is dedicated to delivering community benefit with the engagement of its management team, Community Board and Community Health Integration Network (CHIN). The board and its committee on community health and benefit issues are composed of community members who provide stewardship and direction for the hospital as a community resource.

The Community Board and its chairperson, Richard Horn, Patty White, the hospital's President and CEO, the Executive Management Team and the community are involved in the CHNA process, Community Benefit planning process, and the prioritization of the identified unmet health-related needs to inform the development of the programs for each year and how they link to the hospital's strategic plan. This commitment is reflected in the hospital's Community Health Integration and Community Benefit programs, which are a demonstration of the hospital's commitment to improving the lives of the communities within

Arizona. The Community Board, leadership and CHIN hold the planning of the community needs, oversee the CHNA and its adoption through setting the priority for the Community Benefit Plan and approving the strategies for implementing the programs that will work with the community. They will continue to monitor the outcomes of the programs and ensure the appropriate resources are made available to sustain a healthier Arizona.

The key staff positions dedicated to planning and carrying out the community benefit programs include, but are not limited to the following:

- Director of Community Health Integration and Community Benefit provides the leadership, oversight, evaluation, and effectiveness of the community benefit programming for the hospitals and its affiliates.
- Directors of Hospital Service Lines provide oversight of the programs within their departments that are providing community benefit programming to meet the needs within the community.
- Community Benefit Specialists and Program Coordinators provide program coordination, outreach efforts, and community integration. These program coordinators are integrated within the hospital departments delivering the programs.
- Community Benefit Analyst provides oversight of the evaluation and outcomes of the programs to meet the needs within the community.

SJHMC's community benefit program includes financial assistance provided to those who are unable to pay the cost of their care, unreimbursed costs of Medicaid, subsidized health services that meet a community need, and community health improvement services. Our community benefit also includes monetary grants we provide to not-for-profit organizations that are working together to improve health on significant needs identified in our CHNA.

In addition, we are investing in community capacity to improve health – including by addressing the social determinants of health – through Dignity Health's Community Investment Program. In Arizona, \$14,900,000 has been invested through Dignity Health Community Investments. The following are the investments made to date:

Name	Amount
Arizona Community Foundation	\$5,000,000
Local Initiatives Support Corporation (LISC)/WESCAP Investments, Inc.	\$2,400,000
Chicanos por la Causa (Prestamos)	\$4,000,000
Trellis	\$500,000
Foundation for Senior Living	\$2,500,000
Brighter Way Institute (BWI)	\$500,000
	\$ 14,900,000

These investments were made to improve the community through social impact funding with the Arizona Community Foundation; improve a local food bank who also provides social supports to the Chandler Community; provide low-interest loans to small, start-up business to minority groups; improve early childhood learning; provide low-interest rates to individuals who are unable to secure loans for homes; and transitional housing for adolescents. All these projects and investments continue to create healthier, safe, communities in Arizona.

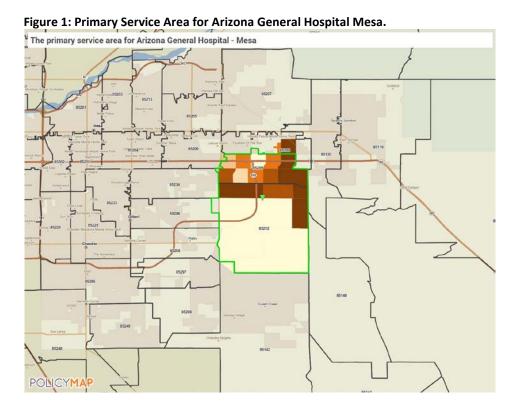
Community Definition

Definition of Community

The geographic area for this CHNA is Maricopa County, the common community for all partners participating in the Synapse coalition. However, Arizona General Hospital's Primary Service Area specific information will also be provided when available.

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.

Dignity Health defines the community served by a hospital as those individuals residing within its primary and secondary service areas. For this report the focus will be on the Primary Service Area of Arizona General Hospital Mesa. The Primary Service Area includes all residents in a defined geographic area surrounding the hospital and does not exclude low-income or underserved populations. The Primary Service Area for Arizona General Hospital Mesa includes the zip codes making up the top 75% of the total patient cases. AGHM Primary Service Area is outlined in green below.



Demographic and Socioeconomic Profile

Primary Care Area (PCA) Statistical Profiles are revised annually and provide detailed information on the demographics, health resources, hospital utilization, and health status indicators in defined geographic areas

throughout Arizona. In the AGHM Primary Service Area, 9.2% of the total population is living in poverty and 13.0% are under the age of 18^{xviii}. This data shows that the population as a whole is majority white, and with a median income for zip codes 85209 is 57,736 and zip code 85212, \$81,101, which are both above Maricopa County and the state of Arizona. Table 1 provides the specific data on key socioeconomic drivers of health status of the population in AGHM's Primary Service Area compared to Maricopa County and the state of Arizona. Please note, not all indicators were analyzed for these two zip codes.

Table 1: Demographic Information for Arizona General Hospital Mesa Primary Service Area.

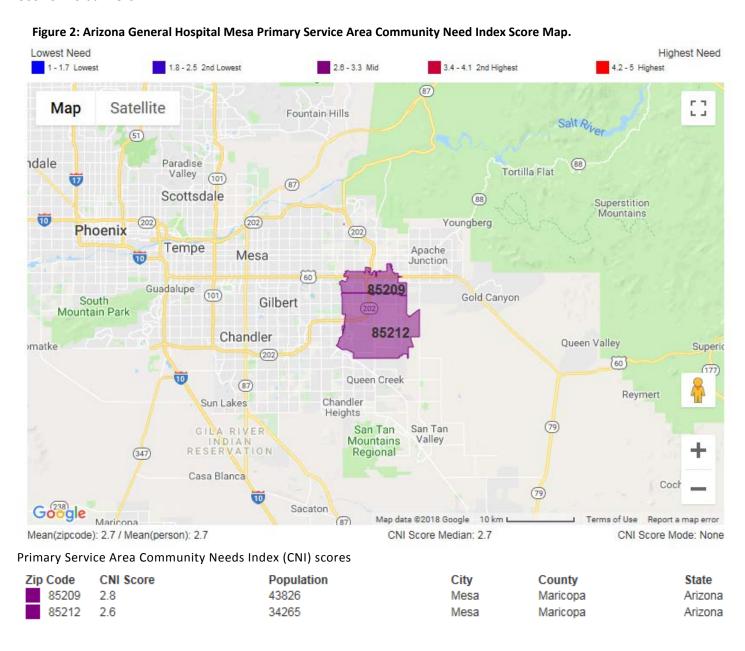
	Arizona General Hospital Mesa PSA	Maricopa County	Arizona
Population: estimated 2016	70,438	4,088,549	6,728,577
Gender			
• Male	47.8%	49.5%	49.7%
 Female 	52.2%	50.5%	50.3%
Age			
 0 to 9 years 	16%	13.8%	13.3%
• 10 to 19 years	14%	13.8%	13.6%
• 20 to 34 years	18%	21.2%	20.5%
• 35 to 64 years	35%	37.3%	36.7%
• 65 to 74 years	11%	8.0%	9.2%
• 85 years and over	9%	5.9%	6.7%
Race			
• White	75.0%	56.9%	77.8%
 Asian/Pacific Islander 	3.1%	4.0%	3.2%
Black or African American	2.3%	5.0%	4.3%
 American Indian/Alaska Native 	0.9%	1.5%	4.4%
• Other	2.3%	2.3%	7.0%
Ethnicity			
Hispanic	16.4%	30.3%	30.5%
Median Income	\$57,736	\$53,694	\$51,340
Uninsured	7.9%	13.9%	13.6%
Unemployment	5.0%	4.4%	5.4%
No HS Diploma	3.4%*	14.0%	13.8%
Limited English Proficiency	3.9%*	9.3%	9.1%
Renters	23.9%*	39.6%	37.5%
CNI Score	2.7	3.4	-
Medically Underserved Area	Yes	-	-

Source U.S. Census American Community and Survey American Community Survey 2013-2017 5 year estimates*

Mesa is home to several major industrial firms that include Boeing Company, Mesa Community College and Niagara Bottling. Despite strong economic growth, there continue to be many factors and social determinants of health in the suburban Mesa community that needs to be addressed in order to improve the health and wellbeing for the broader community, and the underserved. Challenges for this community include high rates of poverty, violence-associated injuries, a large non-English speaking population, and low education attainment, all of which create barriers to access. Downtown Mesa has a significant population of uninsured and underinsured non-English speaking persons of all age groups. A large majority of this population is also indigent with their primary source of income through day labor and seasonal work.

