Deer Valley Medical Center

Community Health Needs Assessment

HONOR HEALTH®



Approved by the HonorHealth Board of Directors December 2018

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Executive Summary

About HonorHealth

Founded in 2013, HonorHealth draws upon nearly 150 years of combined history in caring for the underserved in the local community. The system is comprised of five acute care hospitals, a surgical specialty hospital, a rehabilitation hospital, and a free-standing emergency department, as well as other specialty locations. HonorHealth as a system encompasses more than 3,400 expert physicians with a medical group offering more than 70 primary, specialty and immediate care locations across the metropolitan Phoenix area. Additionally, Innovative Care Partners (ICP), a physician-led clinically integrated network wholly owned by HonorHealth, covers more than 100,000 patients and leverages HonorHealth's integrated system of care to not only deliver best practice care for the patients, but also to realize cost reductions for patients, employers, and health-plans. Outside of traditional sites of care, HonorHealth has a long history, dating back to the origins of John C. Lincoln and Scottsdale Healthcare, of serving the community through programs such as NOAH and Desert Mission.

HonorHealth's mission is "to improve the health and well-being of those we serve", and although the organization recognizes that access to high-quality health care is necessary, by no means is that enough to improve the overall health of the population. HonorHealth must also engage in deep and transformative relationships with local community partners and organizations to address the social determinants of health, as well as to continue to reinvest its resources back into the communities it serves.

About HonorHealth Deer Valley Medical Center

The 204-bed hospital serves the rapidly expanding growing Northern Phoenix area as well as communities to the north along Interstate 17, including Anthem, New River and Black Canyon City.

Deer Valley Medical Center is a cardiac arrest center certified by the Arizona Department of Health Services and a primary stroke center. The facility provides a wide range of state-of-the-art inpatient and outpatient services including: a Level III trauma center; a care program for trauma patients age 60 and older; a children's emergency center and inpatient pediatric unit; a complete range of personalized inpatient and outpatient care; emergency care; a critical care unit; a progressive cardiac care unit; an orthopedic unit; cancer care; and medical/surgical and telemetry units and an outpatient surgery center. General surgery residents train here and at John C. Lincoln Medical Center.

On the campus are:

- The Breast Health and Research Center: offers advanced diagnostic and technology that includes 3-D digital mammography, an on-site MRI, bone density screenings, body composition assessments and care coordination.
- An outpatient surgery center

CHNA Background

The Patient Protection and Affordable Care Act (ACA), enacted on March 23, 2010, included new requirements for nonprofit hospitals in order to maintain their tax exempt status. The provision was the subject of final regulations providing guidance on the requirements of section 501(r) of the Internal Revenue Code. Included in the new regulations is a requirement that all nonprofit hospitals must conduct a community health needs assessment (CHNA) and develop an implementation strategy (IS) every three years. This 2018 CHNA is the second assessment for HonorHealth since merger of John C. Lincoln Health Network and Scottsdale Healthcare.

A community health needs assessment is seen as an essential function for HonorHealth as it helps to identify the major health needs of the community and offers insight into what services may be offered to address those needs. Whether it be a pervasive issue that is affecting all of the communities and populations HonorHealth serves, or those needs that may only impact a particular community or vulnerable population (e.g. poor, uninsured, underinsured, various racial/ethnic populations, etc.) understanding the major health needs of each community supports the development and prioritization of strategies that can be tailored to each need in order to maximize the impact on the wellness of the populations in the area. Additionally, understanding that there are finite resources to deploy to address our communities' needs, an effective health needs assessment includes partnering with organizations and community agencies, through which information and resources can be shared to deploy strategies maximizing the benefit and impact to the communities.

Approach to CHNA

HonorHealth completed a Community Health Needs Assessment (CHNA) to reassess the health needs of the communities served by its seven hospitals (one surgical specialty, one rehabilitation, and five acute care hospitals). The assessment included the collection and analysis of both quantitative (over 140 public health indicators, quantitative survey methods) and qualitative (organization and community representative interviews, qualitative survey methods, and focus groups) data to identify and create a comprehensive list of health needs for each community.

Summary of Prioritized Needs

In August of 2018, the HonorHealth CHNA Steering Committee convened to review the identified health needs and gain consensus on an objective prioritization framework. Using this framework, each Steering Committee member then completed an exercise to score each identified health need, the results of which yielded the prioritized list of significant health needs facing the community. For prioritized issues that HonorHealth is unable to address, a rationale as well as recommendations for addressing the health issue will be provided.

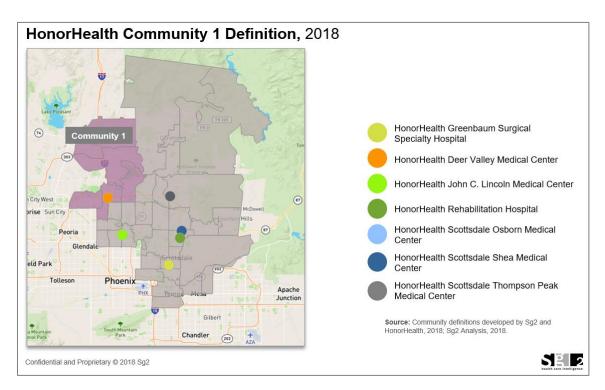
Community Served

HonorHealth Definition of Community

HonorHealth's primary service area covers the cities of Scottsdale, North Phoenix, Tempe, Carefree, and includes the Salt River Pima-Maricopa Indian Community, but also serves patients beyond the aforementioned areas. However, for the purposes of this needs assessment, three communities have been defined at ZIP code level (see map below) based on demographic segmentation. Each of HonorHealth's hospitals have been assigned to one of the three geographic communities based on location and representative populations that they serve.

The use of communities rather than the traditional patient-origin based catchment area facilitates data collection and analysis based on distinct patient populations. This yields a more comprehensive understanding of the distinct patient populations and their differing health needs, particularly those of medically underserved, low income, or minority populations. Specifically, race, ethnicity, household income, and age were analyzed at the ZIP code level to identify 3 major patient populations within the catchment area.

Map and Description of Community



The community area encompassing Deer Valley Medical Center's service area (hereon referred to as "Community 1") includes the following zip codes: 85024, 85027, 85053, 85085, 85086, 85308.