Community Need Index

Dignity Health has developed the nation's first standardized Community Need Index (CNI) in partnership with Truven Health Analytics. The CNI identifies the severity of health disparity for every zip code in the United States based on specific barriers to healthcare access. The CNI considers multiple factors that are known to limit health care access such as income, language, educational, insurance and housing barriers. The ability to pinpoint neighborhoods with significant barriers to health care access is an important new advancement for public health advocates and care providers. According to the CNI illustrated below, the Primary Service Area has a mean CNI score of 2.7 and both zip codes, 85209 and 85212 are moderate areas with significant socioeconomic barriers.



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Assessment Process and Methods

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. 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, Mayo Hospital, Native Health, and Phoenix Children's Hospital have joined forces with Maricopa County Department of Public Health (MCDPH) to identify the communities' strengths and greatest needs in a coordinated community health needs assessment.

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, surveys, and meetings with community stakeholders. The process was reiterative 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.²⁵ Population health can be defined as "the health outcomes of a group of individuals, including the distribution of such outcomes within the group."²⁶ 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.

Synapse partners selected approximately 100 data indicators to help examine the health needs of the community (Appendix A). 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.²⁷ While this report does not 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 utilized 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 2. Health factor and health outcome indicators

Health Outcome Metrics		Health Determinants and Correlated Metrics				
Mortality	Morbidity	Access to	Health	Demographics &	Physical	
		Healthcare	Behaviors	Social Environment	Environment	
Leading Causes	Hospitalization	Health Insurance	Tobacco	Age	Air Quality	
of Death	Rates	Coverage	Use/Smoking			
Infant Mortality	Obesity	Provider Rates	Physical Activity	Sex	Water Quality	
Injury-related	Low Birth Rates	Quality of Care	Nutrition	Race/Ethnicity	Housing	
Mortality						
Motor Vehicle	Cancer Rates		Unsafe Sex	Income		
Mortality						
Suicide	Motor Vehicle		Alcohol Use	Poverty Level		
	Injury					
Homicide	Overall Health		Seatbelt Use	Educational		
	Status			Attainment		
	STDs		Immunizations &	Employment Status		
			Screenings			
	Communicable			Language Spoken at		
	Diseases			Home		

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, Arizona Criminal Justice Commission, 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 three means. First, data was collected through focus groups engaging members of underserved populations and communities. Second, surveys were conducted with key informants who serve the Primary Service Area. Finally, a series of meetings were held with key stakeholders from Arizona General Hospital Mesa Primary Service Area. Members of the Community CHIN and Arizona's Community of Care Network (ACCN) provided input on the selection of data indicators, provided feedback on data collected, and aided in the selection of final priorities. Membership of the above mentioned committees and collaborations intentionally represent vulnerable and disenfranchised populations including the homeless, uninsured/underinsured, Medicaid, Medicare, immigrant, disabled, mentally ill, and elderly.

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 B) 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 twelve focus groups were conducted with 127 community members from the following groups: (1) older adults (65-74 years of age); (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 (English); (8) adults with children (Spanish); (9) low socio-economic status adults (Spanish), and (10) 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 problem identified was access to care. Specific barriers discussed included lack of transportation, high cost of doctor visits, high deductibles, unexpected or complicated bills from insurance, and a perceived lack of cultural competency and respect from providers. Participants also identified mental health, substance abuse, and community safety as important issues. Additionally, American Indian and African American participants felt diabetes was a significant health concern for their community.

Recommended strategies for health improvement discussed amongst the participants included:

- More health care navigators/advocates
- More community education/awareness of resources
- More transparency in health care (insurance, side effects, alternatives, toxins, etc.)
- Better access to healthy, affordable food

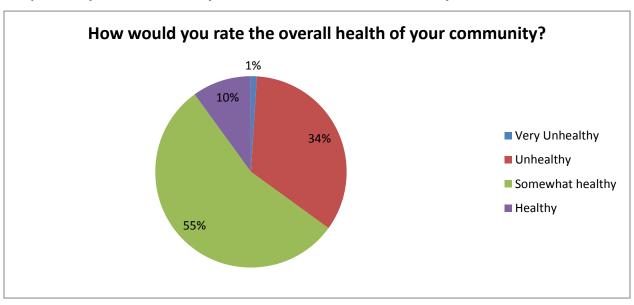
• Increased training/education of health care professionals (e.g., proper use of pronouns for transgendered individuals, updated technologies/medical research, alternative medicine options, etc.)

Key Informant Surveys

In order to identify and understand community health needs, a community health survey was administered to key informants. Key informants were identified as health or community experts familiar with target populations and geographic areas within Arizona General Hospital Mesa Primary Service Area. The survey instrument was created by MCDPH based on recommendations from the National Association of County and City Health Officials, Centers for Disease Control and Prevention, and Dignity Health leadership.

The survey was administered to 100 key informants who provide services throughout Arizona General Hospital Mesa Primary Service Area. The survey asked respondents about factors that would improve "quality of life," most important "health problems," in the community, "risky behaviors" of concern, and their overall rating of the health of the community (Appendix B).

When surveyed about the overall health of the community, an alarming 35% felt the community was either "very unhealthy" or "unhealthy".



Graph 1. Key Informant Survey -Overall Health of Your Community Results

Source Key Informant Survey

Key informants felt the most important health problems impacting their community are mental health, access to health care, alcohol/drug abuse, aging problems, and diabetes (Graph 1).

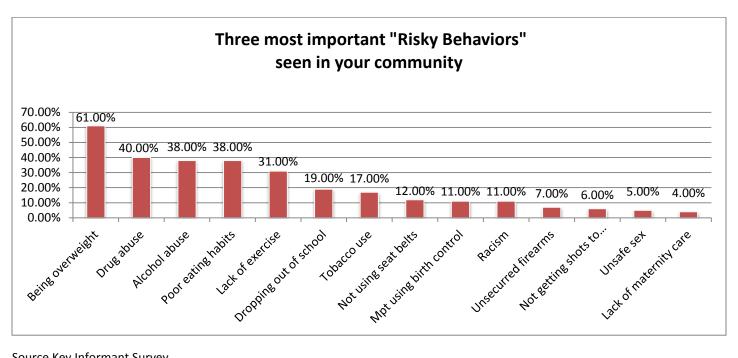
Three most important "Health Problems" that impact your community 56.00% 60.00% 52.00% 50.00% 37.00% 40.00% 30.00% 24.00% 24.00% 17.00% 17.00% 15.00% 15.00% 20.00% 13.00% 6.00% 5.00% 10.00% 3.00% 3.00% 1.00% 0.00% Mentalhealth Alchollitus abuse proberts Diabetes healect poblens Ancers disease pressure and the relicited that the property of the property of

Graph 2. Key Informant Survey – Most Important Health Problems that Impact Community Results

Source Key Informant Survey

When asked to rank the three most important risky behaviors seen in the community, the top five answers selected by respondents included being overweight, drug abuse, alcohol abuse, poor eating habits, and lack of exercise (Graph 2). Though the responses reflect distinct behaviors, there appears to be some overlap with primary concerns of key informants centering on the areas of substance use, healthy eating, and active living.

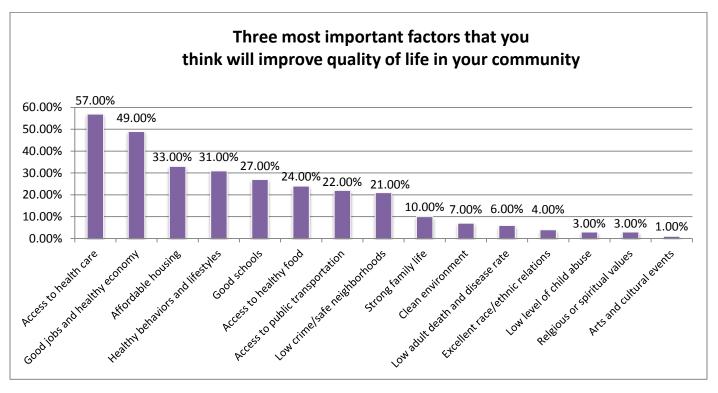
Graph 3. Key Informant Survey – Most Important "Risky Behaviors" Results



Source Key Informant Survey

Lastly, the most important factors key informants felt would improve the quality of life within their community included access to healthcare, good jobs and healthy economy, affordable housing, healthy behaviors and lifestyles, and good schools (Graph 3).