Community 1 Healthcare Resources

Туре	Name	Specialty
	Abrazo Arrowhead Campus	Short Term Acute Care Hospital
Acute Care Facilities (Community 1)	HonorHealth Deer Valley Medical Center	Short Term Acute Care Hospital
	Quail Run Behavioral Health	Psychiatric Hospital
	HHMG - 27th Avenue	Primary Care
	HHMG - Calavar	Primary Care
	HHMG - Cave Creek	Primary Care
	HHMG - Deer Valley	Primary Care
	HHMG - Gavilan Peak IC	Primary Care
	HHMG - Tramonto	Primary Care
	HHMG - Wellness Center	Primary Care
	HHMG - West Bell Road IC	Primary Care
HonorHealth	HHMG - West Union Hills	Primary Care
Ambulatory Sites (Community 1)	Breast Health & Research Center - Deer Valley	Specialty Care
(••••••••••••••••••••••••	HH Care for Women	Specialty Care
	HH Gastroenterology - North Valley	Specialty Care
	HH Heart Institute - Arrowhead	Specialty Care
	HH Corp Health - Deer Valley	Other
	HH Outpatient Therapy Services - Anthem	Other
	Infusion (Glendale Health Center)	Other
	Outpatient Therapy (Glendale Health Center)	Other
	Radiology (Glendale Health Center)	Other

Federally Qualified Health Centers (Community 1)	Calavar Family Health Center (NOAH)
	Sierra Health Center (NOAH)
	Venado Valley Health Center (NOAH)
	Sunrise Elementary School (Mountain Park Health Center)

NOAH = Neighborhood Outreach to Access Health. **Source**: "Health Centers," Arizona Alliance for Community Health Centers, Accessed October 2018.

For additional community resources, please see Appendix G.

Input and Participation

HonorHealth, NOAH

The HonorHealth CHNA was created by HonorHealth in collaboration with Sg2. The HonorHealth Steering Committee was composed of a diverse group of 12 individuals from across the HonorHealth system, including physicians, hospital regional leadership, system leadership, clinical leadership, and others, as well as community representatives.

Maricopa County

The Maricopa County Department of Public Health provided input into the identification of health needs through key informant interviews.

Sg2

Sg2 is a health care consulting, analytics, and intelligence firm with experience performing community health needs assessments and implementation strategy plans for health care organizations across the country.

Community Representatives and Residents

Various key information interviews were conducted across the region among specific community-based organizations to provide input into the identification of health needs for the populations they serve (see **Appendix B** for a list of organizations). In addition, a multi-modal consumer survey was distributed to obtain information about community health needs from residents in the defined community areas. Special efforts were made to target vulnerable populations within the community through the distribution of the survey to clients at key community health access points.

Process and Methods Used to Conduct the CHNA

Secondary Data

Sources

Secondary data were utilized from various sources including aggregated data from Community Commons data platform (<u>www.communitycommons.org</u>), which aggregates over 140 indicators from publicly available data sources, such as the Behavioral Risk Factor Surveillance System and National Vital Statistics System from the Center for Disease Control and Prevention, the American Community Survey from the US Census Bureau, and the US Department of Health & Human Services. Data were analyzed by zip code, race, and ethnicity when available.

Additional local secondary data were utilized from the Maricopa County public health department as well as the State of Arizona. For details on specific sources and dates of the data used, please see **Appendix A**.

Methodology for collection, interpretation, and analysis of secondary data

Information collected from secondary sources was grouped into the following categories: demographics, socioeconomic factors, physical environment, clinical care, health behaviors, and health outcomes.

Secondary data indicators were compared to Healthy People 2020 targets and county, state, and national averages to assess whether the indicators performed poorly against these benchmarks. Additionally, indicator data for racial/ethnic subgroups were reviewed to determine whether there were disparate outcomes and conditions among groups in the community.

Whenever possible, data indicators were used at the smallest geographic level representing HonorHealth's zip code defined communities. However, if data were not available at the zip code level, county data were used.

Community Input

Sources

HonorHealth contracted with Sg2, WestGroup Research and Survey Sample International to conduct the primary research. Community input was provided by a broad range of community members through the use of key informant interviews, focus groups, and a multi-modal consumer survey of 571 community residents.

Individuals with knowledge, information, and expertise relevant to the health needs of the community were consulted. These individuals included representatives from state or county public health departments as well as leaders, representatives and members of vulnerable populations (including medically underserved, low income, or minority populations) and other individuals with strong expertise of local health needs.

Furthermore, to ensure input from community members as well as vulnerable populations, a multi-modal survey was distributed through a targeted audience panel as well as in person at various key community health access points.

Key Informant Interviews

Sg2 conducted primary research via key informant interviews with 19 individuals from various organizations. Key informants included community and public health representatives from organizations such as Maricopa County Department of Public Health, Washington Elementary School District, Vitalyst Health Foundation, Arizona Alliance for Community Health Centers, Neighborhood Outreach to Access Health, HonorHealth, and others. Please see **Appendix B** for a complete listing of key informant titles and areas of expertise.

Experts were interviewed in person or by telephone for approximately one hour. Experts were asked to identify the top needs of their constituencies, including specific populations, communities, or areas with greater health needs; drivers of health needs, including social determinants of health; barriers to accessing health care; and suggested solutions for the health needs they identified, including existing resources, development of new resources, or community partnerships.

Stakeholders within HonorHealth were asked additional questions pertaining to their facility or system role, including available services, gaps in services, barriers patients encounter when seeking care, and current and historical efforts by the facility to address health disparities.

Focus Groups

WestGroup Research conducted four focus group sessions to gain further community input from residents about their health needs, perceived barriers to access, and awareness of community resources. The discussion included the identification of characteristics needed for a community to be healthy, important health needs in each geographic community, awareness and accessibility of resources available to address those needs, and the role of the healthcare organization in addressing unmet needs. See **Appendix D** for the focus group protocols, discussion guide and location.

Focus group participants were recruited to ensure geographical representation across the three communities as well as the NOAH service area. Furthermore, demographic characteristics such as age, household income, and primary language spoken were used to target significant populations across each focus group and to survey differences in health needs based on respondent socioeconomic factors.

The focus groups included community members that were from low-income and potentially medically underserved areas, as well as those that may be linguistically isolated, underinsured or uninsured. Additionally, one focus group was conducted in Spanish to ensure inclusion of Spanish-speakers across the communities served by HonorHealth and NOAH.

Consumer Survey

A multi-modal community health needs survey instrument was developed and distributed online and via hard copy in person. The appendix contains a detailed summary of the survey findings, respondent demographics, and questionnaire used.