Graph 4. Key Informant Survey - Most Important Factors, Improve Quality of Life Results



Source Key Informant Survey

Community Input/Engagement

Community input for the CHNA included engagement from the following Dignity Health sponsored stakeholder groups:

St. Joseph's Hospital and Medical Center Community Health Integration Network (CHIN)

Each Dignity Health Hospital and Joint Venture Hospital participated and gave input at the Community Health Integration Network (CHIN) that is facilitated by the St. Joseph's Hospital and Medical Center Board of Directors and representatives from the community and experts within the hospitals that are working collaboratively to meet the needs within the communities' they serve. A key function of the Community Health Integration Network (CHIN), comprised of Dignity Health, community agencies, and community members, is to participate in the process of establishing program priorities based on the community needs and assets and to review, advice, and make recommendations to Dignity Health –Arizona General Hospital's Board's Community Benefit Committee.

St. Joseph's Hospital and Medical Center's Arizona Community of Care Network (ACCN)

Arizona Community of Care Network (ACCN) is a collaborative among diverse hospital, community organizations, government agencies, and community members. Through the collective impact model, the ACCN shares common agenda's, shared measurement systems, mutually reinforcing activities and continuous communication to solve complex issues and improve the health of Arizona residents.

The information from the key informant survey along with the key findings from the MCDPH assessment data report was presented on October 2, 2018 to the Executive Leadership Team, Community Board, and CHIN. Attendees were surveyed on the information provided in this presentation in order to further narrow down the list of significant health needs. Following the survey feedback, MCDPH provided additional presentations incorporating focus group findings and gathered final recommendations from leadership, the CHIN and ACCN, in order to solidify the recommended priorities.

Data limitations and Gaps

The AGHM Primary Service Area is comprised of two zip codes 85209 and 85212 provided by the Dignity Health team. All data in this report was calculated based on these two zip codes and some data were unavailable due to the numbers being too small to calculate. For example, leading cause of death for the AGHM Primary Service Area were too small to calculate, so in this report, we will highlight mostly in- patient hospitalizations and emergency room data. The data used in this report are from various reliable sources, but there are limitations to the data that need to be considered. 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 and 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. In October of 2015 the hospital data coding system changed from ICD 9 to ICD 10. ICD 10 is very different from ICD-9, both in content and structure of the codes used to describe the severity and complexity of various diseases/injuries and inpatient procedures. The transition to ICD 10 has some impact on comparability of hospital discharges data and continuity of statistical trends. Any comparison of hospital discharge events between more recent years and those prior to 2015 should take this into account. 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. This data could not be drilled down to each hospitals Primary Service Area. 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. This data can be evaluated at the county level, but not at the hospital service area.

Prioritized Descriptions of Significant Community Health Needs

Identifying Community Health Needs

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 that the Primary Service Area had a health outcome or factor rate worse than the average Maricopa County rate, demonstrate a worsening trend when compared to Maricopa County data in recent years, or indicate an apparent health disparity; second, the health outcome or factor had to be mentioned in a substantial way in at least two primary data collection sources which were focus groups, surveys, or stakeholder meetings.

Process and Criteria for Prioritization

The process for prioritization included engagement with both internal Dignity Health stakeholders and community partners from the Community Benefit Board and the Community Partnership Collaboration (See Appendix A for list of participating organizations). The first step of the process was a comprehensive presentation by MCDPH that included an overview of the CHNA findings and key emerging health needs. Throughout the presentation, stakeholders in attendance responded to survey questions that would later be used during strategy sessions to identify health priorities. After completion of the presentation, stakeholders were given the opportunity to provide additional feedback and recommendations. The second step in the process involved review and prioritization of the key emerging health needs outlined in the MCDPH presentation. Participants discussed each health need, consideration was given to the size of the problem, disparity and equity, known effective interventions, resource feasibility and sustainability, and community salience. Through a voting process, participants made final recommendations to Arizona General Hospital Mesa for priority health needs.

Description of Prioritized Community Health Needs

The following statements summarize each of the areas of priority for Arizona General Hospital Mesa, and are based on data and information gathered through the CHNA.

Stakeholders, community partners, focus group participants and key informants overwhelmingly felt that access to care is an important issue for the community. In Maricopa County 13.9% of the population is uninsured. In the AGHM Primary Service Area, uninsured rates are at 7.9% per 100,000 and Maricopa County is 13.9% per 100,000 (according to the 2012-2016 ACS).

When MCDPH analyzed all the inpatient hospitalizations and emergency department visits from the residents of the AGHM PSA, the two most common payment methods were private insurance and AHCCCS/Medicaid. In 2016, about 38% of inpatient hospitalizations and 39% of emergency department visits were paid through private insurance. Approximately 41% of inpatient hospitalizations and 21% of emergency department visits were paid through Medicare. Lastly, about 16% of inpatient hospitalizations and 23% of emergency department visits were paid by AHCCCS/Medicaid.

In the 2016 community survey from Maricopa County Department of Public Health, 63% of survey respondents indicated that they sometimes or never have enough money for healthcare expenses.

When focus group respondents were asked about choices, needs, and barriers to healthcare, responses included:

When community participants were asked about healthcare needs, responses included:

- Most get their healthcare information online.
- Attend health fairs, workshops, free clinics, urgent cares, emergency rooms, and some go out of state or even out of country.
- The healthcare system is disjointed and they want better communication and greater coordination across providers.
- System is hard to navigate and was seen to require a significant amount of personal effort and persistence.
- Eligibility restrictions, insurance issues, and a lack of low cost options for care.

Access to care is a critical component to the health and well-being of the community members in the Primary Service Area. 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. The most frequently identified barriers to health care discussed amongst focus group participants included cost, complication of navigating the system, 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 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 the most important health problem impacting the community by key informants. This was echoed by participants in the focus groups who felt it was among their top concerns.

Mental health emergency department visits, also known as Neurotic Conditions (i.e. Post-Traumatic Stress Disorder, Anxiety, adjustment disorder, panic disorders), have increased over the past five years in Maricopa County. In the AGHM Primary Service Area, inpatient and emergency department rates or organic psychotic conditions are not higher than MC as a whole xix.

"It's hard to care about being physically healthy when you're not happy, or you just feel like there's an invisible ceiling, there's a road block everywhere. I think it starts with the mental health."

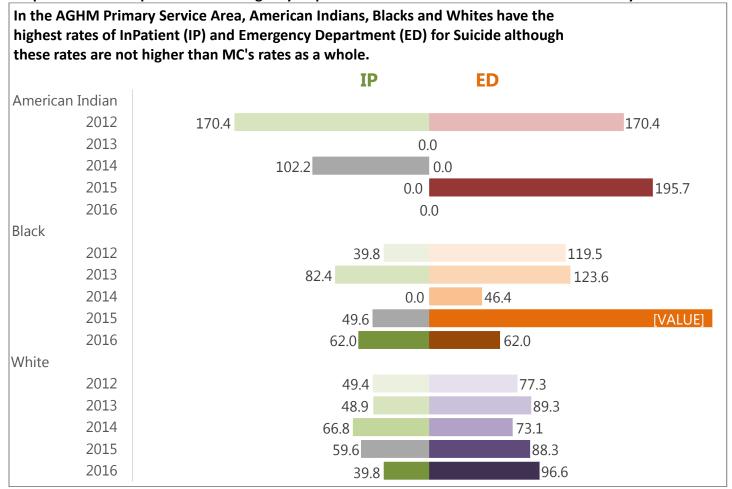
-Focus Group Participant

Inpatient rate for organic psychotic conditions for the AGHM Primary Service Area went from 41.2 to 95.6 per 100,000, compared to Maricopa County from 92.6 to 149.3 per 100,000, and emergency department visits for the same condition in the AGHM Primary Service Area went from 49.3 to 83.1 per 100,000 compared to Maricopa County, 88.1 to 112.6 per 100,000^{xx} in 2012-2016. Inpatient and emergency department hospitalization rates of organic psychotic conditions by age in the AGHM Primary Service Area, were found in those between 20 and 54 and then 75+. None of these rates, however, were higher than the rates for Maricopa County^{xxi}.

Suicide is a major public health problem and a leading cause of death in the United States^{xxii}. According to the Behavioral Risk Factor Surveillance Survey, 18.7% of Maricopa County residents reported having a depressive disorder. Suicide mortality rates in Maricopa County are significantly higher in males than females. In the AGHM Primary Service Area for the year 2016, 26.7% of males compared to 5.4% of females died from suicide. Male rates are almost triple that rate of females for emergency department visits and in-patient visits

In the AGHM Primary Service Area, American Indians, Blacks, and Whites have the highest rates of inpatient and emergency department hospitalizations for suicide, although the rates are not higher than Maricopa County (Graph 7).