Online Survey

An online survey to respondents living within the HonorHealth and NOAH service areas was administered. The survey sample was census-balanced by age and gender to ensure a relatively representative sample of the population (adults aged 18+), consisting of 389 responses.

In-person Survey

In order to ensure community input from individuals that may lack the means or ability to access the internet, including vulnerable or disadvantaged populations, a condensed paper survey was distributed in person at various community health access points within the community. The survey was offered in English and Spanish to be as inclusive of community residents as possible with 182 completed responses received.

See **Appendix E** for the full survey distribution methodology.

Written Comments

HonorHealth published the previous CHNA online and provided the public an opportunity to submit questions or feedback by emailing <u>communitybenefit@honorhealth.com</u>. At the time of this CHNA report, HonorHealth has not received any written comments. HonorHealth will continue to track any feedback to ensure relevant input is considered and addressed.

Data Limitations and Information Gaps

Close to 150 secondary indicators were used to identify the broad health needs faced by a community. However, there are some limitations with these data. Some data were only available at a county level, making an assessment of some health needs at a local community level challenging. Furthermore, disaggregated data around age, ethnicity, race and gender are not available for all data indicators, which limited the ability to examine disparities of health within the community. Lastly, data are not always collected on a yearly basis, meaning that some data are several years old.

HonorHealth was limited in its ability to assess some of the identified community health needs due to a lack of secondary data on certain sub-populations, such as individuals with undocumented status, homeless individuals, and incarcerated individuals, among others.

Demographics

Demographics

Community 1 covers 6 zip codes and approximately 148 square miles, including a population of 216,326 people. The population density for this area is estimated to be 1,457 people per square mile, compared to 444 people per square mile in Maricopa County.

Community Highlights

Community 1 has a slightly younger population with a lower percentage of adults ages 65+ (14% for Maricopa County and 16% for Arizona). Community 1 is not as racially diverse relative to Maricopa County and Arizona, although the Asian population is slightly larger. Nearly one in four adults and one in three children live below the Federal Poverty Level (<200% FPL) in Community 1.

Demographic Profile	Community 1	Maricopa County	Arizona	US
Total Population	216,326	4,088,549	6,728,577	318,558,162
% Population Ages 65+	12%	14%	16%	15%
Race				
% White	85%	79%	78%	73%
% Black	3%	5%	4%	13%
% Asian/Pacific Islander/Native Hawaiian	6%	4%	3%	5%
% Native American/Alaska Native	1%	2%	4%	1%
% Some Other Race	2%	7%	7%	5%
% Multiple Races	3%	3%	3%	3%
Ethnicity				
% Hispanic/Latino	14%	30%	31%	17%
% Non-Hispanic/Latino	86%	70%	69%	83%

Social and Economic Factors

Summary

Educational Attainment

Community 1 shows higher educational attainment than county, state and US benchmarks. Approximately 93% of adults aged 25+ have received their high school diploma, and 34% have received their bachelor's degree.

Employment

The unemployment rate in Community 1 is 4.7%, which is slightly higher than the US and Maricopa County, but in line with the state.

Food Insecurity

Fourteen percent of the population in Maricopa County, or 585,330 people, were estimated to have experienced food insecurity in 2016. This is similar to the food insecurity rate in the state (15%) and country (13%). Additionally, about 24% of the population has low food access, which is slightly higher than the county and US but lower than the state.

Limited grocery stores reflect reduced access to healthy food in the community, especially for vulnerable populations that may lack the means to find transportation to the nearest grocery store. This can contribute to unhealthy food choices, resulting in poor nutrition and a variety of community health issues. The number of grocery stores per population is significantly lower in Community 1 (9.5 per 100,000) relative to the US (21.1). The state and county rates are both approximately 12 stores per 100,000 people.

Health Insurance

Ten percent of the population in Community 1 is uninsured, lower than benchmarks for Maricopa, AZ, and the US (12-14%). Lack of insurance is a more significant issue among racial and ethnic minority groups in Community 1, such as Hispanic/Latinos (14%) and Native Americans (18%).

Homelessness

Approximately 22,092 people experienced homelessness in Maricopa County from 2016 to 2017. Over 40% of this population self-reported having a serious mental illness, substance abuse disorder, or HIV/AIDS (Homeless in Arizona, 2017).

Language Proficiency

Approximately five percent of the population aged 5+ in Community 1 has limited English proficiency, which is considerably lower than the state and US (9%).

Poverty

The poverty rate (200% of the federal poverty line) in Community 1 is below county, state, and US benchmarks – for the overall population as well as for children. In Maricopa County, poverty rates are significantly higher among Black or African Americans, Native Americans, and Hispanic/Latinos. Community 1 shows a similar pattern, but the observed disparities are less extreme than in the county.

Transportation

About 1% of the Community 1 population uses public transportation for commute to work, compared to 5% nationally. Low utilization of public transportation across the community as well as the county may reflect underlying issues, such as limited regional transportation infrastructure, that have implications for the population's ability to access care.

Supporting Data

Social and Economic Factors	Metric	Community 1	Maricopa County	AZ	US
Educational Attainment	% Population Ages 25+ with No High School Diploma, 2016	7%	13%	14%	13%
	% Population Ages 25+ with Bachelor's Degree or Higher, 2016	34%	31%	28%	30%
Employment	Unemployment Rate, 2018	5%	4%	5%	4%
Food Insecurity	% Population With Low Food Access, 2015	24%	20%	26%	22%
Food insecutivy	Grocery Stores per Pop. (100,000), 2016	9.5	12.2	12.3	21.2
Health Insurance	% Population Without Medical Insurance, 2016	10%	14%	14%	12%
Language Proficiency	% Population Age 5 and Up With Limited English Proficiency, 2016	1%	2%	2%	5%
Poverty	% Population Under Age 18 Below 200% FPL, 2016	30%	47%	50%	43%
Poverty	% Population at or Below 200% FPL, 2016	24%	35%	38%	34%
Transportation	% Population Using Public Transit for Commute to Work, 2016	1%	2%	2%	5%
	% Households with No Motor Vehicle, 2016	3%	7%	7%	9%

Note: FPL = Federal Poverty Level. **Source:** US Census Bureau, American Community Survey, 2012-16; US Department of Labor, Bureau of Labor Statistics, 2018 – March; US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas, 2015; US Census Bureau, County Business Patterns; US Census Bureau, Small Area Health Insurance Estimates, 2016.