Graph 7. Rates of Inpatient and Emergency Department visits for Suicide in the AGHM Primary Service Area



Source: Hospital discharge data from ADHS, analyzed by MCDPH

Substance abuse refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs^{xxv}. 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.^{xxvi} 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.

Key informants listed alcohol and drug abuse as two of the top risky health behaviors community members are engaging in. The substances most frequently cited in the survey as being of concern included methamphetamines, prescription drugs, heroin, marijuana, cocaine and alcohol. Additionally, substance abuse was frequently mentioned as a concern amongst focus group participants.

Opioids are psychoactive substances derived from the opium poppy, or their synthetic analogues. Examples are morphine and heroin xxviii. In 2016 there were 790 deaths attributed to opioids in Arizona. This represents a

In Maricopa County, opioids are found more often than alcohol and methamphetamine when examined by the Maricopa County Office of the Medical Examiner (OME). All three of these drugs are showing an upward trend with our preliminary 2017 data (Graph 8).

Opioid-related mortality rates have risen over the past 5 years and match the trend nationally. In June of 2017 Arizona Governor Doug Ducey declared a public health emergency to address this epidemic.

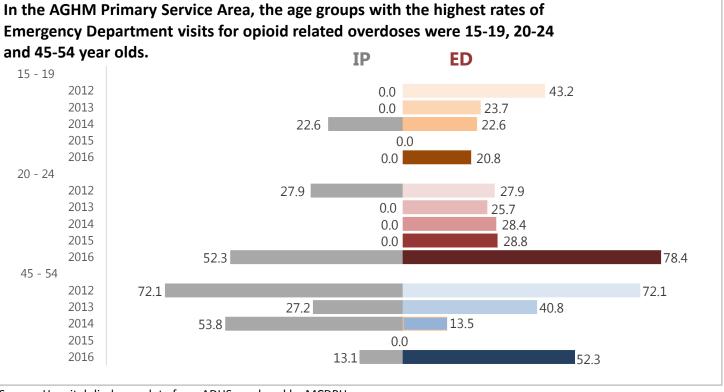
In Maricopa County, opioids are the most common substance leading to an overdose death, followed by methamphetamine and alcohol. The number of deaths by all three substances have been increasing since 2012. 647 595 577 518 318 285 287 337 249 275 223 185 2012 2013 2014 2015 2016 2017 -Alcohol Opioid Methamphetamine

Graph 8. Most Common Substance Leading to Overdose Death

Source: Office of the Medical Examiner for Arizona

Opioid-related overdose rates for the emergency department has been increasing every year for Maricopa County as a whole. When looking at just the AGHM Primary Service Area, the 15-19, 20-24 and 45-54 year olds almost always had the highest rates of visits to the emergency department due to Opioid overdoses. See graph 9 below^{xxx}.

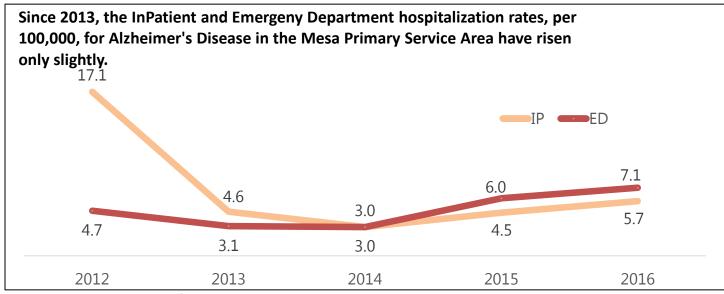
Graph 9. Rate of Emergency Department Visits for Opioid Related Overdoses in the AGHM Primary Service Area



Source: Hospital discharge data from ADHS, analyzed by MCDPH

Alzheimer's is a type of dementia that causes problems with memory, thinking, and behavior In Arizona, 2,943 deaths occurred in 2015 due to Alzheimer's and it is the fifth leading cause of death, which is a 182% increase since 2000 , Alzheimer's disease is the fourth leading cause of death Appendix A). The In Patient and Emergency Department rates for the AGHM Primary Service Area were not higher than Maricopa County (Graph 10).

Graph 10. Alzheimer's Disease-Inpatient and Emergency Department Hospitalization Rates



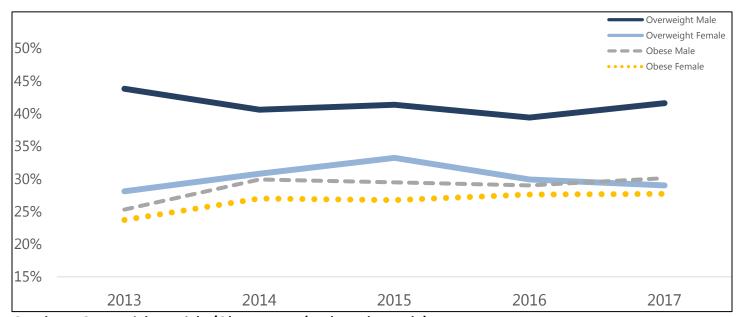
Source: Hospital discharge data from ADHS, analyzed by MCDPH

Mortality rates for the AGHM Primary Service Area per 100,000, for Alzheimer's disease in 2016 among races, gender and age groups were analyzed. For the race category, only Whites had enough deaths to calculate a death rate and it was lower than Maricopa County's death rate. Seventy-five and older had enough deaths to calculate a death rate, and that rate (386.4 per 100,000) was lower than Maricopa County (713.9 per 100,000) **Example **Examp

Overweight/Obesity

According to the World Health Organization (WHO), in 2016, more than 1.9 billion adults, 18 and older, were overweight. Of these over 650 million were obese^{xxxiv}. The prevalence of obesity was 39.8% and affected by -2016. Obesity related conditions include heart disease, stroke, type 2 diabetes, and certain types of cancers^{xxxv}. In 2017, the Arizona adult obesity rate was 29.5%

11) and Hispanic obesity rates are higher than non-Hispanic whites . Key informants felt that being overweight, poor eating habits and lack of exercise were among the top five risky health behaviors community members were engaging in.

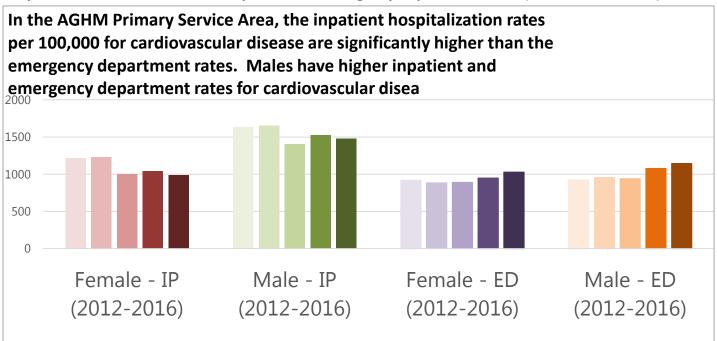


Graph 11. Overweight Weight/Obese Rates (Male and Female)

Source: Behavioral Risk Factor Surveillance Survey from the CDC

Cardiovascular disease is the second leading cause of death for Maricopa County. In the AGHM Primary Service Area, the inpatient rates per 100,000 for cardiovascular disease were significantly higher than emergency department hospitalizations, and males had a higher inpatient and emergency department rate than females (graph 12)^{xxxviii}. The primary risk factors include diabetes, overweight/obesity, poor diet, physical inactivity and excessive alcohol use. Many of these are the same risky behaviors key informants reported being concerned about for the Primary Service Area.

Graph 12. Cardiovascular Disease-Inpatient and Emergency Department Rates (Males and Females)



Source: Hospital discharge data from ADHS, analyzed by MCDPH

A cardiovasular disease density map (Figure 1) highlights in red where the death rates due to cardiovascular rates are highest in Maricopa County.