Health Behaviors

Summary

Fruit and Vegetable Consumption

The vast majority of adults in the US aged 18 and older self-report consuming an inadequate amount of fruit and vegetables each day, which may significantly contribute to health issues like diabetes and obesity. Approximately 75% of Maricopa County adults consume less than 5 servings of fruits and vegetables per day, which is in line with state and national benchmarks.

Physical Inactivity

The Maricopa County population is slightly more active than the state and the US. A lower percentage of adults are considered physically inactive (18%) relative to the state (19%) and the country (22%).

Substance Abuse

Substance abuse can be a contributing factor to many chronic diseases as well as significant social, physical, and mental health issues, including child abuse, domestic violence, motor vehicle crashes, crime, suicide, and other health issues.

Alcohol

Maricopa County is in line with state and national benchmarks for alcohol consumption, with about 17% of adults reporting that they drink excessively. Excessive drinking is defined by the Center for Disease Control and Prevention as more than two drinks per day on average per men and one drink per day on average for women.

Tobacco

Sixteen percent of the population in Maricopa County reports currently smoking cigarettes, which is slightly lower than the smoking rates for the state (17%) and the US (18%).

Opioids

Between June 2017 and October 2018, there were 14,758 suspected overdoses in the state of Arizona with 2,349 suspected overdose fatalities.

Sexually Transmitted Infections (STIs)

STI rates in Maricopa County and Arizona exceed national benchmarks for infections like chlamydia and gonorrhea but are lower for HIV. STI rates also vary widely and often disproportionally affect minority groups such as Blacks, Native Americans, and Hispanics or Latinos. In Arizona, the chlamydia incidence rate for Native Americans and Non-Hispanic Blacks is 6-7x the rate for Non-Hispanic Whites and 10x the rate for Asians and Pacific Islanders.

Supporting Secondary Data

Health Behavior	Metric	Maricopa County	AZ	US
Fruit/Vegetable Consumption	% Adults with Inadequate Fruit/Vegetable Consumption, 2009	75%	75%	76%
Physical Inactivity	% Adults with No Leisure Time Physical Activity, 2013	18%	19%	22%
Tobacco Usage	% Population Smoking Cigarettes (Current Smokers), 2012	16%	17%	18%
Alcohol Consumption	Estimated % of Adults Drinking Excessively, 2012	17%	17%	17%
	Chlamydia Infection Rate (per 100,000 pop), 2014	504.3	488.9	456.1
Sexually Transmitted Infections	Gonorrhea Infection Rate (per 100,000 pop), 2014	140.7	117.0	110.7
	HIV/AIDS Prevalence Rate (Per 100,00 pop), 2014	289.1	242.8	353.2

Sources: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. US Department of Health & Human Services, Health Indicators Warehouse. 2005-09; Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2013; US Census Bureau, American Community Survey. 2012-16. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12; Institute for Health Metrics and Evaluation (IHME), US County Profile.

Report Area and Date	Suspected Opioid	Suspected Opioid	Neonatal Abstinence
Range	Overdoses	Overdose Fatality	Syndrome
Arizona, June 2017 – October 2018	14,758	2,349	1,393

Source: "Opioid Epidemic," Arizona Department of Health Services, Accessed October 2018.

Health Outcomes

Summary

General Health

The percentage of adults in Maricopa County who self-report having poor or fair health is in line with state and national benchmarks (15%-16%).

Chronic Diseases

Cancer

Maricopa County cancer incidence rates are low relative to national benchmarks as well as Healthy People 2020 goals for major cancer types, including breast, cervical, colon, lung, and prostate. However, cancer incidence rates vary significantly by race and ethnicity. Blacks or African-Americans, Native Americans, and Hispanics suffer poorer outcomes for most cancer types. Blacks experience significantly higher prostate cancer rates as well as overall cancer mortality rates.

Cardiovascular and Stroke

Maricopa County performs at or better than national benchmarks and Healthy People 2020 goals on the major measures of cardiovascular health, including high blood pressure, cholesterol, heart disease incidence, and heart disease and stroke mortality. Whites or Caucasians are more moderately more likely to have high cholesterol and heart disease. However, Blacks or African Americans experience higher mortality rates, especially for stroke.

Lung Disease

Maricopa County is in line with national benchmarks for lung disease mortality, but over 2x the Arizona benchmark (20 deaths per 100,000). Mortality rates are highest for Whites or Caucasians, followed by Blacks or African Americans.

Diabetes

The adult diabetes prevalence rate in Maricopa County is 9%, consistent with the state and national benchmarks. Among Medicare Fee-For-Service beneficiaries, diabetes prevalence rate for Maricopa County is lower than the US benchmark (22% vs 27%).

Obesity/Overweight

Maricopa County performs similarly to the state and US regarding the rate of obese (BMI>30.0) and overweight adults. Approximately 37% of the county's adult population is overweight and 25% is obese. Within Arizona, African Americans and Hispanics/Latinos are slightly more likely to be considered overweight.

Accidental Deaths and Homicides

Homicide

The homicide rate in Maricopa County is similar to the US as well as the Healthy People 2020 benchmark (5-6 deaths per 100,000). Similarly to the state and US, homicide rates in the county reflect severe racial disparities. The homicide rate for African Americans is 17 per 100,000, nearly 5x the rate for Whites or Caucasians. Native Americans and Hispanics or Latinos also have significantly higher rates relative to Whites and Asians/Pacific Islanders.

Motor Vehicle Crash

Motor vehicle crash rates in Maricopa County are in line with state and national averages (11-12 deaths per 100,000 people). Native Americans in the county are disproportionately affected by motor vehicle crashes, with a mortality rate of 20 per 100,000 people.

Unintentional Injury

Common unintentional injuries include motor vehicle crashes, poisoning, falls, fires and burns, and drowning. The unintentional injury mortality rate in Maricopa County is 44 deaths per 100,000, significantly higher than the Healthy People 2020 goal of 36 deaths per 100,000. Native Americans are disproportionately impacted by unintentional injuries and experience a mortality rate that is nearly twice the Healthy People 2020 goal.

Mental Health

Depression

The depression rate among Medicare beneficiaries in Maricopa County is 13%, similar to the rate for Arizona and below the national average (17%).