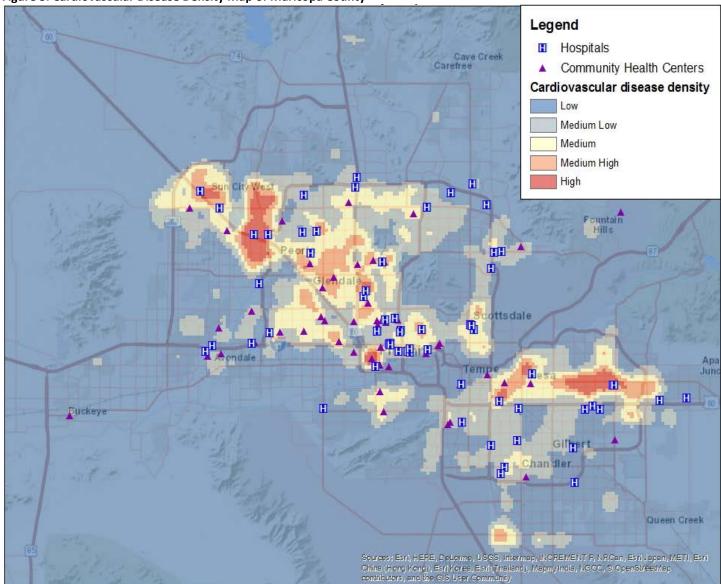


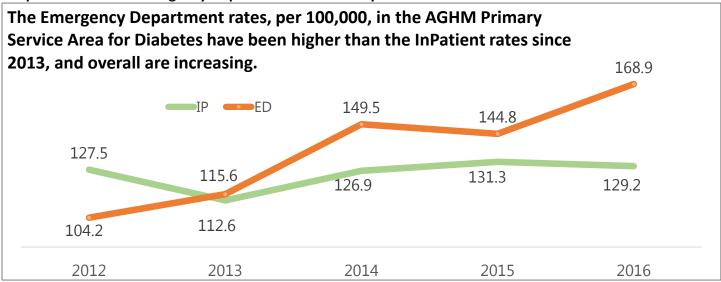
Figure 3: Cardiovascular Disease Density Map of Maricopa County

Diabetes

More than one million U.S. adults are now living with diabetes or pre-diabetes, according to a new report released by the Centers for Disease Control and Prevention XXXXIX. The number of deaths related to diabetes is leading cause of death, indicating a sustained health

need (Appendix A). The number of people reporting they have been told they have diabetes is also increasing. In the AGHM Primary Service Area, inpatient and emergency department hospitalizations are lower than Maricopa County rates. When comparing inpatient and emergency department hospitalizations, inpatient rates are higher than emergency department hospitalizations (Graph 13) and have been increasing since 2013^{xl}.

Graph 13. Diabetes-Emergency Department Rates vs. Inpatient Rates



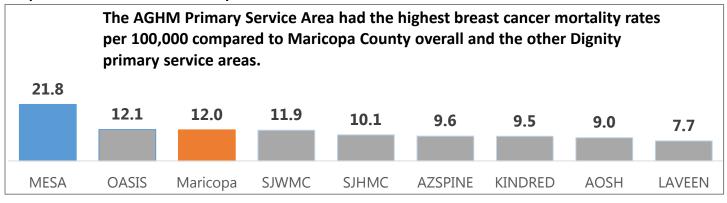
Source: Hospital discharge data from ADHS, analyzed by MCDPH

Mortality rates, per 100,000, for diabetes in 2016 in the AGHM Primary Service Area among races, gender and age groups, only Whites had enough deaths to calculate a death rate and it was just slightly higher, but may not be significant, than Maricopa County's death rate. Only the age category 75+ had enough deaths to calculate a death rate, and that rate (161.0 per 100,000) was lower than Maricopa County (185.6 per 100,000). In an analysis of mortality rates between males and females, males have a slightly higher death rate due to diabetes compared to females. Males had a mortality rate of 26.7 per 100,000 and females had a mortality rate of 21.8 per 100,000 for the year 2016. Neither gender mortality rates were higher than Maricopa County's rates for diabetes^{xli}.

Cancer

While advancements continue to be made in the fight against cancer, it remains the leading cause of death in Maricopa County and was identified as one of the top five areas of concerns from key informants. In Maricopa County, cervical cancer incidence rates have slightly increased overall and the percentage of women that have had a pap test has been declining slightly since 2012 and the Black/African American population have the highest death rates xiii. In the AGHM Primary Service Area, breast cancer rates are 21.8 per 100,000 and are significantly higher when compared to Maricopa County at 120 per 100,000 (Graph 14) and all other Primary Service Areas

Graph 14. Breast Cancer Mortality Rates



Source: Death data from ADHS, analyzed by MCDPH

Trauma/Injury Prevention

In the United States, deaths from unintentional injuries are the seventh leading cause of death among older adults, and falls account for the largest percentage of those deaths^{xliv}. In 2016 unintentional injury was the fifth leading cause of death in Maricopa County. Unintentional injuries are preventable and largely due to lifestyle choices. Nationally, nearly one-third of these deaths are due to car crashes and nearly another onethird is due to accidental poisonings^{xlv}. Males are more likely to suffer from an unintentional injury with the exception of falls which are more prevalent among females^{xlvi}.

In the AGHM Primary Service Area, emergency department hospitalizations per 100,000 for motor vehicle accidents were significantly higher than inpatient rates. Males have lower emergency department hospitalization rates than females, but have higher inpatient rates (Graph 15)xlvii.

In the Mesa Primary Service Area, the Emergency Department rates per 100,000 for motor vehicle accidents are significantly higher than InPatient rates. Males have lower emergency department rates than females but higher InPatient rates than females. 600 400 200 Female - ED Female - IP Male - IP Male - ED (2012-2016)(2012-2016)(2012-2016)(2012-2016)

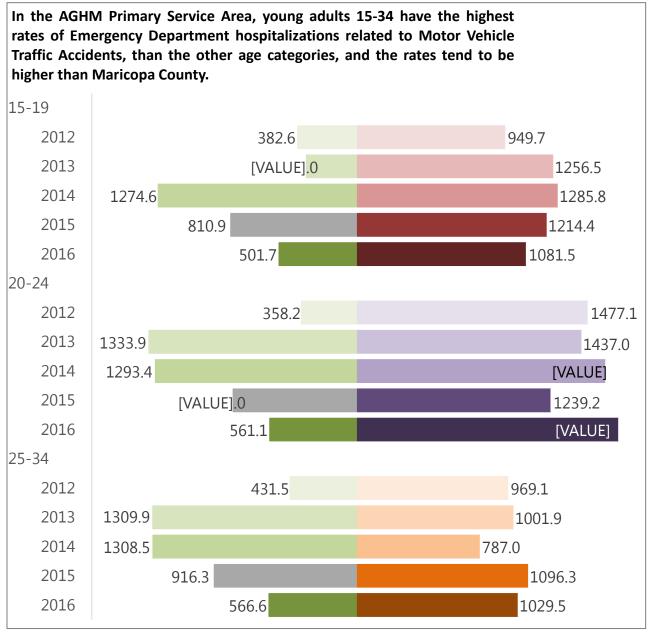
Graph 15. Motor Vehicle Accidents-Emergency Department and Inpatient Rates (Male and Female)

Source: Hospital discharge data from ADHS, analyzed by MCDPH

When looking at injuries related to motor vehicle traffic accidents for inpatient and emergency department hospitalizations in the AGHM Primary Service Area, young adults 15-34 have the highest rates of emergency department hospitalizations than any other age group and the rates tend to be higher than Maricopa County (Graph 16)xlviii.

Mortality rates due to motor vehicle accidents for the AGHM Primary Service Area could not be calculated due to fewer than 5 deaths occurring in 2016.

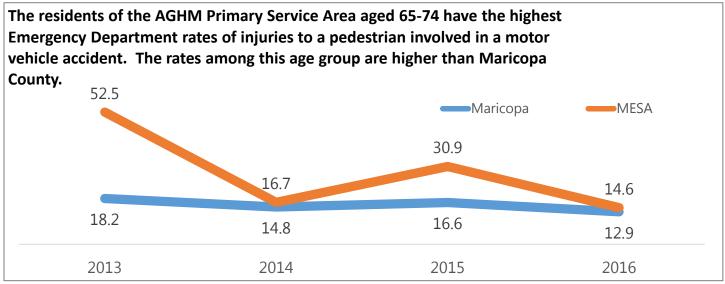
Graph 16. Injuries Related to Motor Vehicle Traffic Accidents-Emergency Department Hospitalizations (By Age)



Source: Hospital discharge data from ADHS, analyzed by MCDPH

Injuries to pedestrians due to motor vehicle traffic accidents in the AGHM Primary Service Area have the highest rate of emergency department hospitalizations among those ages 65-74 years and are higher than Maricopa County (Graph 17)^{xlix}.

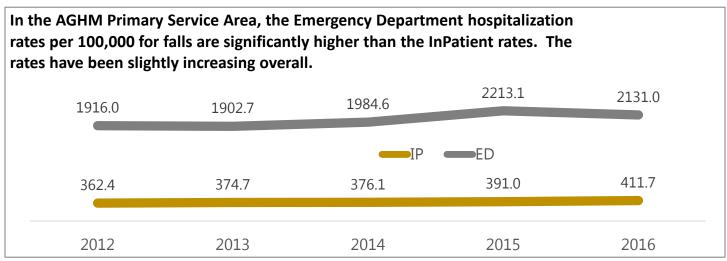
Graph 17. Emergency Department Rates of Injuries Due to a Pedestrian Involved in a Motor Vehicle Accident



Source: Hospital discharge data from ADHS, analyzed by MCDPH

Emergency department hospitalizations rates for injuries to falls in the AGHM Primary Service Area, are significantly higher than inpatient rates and have been slightly increasing from 2012-2016 (Graph 18)¹.