Drug Overdoses

Drug overdose mortality is a major concern in Arizona, with nearly 19 deaths per 100,000 people due to overdoses. This is higher than the US and nearly double the Healthy People 2020 target of 10.2 deaths per 100,000. The rate for Maricopa County is 17.3 deaths per 100,000. **Suicide**

The suicide death rate in Maricopa County is 16 per 100,000, which is significantly higher than state, and national benchmarks as well as the Healthy People 2020 target (10 per 100,000).

Other

Maternal and Child Health

Maricopa County performs in line with the state, national, and Healthy People 2020 benchmarks for infant mortality (6-7 infant deaths per 1,000 infant births). Also, the county is consistent with the state and national benchmarks for low birth weight rates (7-8% of births).

However, significant racial disparities exist for infant health. The infant mortality rate for African Americans is almost 3x the rate for Caucasians. Additionally, African-Americans are significantly more likely to be born at a low birth weight (12% of African Americans vs 7% of Caucasians).

Asthma

Maricopa County performs in line with state, national, and Healthy People 2020 benchmarks for asthma prevalence (about 6-7% of adults). However, Blacks or African Americans are disproportionately affected by asthma, with a 14% prevalence rate in Maricopa County.

Vaccine-Preventable Diseases

The mortality rate for tuberculosis is 2.2 per 100,000 people, significantly higher than Healthy People 2020 target of 1 per 100,000 people.

Supporting Data

Health Outcome	Metric	Maricopa County	AZ	US	Healthy People
	Breast Cancer Incidence Rate, 2014	120.3	112.4	123.5	-
	Cervical Cancer Incidence Rate, 2014	6.6	6.7	7.6	7.1
Cancer	Colon and Rectum Cancer Incidence Rate, 2014	34.6	34.2	39.8	38.7
	Lung Cancer Incidence Rate, 2014	50.6	50.1	61.2	-
	Prostate Cancer Incidence Rate, 2014	87.8	80.8	114.8	-
	Cancer Mortality, 2014	141.6	120.9	160.9	160.6
Diabetes	% of Medicare FFS Beneficiaries with Diabetes, 2015	22%	22%	27%	-
High Blood Pressure	% of Adults with High Blood Pressure, 2012	25%	25%	28%	-
High Cholesterol	% of Adults with High Cholesterol, 2012	40%	40%	39%	-
	% of Adults with Heart Disease, 2012	4%	4%	4%	-
Heart Disease	Coronary Heart Disease Mortality per Pop. (100,000), 2016	88.5	77.7	99.6	103.4
Obese	% of Adults Ages 20+ with BMI >30.0, 2013	25%	26%	28%	-
Overweight	% of Adults Ages 18+ Reporting BMI of 25.0- 30.0, 2012	37%	37%	36%	-
Lung Disease	Age-Adjusted Death Rate Per Pop. (100,000), 2016	42.9	20.2	41.3	-
Stroke	Stroke Mortality per Pop. (100,000), 2016	28.7	29.5	36.9	33.8
Homicide	Age-Adjusted Death Rate per Pop. (100,000), 2016	5.6	6.2	5.5	5.5
Motor Vehicle Crash	Age-Adjusted Death Rate per Pop. (100,000), 2016	10.8	11.9	11.3	-
Unintentional Injury	Unintentional Injury Death Rate Per Pop. (100,000), 2016	44.3	46.5	41.9	36.0
Infant Mortality	Infant Deaths per 1,000 Births, 2010	6.1	6.3	6.5	6.0
Low Birth Weight	% of Births Considered Low Birth Weight (<2,500 g), 2012	7%	7%	8%	8%

See **Appendix H** for additional health outcomes data by race and ethnicity.

Asthma	% of Adults Aged 18+ With Asthma, 2012	14%	14%	13%	-
Tuberculosis	Death Rate per Pop. (100,000), 2016	2.2	2.8	-	1.0

Source: State Cancer Profiles, 2010-14; Centers for Medicare and Medicaid Services. 2015; Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health Human Services, Health Indicators Warehouse, 2006-12; Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System and additional data analysis by CARES, 2011-12; Centers for Disease Control and Prevention, National Vital Statistics System, Accessed via CDC WONDER, 2012-16; Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 2013; Arizona Department of Health Services, Bureau of Epidemiology and Disease Control Services, Office of Infectious Disease Service, 2016.

Identification and Prioritization of Community Health Need

Identifying Health Needs

Process and Criteria Used for Identification of Health Needs

To identify the community's health needs, Sg2 and HonorHealth gathered data on approximately 150 health indicators and also solicited community input. Health needs were preliminarily identified by three major means – primary research, secondary research, or presence of health disparities.

Primary research: If a health issue was prioritized by at least one third of interviews, one third of survey respondents, OR at least 2 focus groups, the health issue was identified as a health need.

Secondary research: Performance indicators for Maricopa County (and when available, the HonorHealth ZIP-code defined communities) were compared to state and national benchmarks. If at least two indicators for a health issue failed a benchmark by 10% or more, OR if one indicator failed a benchmark by 35% or more, the health issue was identified as a health need.

Health disparity: Whenever possible, performance indicators were analyzed by race and ethnicity to discern potential health disparities among racial or ethnic minorities. Performance indicators where a minority group performed 25% worse than the highest-performing group on a given metric were considered to be health disparities. To ensure that the assessment accounted for the needs of the medically underserved, any health issue characterized by a health disparity was identified as a health need.

A total of 24 conditions were preliminarily identified by the primary research, secondary research, or presence of health disparities. These conditions were subject to additional criteria reflecting a community health stakeholder's ability to impact the health need. The broader term "community health stakeholder" was used to in lieu of specific reference to HonorHealth to acknowledge the importance and ability of various providers, community health organizations and partnerships in addressing health needs.

Feedback from community representatives composing the HonorHealth Steering Committee was used to determine if a community health stakeholder could reasonably directly impact the health need. The Steering Committee achieved consensus that it was unlikely a community health stakeholder could directly impact the following health issues:

- Climate health
- Air quality
- Intentional injury (homicide)

As a result, 21 conditions were retained as the identified community health needs. The list of needs, in priority order, is described later in the report.

Health Need Prioritization

Each identified health need was prioritized according to criteria identified by the HonorHealth Steering Committee before beginning the process. The criteria and scoring are listed in the table below.

Criteria	Definition	
Affected Population	Portion and number of the community/population who are impacted	
Severity of Health Need	Degree to which the health issue significantly impacts an individual's overall health and quality of life	
Clear Disparities or Inequities	Degree to which the heath issue disproportionately affects a vulnerable population (eg, race, ethnicity, income, or other)	
Historical Trend of Health Need	Degree to which the issue is getting worse/not improving over time	
Opportunity to Intervene	Extent to which HonorHealth or a community partner can intervene to effectively address the issue	

As previously noted, secondary data regarding disparities or inequities is primarily available for racial or ethnic disparities. However, the Steering Committee was asked to consider other subgroups that may face disproportionate barriers to healthcare, such as those based on language, culture, citizenship status, economic status, sexual orientation, age, gender, or others.

The Steering Committee used the prioritization criteria to rate each of the health needs via an online survey in September 2018.

Prioritized Health Needs Profiles

Mental Health

The HonorHealth community area faces significant mental health challenges, including access to mental health care resources and limitations in the system of care for the region.

Interviews and Focus Groups

Community representatives and residents frequently listed mental health as an issue that was important to address due to its high degree of impact on an individual's health as well as his or her ability to function in everyday life. A key theme surfacing from the community was the high degree of connection between mental health, substance abuse, and homelessness.

Community residents and representatives reported difficulty accessing mental health resources, such as counseling for youth and adolescents as well as specialist resources such as neuropsychiatry. Access challenges included long wait times, and in some cases, prohibitively high costs. The developmentally disabled were also identified as a population for whom few or limited resources currently exist in the community. Furthermore, community input noted regional challenges with the system of mental health care delivery, evidenced by high ED utilization and length of stay.

Community Survey

• Mental health was a higher issue especially among African Americans/Blacks, Asians, and Native Americans.

% of Survey Respondents Considering Mental Health A Top Issue for Their Household, By Race and Ethnicity			
American Indian, Alaskan Native, or Native American	33%		
Asian, Native Hawaiian, or Pacific Islander 33%			
Black or African American 41%			
White or Caucasian 28%			
Hispanic 23%			
Non-Hispanic 29%			

Performance Compared to Benchmarks

Access to Mental Health Providers

Maricopa County and Arizona have a severe shortage of mental health providers (psychiatrists, psychologists, clinical social workers, and counselors specializing in mental health care). There are approximately 125 mental health providers per 100,000 people in the county, compared to 203 mental health providers per 100,000 people in the US.

Additionally, the Kaiser Family Foundation estimates that only 17% of the need for mental healthcare in the state is currently being met. Over 180 areas in Arizona have been designated as mental health care shortage areas, with an estimated shortfall of 398 practitioners

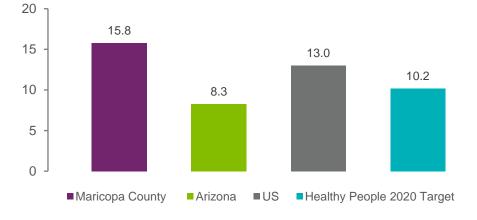
Number of Mental Health Providers (per 100,000 pop), 2018

Maricopa County	Arizona	US
124.9	121.4	202.8

Source: University of Wisconsin Population Health Institute, County Health Rankings. 2018.

Mental Health Outcomes

The depression rate among the Medicare population in Maricopa County falls below the national average (13% vs 17%). However, death rates for suicide significantly exceed those for Arizona, the US, and the Healthy People 2020 target.

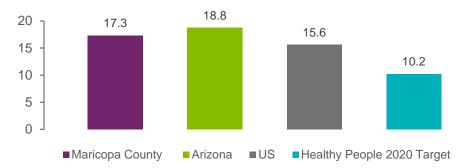


Age-Adjusted Death Rate due to Suicide (per 100,000 pop), 2016

Source: Centers for Disease Control and Prevention, National Vital Statistics System. 2012-16.

Substance Abuse and Homelessness

Substance abuse is a major health issue in the state of Arizona as well as Maricopa County, where overdose death rates exceed the Healthy People 2020 target by 50-60%.



Age-Adjusted Death Rate due to Overdoses (per 100,000 pop), 2016

Source: Centers for Disease Control and Prevention, National Vital Statistics System. 2012-16.

Maricopa County reported a homeless population of 22,092 from 2016 to 2017, which accounts for over half of the homeless population in the state. The homeless population represents one of the most vulnerable groups in Maricopa County with severe behavioral health need. Over 40% of homeless adults in the county self-reported having a serious mental illness, a substance abuse disorder, or HIV/AIDS (Homeless in Arizona, 2017).

Serious mental illnesses are defined by the Substance Abuse and Mental Health Services Administration (SAMHSA) as a disorder that results in serious functional impairment. In 2016, an estimated 4% of US adults had a serious mental illness (SAMHSA, 2016).

Access to Care

Primary care is an essential part of the system of care and often considered a patient's first point of contact with a healthcare system. Primary care providers can help to manage health in the community settings, limiting the progression of disease into more serious and acute episodes. Preventive health services such as health screenings, routine tests, and vaccinations offered in primary care or community settings can reduce morbidity and mortality rates for chronic diseases.

Among medically underserved populations, community health centers (such as federally qualified health centers) play a key role in providing access to comprehensive primary care.

Additionally, given the rise of health care costs as well as increased cost-sharing in high deductible health plans, the affordability of health care is a significant issue for community residents and especially salient among low-income, minority and uninsured populations.

Interviews and Focus Groups

While community residents did not express a need for more primary care providers, residents shared the perception that wellness and prevention resources were somewhat limited and desired this to be a more integral part of their healthcare experiences.

Community residents frequently expressed concerns with the rising costs of health care and the resulting cost to patients through increased premiums, co-pays, and out-of-pocket expenditures. Residents felt that the price of healthcare exceeded the average person's ability to pay.

Community Survey

The ability to pay for healthcare was the most frequently prioritized health issue for individuals and their households.

Race and Ethnicity	% of Respondents Considering Ability to Pay for Healthcare a Top Household Issue
American Indian, Alaskan Native, or Native American	42%
Asian, Native Hawaiian, or Pacific Islander	57%
Black or African American	59%
White or Caucasian	54%
Hispanic	61%
Non-Hispanic	53%

Top reasons for not having a personal healthcare provider were inability to afford payments and lack of reason or motivation to see a doctor.