Graph 18. Emergency Department Hospitalization and Inpatient Rates Due to Falls



Source: Hospital discharge data from ADHS, analyzed by MCDPH

The mortality rate due to falls in the AGHM Primary Service Area (15.6 per 100,000) is lower than the mortality rate for Maricopa County (18.7 per 100,000)^{li}. Gender, age or race numbers are too small to calculate any rates for comparison.

Social Determinants of Health

According to Health People 2020, a social determinants of health is a condition in the environment in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and qualify-of-life outcomes and risks lii. For the AGHM Primary Service Area, transportation, access to food, and housing were mapped to better understand those social determinants of health for this Primary Service Area.

Homelessness/Housing

A household is considered cost burdened if they are paying 30% or more (for homeowners) and 50% or more (for renters) of their gross income towards housing, which includes rent or mortgage, utilities, etc. If a household is cost burdened then it can make it more difficult to afford the other necessities such as transportation, health care, food, child care, clothing, etc. To greater understand the population considered cost burdened by home ownership or renting, a map was created (Figure 2). The green outlines the AGHM Primary Service Area and the purple areas on the map meet the following criteria as of 2012-2016:

- At least an estimated 20% of all people are considered living in poverty
- At least an estimated 25% of all homeowners are considered cost burdened
- At least an estimated 46% of all renters are considered cost burdened

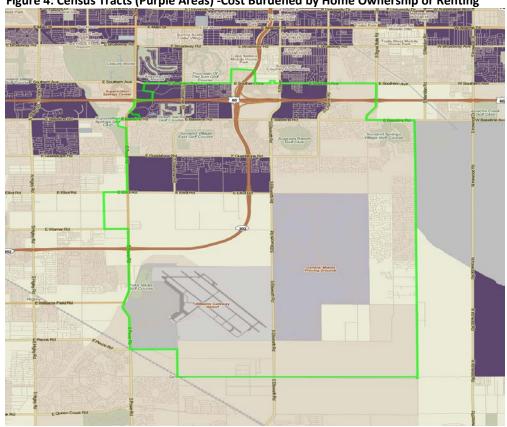


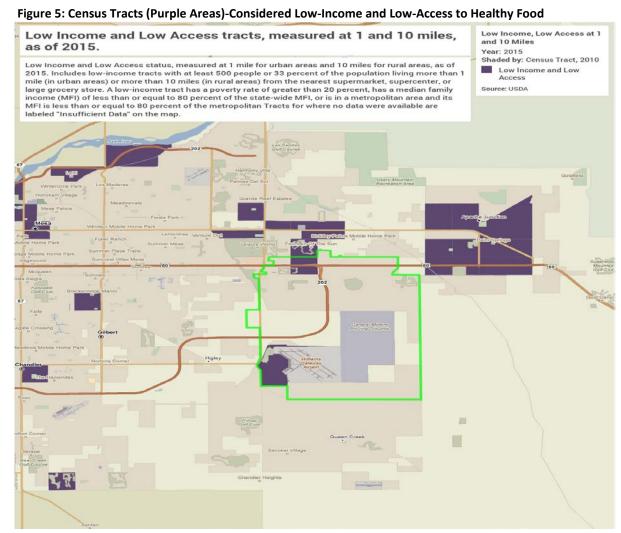
Figure 4: Census Tracts (Purple Areas) -Cost Burdened by Home Ownership or Renting

Source: PolicyMap

Access to Food – Low-Income and Low-Access to Grocery Stores

Every individual needs access to healthy food to live and sustain health. Without the ability to access, afford and consume healthy food, a person is at an incredible risk of developing a chronic disease, such as cardiovascular disease and diabetes, and the chance of living a long and healthy live is very small. Census tracts were visually analyzed in the AGHM's Primary Service Area to see which census tracts had lower access to healthy food. The map below (Figure 3) shows census tracts which are considered low-income and low-access in purple and green outlines the AGHM Primary Service Area.

The USDA defines a low-income neighborhood as a census tract with a poverty rate that is 20 percent or greater, a family with a household income that is 80 percent or less than the State-wide median family income or a census tract that is 80 percent or less than the metro area's median family income. The USDA defines a low-access neighborhood is a census tract that is considered to be far from a supermarket, supercenter or large grocery store. It is calculated as low-access if it has at least 33% (or at least 500) people farther than ½ mile from the nearest supermarket, supercenter or large grocery store for an urban area or more than 10 miles for a rural area. A census tract is considered low-income and low-access if it fits both criteria. The following maps highlight in red those census tracts considered low-income and low-access.



Source: PolicyMap

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:

Hospitals and Hospital Systems providing emergency care, acute care, outpatient services, and community programs:

- Arizona Heart Hospital
- Banner Health
- Dignity Health
- Honor Health
- Maricopa County Integrated Health System
- Phoenix Children's Hospital
- Valley Hospital
- OASIS Hospital
- Arizona Orthopedic Surgical Hospital

Community-Based Agencies:

Organization Name	Services Provided
Ability 360	Social and health supports for individuals with disabilities
Area on Aging	Programs and support for aging population
Arizona Living Well Institute	Chronic Disease Self-Management Education
Catholic Charities Community Services	Provides social services, including behavioural health to veterans and their families, sex-trafficked survivors, victims of domestic abuse, refugees and those experiencing homelessness and the broader community
Circle the City	Medical care and respite for homeless
Clinica Adelante	Primary medical care for uninsured/underserved
Community Bridges	Supportive services for homeless
Corporate for Supporting Housing	Housing
Dignity Health Medical Group	Primary Care services – General, Internal Medicine, Specialty Care and women's health services
DUET: Partners in Health and Aging	Elderly and care giver support services, parish nurse programs
Esparanca Women's Health Center	Women's Health

Faith Community/Churches	Parish Nurse programs	
Feeding Matters	Support for parents of infants and children who	
	struggle with eating and the physicians who treat	
	them	
Foundation for Senior Living	Adult Health Services	
Keogh Health Connection	Heath insurance enrollment and navigation	
International Rescue Committee	Refugee and Immigrant Services	
Healthcare for the Homeless and Dental Clinic	Health and dental care for the homeless population	
Hospice of the Valley	Palliative and Hospice Care	
Lodestar Day Resource Center	Resource Center	
Mission of Mercy	Primary medical care for uninsured/underserved	
Mountain Park Health Center	Primary medical care for uninsured/underserved	
Native American Health Center	Medical, Dental Behavioral health for urban Native	
	Americans	
Neighborhood Christian Clinic	Free and reduced health services	
Parson's Family Health Center	Homeless Healthcare and Federally Qualified Health	
	Center	
Phoenix Indian Center	Support to American Indians for education and	
	employment	
Southwest Human Development	Services for children and families	
St. Mary's Food Bank	Food bank	
Terros Health Center	Primary medical care for uninsured/underserved	
The Society of St. Vincent De Paul	Medical, dental, food, clothing, housing for	
	underserved	
Touchstone Behavioral Health	Mental Health/Behavioral Health services	
United Food Bank	Food bank	
Valle dal Sol	Primary healthcare services are offered for children	
	and adults, in addition to behavioral health services.	
Vitalyst Health Foundation	Improve well-being in Arizona by addressing root	
	causes and broader issues that affect health.	
Youth Violence Intervention & Prevention Project (Y-	addresses the untreated risk factors associated with	
VIPP)	interpersonal violence perpetration among youth	

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 to resource to help Arizona General Hospital Mesa connect to other community based organizations that are targeting many of the same health priorities.

Impact of Actions Taken Since Preceding CHNA

From fiscal year 2016 through fiscal year 2018, Dignity Health – St. Joseph's Hospital and Medical Center provided \$614,977,700 in patient financial assistance, unreimbursed cost of Medicaid, community health improvement services, and other benefits. The hospital also incurred \$340, 388, 753 in unreimbursed costs of caring for patients covered by Medicaid.