Race or Ethnicity	% of Respondents Who Have a Personal Healthcare Provider	% of Respondents Considering Access to Healthcare a Top Household Issue
American Indian, Alaskan Native, or Native American	58%	58%
Asian, Native Hawaiian, or Pacific Islander	71%	24%
Black or African American	73%	45%
White or Caucasian	78%	33%
Hispanic	69%	41%
Non-Hispanic	78%	33%

Performance Compared to Benchmarks

Primary Care Access

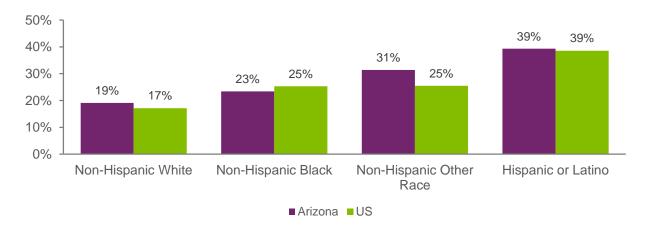
Maricopa County is generally in line with state and national averages for primary care access. There are slightly fewer primary care physicians per population, but other metrics measuring primary care access (adults without consistent source of primary care, adults with a routine checkup in the past year) are similar to benchmarks.

	Maricopa County	Arizona	US
Primary Care Physicians per Pop. (100,000), 2014	77.9	73.7	87.8
Adults Without a Consistent Source of Primary Care, 2012	23%	26%	22%
% of Adults with a Routine Checkup in the Past Year, 2015	66%	66%	68%

Sources: US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2014; Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2011-12; Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2015.

However, various challenges emerge when examining primary care access for vulnerable and medically undeserved populations in Maricopa County.

- Nearly 40% of Hispanic or Latino adults in the county reported lacking access to a consistent source of primary care.
- Resources like FQHCs that play critical roles in bridging gaps in access for the undeserved are relatively limited in Maricopa County. There are significantly less FQHCs per 100,000 population compared to Arizona and the US (1.1 in Maricopa County vs. 2.7 in the US).
- 44% of the Maricopa County population lives in a health professional shortage area, compared to 33% for the US indicating that there are significant pockets within Maricopa County that face shortages in primary care, dental, or mental health providers and services.



Adults Without a Consistent Source of Primary Care by Race and Ethnicity, 2012

Source: US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2014

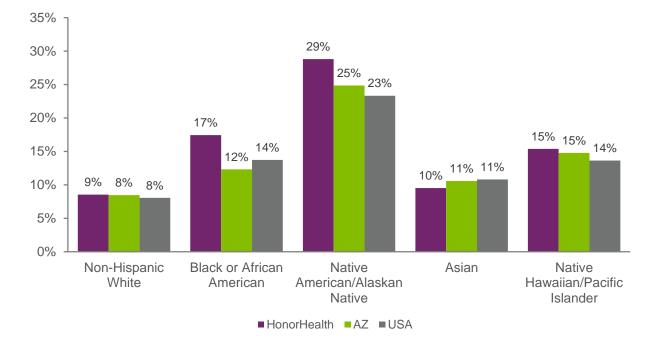
Screenings and Preventive Health

Maricopa County is generally in line with state and national averages for cancer screenings. Colonoscopy or sigmoidoscopy rates and pap tests are slightly lower than national averages for colon cancer, while mammogram rates are slightly above average.

In addition, the county performs better than national averages for diabetes exams (hemoglobin A1c tests), HIV screenings, and pneumonia vaccinations.

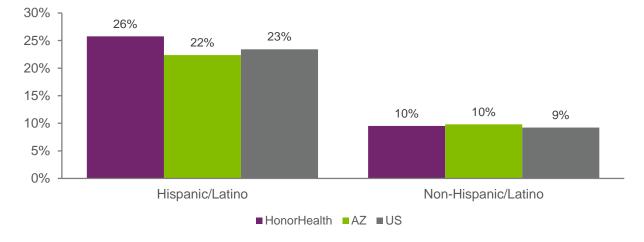
Affordability

According to the Commonwealth Fund, uninsured adults are the least confident in their ability to pay for healthcare due to high costs and expectation of prompt payment. Lack of health insurance is a key barrier to health care access including primary care, specialty care, and other services that may contribute to poor health outcomes. Maricopa County has a slightly higher percentage of uninsured (14%) relative to the United States (12%), with Hispanics and Native Americans significantly impacted by lack of insurance.



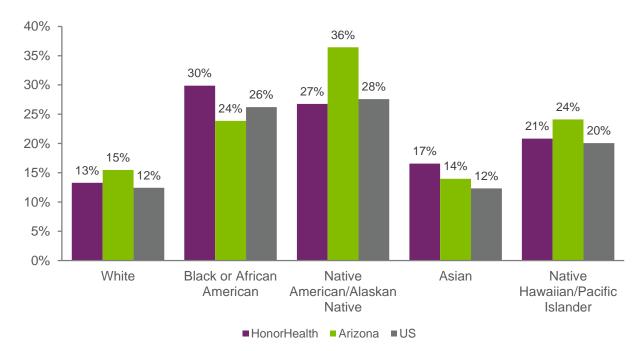
Uninsured Population by Race Alone, 2016

Uninsured Population by Ethnicity Alone, 2016

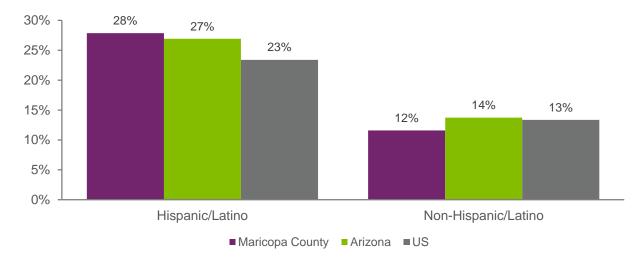


Source: US Census Bureau, American Community Survey. 2012-16.

Additionally, poorer populations are likely to face barriers in accessing and affording healthcare services. The HonorHealth Community Area is generally aligned with state and national poverty rates. Nearly 16% of the HonorHealth Community Area population falls below the federal poverty level, with significantly higher poverty rates among Black or African Americans, and Native Americans. Hispanics/Latinos also have higher poverty rates (~28% in Maricopa County).



Population in Poverty (<100% FPL) by Race Alone, 2016



Population in Poverty (<100% FPL) by Ethnicity Alone, 2016

Chronic Diseases

Interviews and Focus Groups

Community residents commonly shared a perception that many chronic diseases are affected by lifestyle factors such as nutrition, exercise, smoking or other substance abuse. Residents also expressed concerns about treating chronic illness, perceiving over-reliance on medications to manage chronic illness rather than a preferred focus on wellness and prevention.