In addition, the number of persons served through financial assistance and community health improvement services between fiscal year 2016-2018 further demonstrates the impact of Dignity Health actions taken through community benefit services. 3,208 people received financial assistance and 429,886 people were served through community health services. Below is a listing of key community benefit services:

- Mohammed Ali Parkinson Center
- Maternity Outreach Mobile
- Keogh Health connections
- Barrows Neurological Institute's Fall Prevention Program
- Barrows Neurological Institute's Stroke Program
- Healthier Living Chronic Disease Self-Management
- ACTIVATE ACTIVATE Prime Transitional Care Program
- Refugee Health Partnership
- Smooth Way Home
- Native American Collaborative
- HOMeVP: Health and Home of Medically Vulnerable People

Input Received on Most Recent CHNA and Implementation Strategy

A formal mechanisms is being worked on to receive and track written comments regarding the Community Benefit Report and Plan. Arizona General MESA Hospital is working to track or record written comments for the most recently conducted CHNA and adopted Implementation Strategy. Positive feedback on the value and benefit of the CHNA report has been received verbally by many internal and external stakeholders. In addition, many individuals and agencies have requested the CHNA report to use for grant applications, assessments, and planning. Although there have not been formal mechanisms in place to receive and track written comments in the past, a process will be in place for newly conducted CHNA's, including this report, to comply with the regulatory requirement to solicit and take into account input received from written comments.

This report is widely available to the public on the hospital's web site, and a paper copy is available for inspection upon request at Arizona General MESA Hospital Department of Community Health Integration.

Written comments on this report can be submitted to the Arizona General MESA Hospital Department of Community Health Integration, by e-mail to CommunityHealth-SHJMC@DignityHealth.org or by phone to 602-406-2288.

Appendix A - List of Data Sources

Data Sources

- Vital statistics (birth, death) obtained from the Arizona Department of Health Services (ADHS). Data analysis completed by MCDPH Office of Epidemiology staff.
- Hospital Discharge Data (inpatient and emergency department) obtained from the Arizona Department of Health Services. Data analysis completed by MCDPH Office of Epidemiology staff.
- Behavioral Risk Factor Surveillance Survey (BRFSS)
- Arizona Youth Survey (AYS)
- Youth Risk Behavioral Surveillance Survey (YRBSS)
- Centers for Disease Control (CDC) Environmental Public Health Tracking (EPHT) -
- ADHS EPHT Explorer
- US Census, American FactFinder

Data Indicators

1. Population Demographics

- o Gender
- o Age groups
- o Race/Ethnicity

- o Education
- o Income
- Employment Status

2. Access to Health Care

Health Insurance Coverage by:

- Age groups
- o Gender
- o Race/Ethnicity
- Nativity/Citizenship
- Education
- o Income
- o Employment status
- Poverty level

Health Care Coverage (18-64)

- Usual Source of Care
- Routine Checkup (last year)
- o Couldn't Afford Needed Care
- AHCCS enrollment broken down as much as possible
- Primary Payer Type for ED/IP

3. Birth Related

- o IMR
- Low Birth Weight

- o Preterm Births
- o Teen Birth

4. Cancer Incidence & Prevention

- o Breast Cancer Incidence
- Breast Cancer Screening
- o Breast Cancer
- Cervical Cancer Incidence
- o Cervical Cancer Screening
- o Cervical Cancer
- o Colorectal Cancer Incidence

- o Colorectal Cancer Screening
- Colorectal Cancer
- Prostate Cancer Incidence
- o Prostate Cancer Screening
- o Prostate Cancer
- Lung Cancer Incidence
- o Lung Cancer

5. Environmental Health

- Asthma rates
- Air Quality
- o Blood Lead Levels in children
- Carbon Monoxide Poisonings

6. Chronic Disease

- o Stroke
- o Been told they had a stroke
- Been told they have high blood pressure
- Cardiovascular Disease
- o Cholesterol checked in last 5 yrs.
- o Told they have high cholesterol
- o Congestive Heart Failure
- Told they have coronary heart disease
- o Told they have had heart attack

- Extreme Heat Days
- Heat Related Illness
- Flood Vulnerability
- o Diabetes
- o Arthritis
- o Alzheimer's
- Confusion/Memory Loss
- o COPE
- Been told they have COPD
- o Asthma
- Been told they have asthma
- o Diabetes
- o Been told they have diabetes

7. Mental/Behavioral Illness

- o Organic Psychotic Conditions
- Other Psychoses
- Neurotic, Personality & Other Non-Psychotic Disorders
- Suicide
- o All Mental/Behavioral Ranked
- Screenings for all forms depression (include maternal child health)
- Alcohol Related

- o All Drug Related Intentional
- o All Drug Related Unintentional
- Opioid prescribing over recommended amount and/or days
 - o Opioids Intentional
 - o Opioids Intentional
 - Opioids Unintentional
 - o Opioids Unintentional

8. Behavioral Health Risk Factors

- o Alcohol/Drug use
- Smoking
- o Nutrition/Diet

- Physical Activity
- Obesity

9. Injury

- o Motor Vehicle Related
- o Motor Cycle Related
- o Bicycle Related

- o Pedestrian Related
- o Fall Related
- o Violence

10. Prevention Quality Indicators (PQI's)

11. Social Determinants of Health

- Transportation
- Access to Food
- Housing

- Utilities
- o CNI Map
- o Z Codes

- 12. Top 5 leading causes of death
- 13. Youth Top 5 leading causes of death
- 14. Preventable ED's
- **15. Community Surveys**
- 16. Focus Groups

Top 10 Leading Causes of Death

Rank	Maricopa County	Arizona General Mesa Hospital
1	Cancer	Number's too small to report.
2	Heart Disease	
3	Chronic Lower Respiratory	
4	Unintentional Injury	
5	Alzheimer's	
6	Stroke	
7	Diabetes	
8	Suicide	
9	Fall	
10	Liver Disease	

Key Informant Survey

Total Number of Participants	100	
Characteristic	Percentage of Participants	
Male	23%	
Female	77%	
0-17	0%	
18-24	1%	
25-39	15%	
40-54	37%	
55-64	34%	
65 or older	13%	
American Indian/Alaskan Native	1%	
Asian/Pacific Islander	2%	
African American	6%	
Hispanic	18%	
White	73%	

Focus Groups

Total Number of Participants = 127

Date	Time	Population	Location
9/25 (Fri.)	9:30-11:30am	Older adults (65-74) [n=10]	Sun City Branch Library (16828 N 99th Ave, Sun City, AZ 85351)
9/28 (Mon.)	5:30-7:30pm	Native American adults (x2) [n=24]	Phoenix Indian Center (4520 N Central Ave #250, Phoenix, AZ 85012)
9/29 (Tues.)	5:30-7:30pm	Adults without children [n=10]	Mesa Main Library (64 E. 1 st St., Mesa, AZ 85201)
9/30 (Wed.)	6:00-8:00pm	Lesbian, Gay, Bisexual, Transgender, Questioning (LGBTQ) adults [n=6]	Phoenix Pride LGBT Center (801 N 2nd Ave, Phoenix, AZ 85003)
10/2 (Fri.)	9:00-11:00am	Adults with children under age 18 [Spanish; n=15]	Maryvale Community Center (4420 N. 51st Avenue, Phoenix, AZ, 85031)
10/2 (Fri.)	6:00-8:00pm	Low-income Adults [Spanish; n=15]	Sojourner Center (2330 E Fillmore St, Phoenix, AZ 85006)
10/4 (Sun.)	2:00-4:00pm	Hispanic/Latino adults [English; n=8]	Cesar Chavez Library (3635 W Baseline Rd, Laveen Village, AZ 85339)
10/5 (Mon.)	5:30-7:30pm	Adults with children under age 18 [n=10]	Embry Riddle Aeronautical University, Phoenix Mesa Campus (5930 S. Sossaman Rd., Ste. #102, Mesa, AZ 85212)
10/6 (Tues.)	5:30-7:30pm	Young adults (18-30) [n=10]	Pendergast Community Center (10550 W. Mariposa St., Phoenix, AZ 85037)
10/7 (Wed.)	6:00-8:00pm	African American adults [n=10]	Southwest Behavioral Health Services (4420 S. 32 nd St., Phoenix, AZ 85040)
10/8 (Thurs.)	11:30-1:30pm	LGBTQ adults [n=9]	ASU/SIRC (502 E. Monroe St., Phoenix, AZ 85004)

Stakeholder Meetings

Organization	Number of representatives	Date Attended
CHNA Presentation		
Dignity Health	27	Attended CHNA presentation 10.2.18
Ability 360	1	Attended CHNA presentation 10.2.18
POM Consulting	1	Attended CHNA presentation 10.2.18
Southwest Human Development	2	Attended CHNA presentation 10.2.18
Premier Risk Management	1	Attended CHNA presentation 10.2.18
Cancer Support Community Arizona	1	Attended CHNA presentation 10.2.18
Mountain Park Health Center	1	Attended CHNA presentation 10.2.18
Foundations for Senior Living	1	Attended CHNA presentation 10.2.18
Maricopa Community College	1	Attended CHNA presentation 10.2.18
Arizona State University	8	Attended CHNA presentation 10.2.18
Sacks-Tierney Law Firm	1	Attended CHNA presentation 10.2.18
PV Health Solutions	1	Attended CHNA presentation 10.2.18
Arizona Healthy Communities	1	Attended CHNA presentation 10.2.18
AzCCN Meeting		
City of Phoenix	3	Attended AzCCN meeting 12.6.18
Mercy Housing	2	Attended AzCCN meeting 12.6.18
Valley of the Sun United Way	3	Attended AzCCN meeting 12.6.18
Arizona Spinal Cord Injury Association	1	Attended AzCCN meeting 12.6.18
Southwest Human Development	2	Attended AzCCN meeting 12.6.18
Foundation for Senior Living	4	Attended AzCCN meeting 12.6.18
Maggie's Place	2	Attended AzCCN meeting 12.6.18
Ability 360	2	Attended AzCCN meeting 12.6.18
St. Joseph's Hospital and Medical Center	2	Attended AzCCN meeting 12.6.18
Touchstone Health Services	1	Attended AzCCN meeting 12.6.18
Keogh Health Connections	1	Attended AzCCN meeting 12.6.18
International Rescue Committee	3	Attended AzCCN meeting 12.6.18
Accel	1	Attended AzCCN meeting 12.6.18
Family Involvement Center	1	Attended AzCCN meeting 12.6.18
Tanner Community Development		
Corporation	1	Attended AzCCN meeting 12.6.18
Special Olympics AZ	1	Attended AzCCN meeting 12.6.18
Therapeutic Harp Foundation	1	Attended AzCCN meeting 12.6.18
Arizona Care Network	1	Attended AzCCN Meeting 12.6.18
Franciscan Renewal Center	1	Attended AzCCN meeting 12.6.18
Nami Valley of the Sun	1	Attended AzCCN meeting 12.6.18
CHIN Meeting		

St. Joseph's Westgate Medical Center	1	Attended CHIN meeting 11.29.18
PV Health Solutions	1	Attended CHIN meeting 11.29.18
Arizona Dept. of Health Services	1	Attended CHIN meeting 11.29.18
Sacks Tierney P.A.	1	Attended CHIN meeting 11.29.18
Dignity Health	1	Attended CHIN meeting 11.29.18
Adelante Healthcare	1	Attended CHIN meeting 11.29.18
Arizona State University	1	Attended CHIN meeting 11.29.18
Foundation for Senior Living	1	Attended CHIN meeting 11.29.18
Catholic Charities Community Services	1	Attended CHIN meeting 11.29.18
Chicanos Por La Causa	1	Attended CHIN meeting 11.29.18
St. Joseph's Hospital and Medical Center	4	Attended CHIN meeting 11.29.18
Maricopa County Dept. of Public Health	1	Attended CHIN meeting 11.29.18
Mercy Care Plan	1	Attended CHIN meeting 11.29.18

Appendix B – Primary Data Collection Tools

CHNA Focus Group Questions

For the purposes of this discussion, "community" is defined as where you live, work, and play.

Opening Question (5 minutes)

1. To begin, why don't we go around the table and introduce ourselves. State your name (or whatever you would like us to call you) and what makes you most proud of your community.

General Community Questions (20 minutes)

I want to begin our discussion today with a few questions about health and quality of life in your community.

- 2. What does quality of life mean to you?
- 3. What makes a community healthy?
- 4. Who are the healthy people in your community?
 - a. What makes them healthy?
 - b. Why are these people healthier than those who have (or experience) poor health?
- 5. 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?
 - a. What are the biggest health problems/conditions in your community?

Family Questions (20 minutes)

Now we are going to transition a bit and focus a bit more on your family and experiences.

- 6. What types of services or support do you (your family, your children) use to maintain your health?
 - a. Why do you use these particular services or supports?
- 7. Where do you get the information you need related to your (your family's, your children's) health?
- 8. What keeps you (your family, your children) from going to the doctor or from caring for your health?
 - a. Are there any cost issues that keep you from caring for your health? (Such as co-pays or high-deductible insurance plans)
 - b. If you are uninsured, do you experience any barriers to becoming insured?

Improvement Questions (20 minutes)

Next I'd like to ask a few questions about ways to improve community health.

- 9. What are some ideas you have to help your community get or stay healthy?
- 10. What else do you (your family, your children) need to maintain or improve your health?

[Prompts]

- 1. Services, support or information to manage a chronic condition or change health behaviors such as smoking, eating habits, physical activity, or substance use?
- 2. Preventive services such as flu shots or immunizations?
- 3. Specialty healthcare services or providers?

CHNA Focus Group Questions Cont'd

11. What resources does your community have that can be used to improve community health?

Ending Question (5 minutes)

12. Is there anything else related to the topics we discussed today that you think I should know that I didn't ask or that you have not yet shared?

Facilitator Summary & Closing Comments (5-10 minutes)

Let's take a few minutes to reflect on responses you provided today. We will review the notes we took and the themes we observed. This is your opportunity to clarify your thoughts or to provide alternative responses.

[Co-facilitator provides a brief summary of responses for each of the questions or asks clarifying questions if she thinks she may have missed something.]

4. Thank you for your participation in this focus group meeting. You have all raised a number of great issues for us to consider. We will look at what you have told us and use this information to make recommendations to area hospitals and the Maricopa County Department of Public Health.

Community Health Survey

Please take a minute to complete the survey below. The purpose of this instrument is to get your opinions about community health issues. In collaboration with our public health partners we plan to compile this information and use it as input for the development of Dignity healthcare's community health improvement plan.

Thank you for your time and interest in helping us to identify our most pressing problems and issues.

In this survey, "community" refers list: Northeast (Scottsdale, Carefree, Northwest (Peoria, Surprise, ELN Central (Phoenix, Paradise Valle Central west (Glendale, Avondal Central East (Tempe, Mesa) Southeast (Chandler, Ahwatukee Southwest (Tolleson, Buckeye, Community)	Fountain Hills, Cave Creek) Mirage, Sun City) y) e, Litchfield Park) e, Gilbert)	rovide services. Please check one fror	n the following
Part I: Community Health			
1. Please check the three most in	portant factors that you think v	vill improve the quality of life in your	community?"
Check only three:			
Good place to raise children Low crime / safe neighborhoods Low level of child abuse Good schools Access to health care (e.g., family Safe Parks and recreation Clean environment Affordable housing Arts and cultural events Access to Healthy Food	Good jobs Strong fam Healthy be doctor) Low adult Low infant Religious of Emergency Access to p Other	haviors and lifestyles death and disease rates	
Access to Health care	Heart disease and stroke	Rape / sexual assault Respiratory / lung disease	
Aging problems (e.g., arthritis, hearing/vision loss, etc.)	High blood pressure HIV / AIDS	Kespiratory / fung disease Sexually Transmitted Diseases	
Cancers	Homicide	(STDs)	
Child abuse / neglect	Infant Death	Suicide	
Drug and Alcohol abuse	Infectious Diseases (e.g.,	Teenage pregnancy Other	
Drug and Alcohol abuse Dental problems	hepatitis, TB, etc.)	Teenage pregnancy Office	
Diabetes	Mental health problems		
Domestic Violence	Motor vehicle crash injuries		
Firearm-related injuries	oco. vemere erasii injuries		
			1

Check only three:		
Alcohol abuse	Racism	
Being overweight	Tobacco use	
Dropping out of school	Not using birth control	
		fatur saats /hilva
Drug abuse	Not using seat belts / child sa	iety seats/bike
Lack of exercise	helmets	
Lack of maternity care	Unsafe sex	
Poor eating habits	Unsecured firearms	
Not getting "shots" to prevent disease	Other	
4. If you selected drug abuse in question 3 please	specify substances of use here:	
5. How would you rate the overall health of your	community?	
		1.1
Very unhealthy Unhealthy Somewha	t healthy Healthy Very h	nealthy
Part II: Demographics		
Please answer questions #5-8 so we can see how	different types of people feel about	local health issues.
6. Zip code where you work:		
7. Age:		
0-17		
18-25		
26-39		
40-54		
55-64		
65 or over		
8. Sex:MaleFemale		
9. Ethnic group you most identify with:		
African American	Asian/Pacific Islander	Hispanic/Latino
Native American	White/Caucasian	Other:
African American	-	

3. In the following list, what do you think are the three most important "risky behaviors" seen in your community?

Appendix C -References

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ii Dignity Health Community Need Index (2018). Retrieved from http://cni.chw-interactive.org/.

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