Community Survey

- Survey respondents reported if they had personal experiences (themselves or their household) with each of the following chronic diseases:
 - o Cancer: 22%
 - o Cardiovascular/heart condition: 29%
 - o Diabetes: 33%
 - Obesity or being overweight: 40%
 - Respiratory conditions: 26%

Race or Ethnicity	% of Respondents Considering Chronic Diseases a Top Household Issue
American Indian, Alaskan Native, or Native American	42%
Asian, Native Hawaiian, or Pacific Islander	24%
Black or African American	18%
White or Caucasian	33%
Hispanic	31%
Non-Hispanic	32%

Performance Compared to Benchmarks

Overall, Maricopa County and Arizona perform significantly better than the US for the highest-prevalence chronic diseases, including asthma, cancer, diabetes, heart disease, and obesity, among others. One exception is lung disease, where Maricopa County is slightly worse than the US and much worse than Arizona.

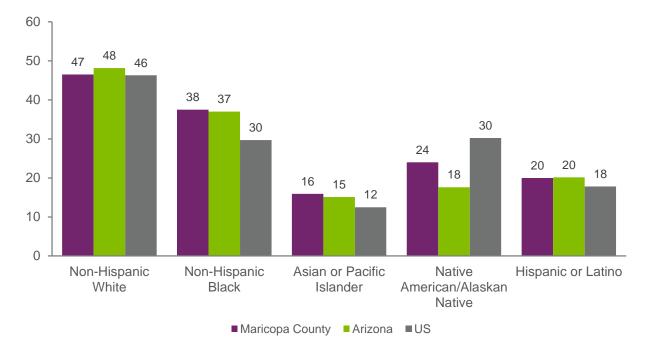
However, health disparities can be observed across minority racial or ethnic groups, contributing to poor health outcomes for Native Americans, Hispanics, and African-Americans. Racial disparities were observed across the most common forms of cancer (breast, cervical, colon and rectum, lung, prostate) as well as heart disease and lung disease. For a full list of racial disparities, see the appendix.

Age-Adjusted Death Rate due to Lung Disease (per 100,000 pop), 2016

Maricopa County	Arizona	US	
42.9	20.2	41.3	
Courses Contain for Disease Control and Drevention, National Vital Statistics System, 2040-46			

Source: Centers for Disease Control and Prevention, National Vital Statistics System. 2012-16.

Age-Adjusted Lung Disease Mortality by Race and Ethnicity, 2016



Source: Centers for Disease Control and Prevention, National Vital Statistics System. 2012-16.

Access to Healthy Food/Food Insecurity

Food insecurity is an important social determinant of health that can lead to difficulties maintaining good health, consuming a nutritious diet, and managing chronic disease. According to the Food Research Action Center, household food insecurity strongly predicts higher health care utilization and health care costs. Even at marginal levels, food security is associated with some of the most costly and prevalent health issues, such as cancer, diabetes, and hypertension.

Interviews and Focus Groups

Community representatives expressed concerns about not only lack of food, but lack of nutritious options. Representatives emphasized Desert Mission Food Bank's historical focus on addressing nutrition, diet, and education in addition to food insecurity to improve overall health.

Community residents shared perceptions that healthy food is too expensive, observing connections in between poverty, consumption of unhealthy food, and obesity in their community. Convenience and price were listed as main reasons for choosing less nutritious health options, such as fast food.

Community Survey

• Native Americans and Hispanics were significantly more likely to report that they were worried food would run out before they had money to buy more, a key indicator of food insecurity

Race or Ethnicity	% of Respondents Considering Access to Healthy Food/Groceries a Top Household Issue	% of Respondents Who Were Worried Food Would Run Out In the Last 12 Months
American Indian, Alaskan Native, or Native American	42%	58%
Asian, Native Hawaiian, or Pacific Islander	43%	29%
Black or African American	55%	32%
White or Caucasian	37%	28%
Hispanic	48%	47%
Non-Hispanic	35%	25%

Performance Compared to Benchmarks

Overall, Maricopa County faces food insecurity rates that are similar to Arizona and the US. The percent of the population with low food access is lower in the county relative to the state and country. However, the proliferation of fast food restaurants and relatively low number of grocery stores per population may contribute to challenges accessing affordable and convenient healthy options.

	Maricopa County	Arizona	US
Food Insecurity Rate, 2016	14%	15%	13%
Fast Food Restaurants per Pop. (10,000), 2015	80	71.7	77.1
Grocery Stores per Pop. (10,000), 2015	12.2	12.3	21.2
Low Food Access, 2015	20%	26%	22%

Sources: Feeding America, 2016; US Census Bureau, County Business Patterns, 2015; US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas, 2015.

Maternal and Child Health

Interviews and Focus Groups

Community representatives noted pockets of the community served by HonorHealth and NOAH are significantly impacted by adverse childhood events, including physical and sexual abuse. Homeless shelters for women and children were noted to house populations with high trauma.

Additionally, community representatives identified foster and homeless children as a significant problem within the HonorHealth community area as well as the state.

Performance Compared to Benchmarks

Maricopa County performs in line with the state, national, and Healthy People 2020 benchmarks for infant mortality (6-7 infant deaths per 1,000 infant births). Also, the county is consistent with the state and national benchmarks for low birth weight rates (7-8% of births).

However, significant racial disparities exist for infant health. The infant mortality rate for African Americans is almost 3x the rate for Caucasians. Additionally, African-Americans are significantly more likely to be born at a low birth weight (12% of African Americans vs 7% of Caucasians).

Evaluation of 2016 Implementation Strategies

HonorHealth's Implementation of Previous CHNA

The following is a review and evaluation of implementation activities carried out over the past two years related to the previous 2016 CHNA and Implementation Strategy (2016 – 2019). For a full description of the initiatives and metrics identified in the last implementation strategy plan, please see **Appendix F.**

In the 2016 CHNA Implementation strategy, HonorHealth identified the following needs to address:

- Behavioral Health
- Substance Abuse
- Geriatric Health
- Chronic Disease Prevention and Management

As stated in HonorHealth's implementation strategy plan completed during fiscal year 2016:

"To address these needs, HonorHealth will implement 18 key initiatives over the next three years. The Implementation Strategy describes these initiatives, including:

- Behavioral Health Service Plan
- Transition Specialists
- Care Management
- Congestive Heart Failure Care Coordination
- Sepsis Care Coordination
- C. Difficile Prevention Initiative
- Palliative Care
- Mobile Integrated Healthcare Practice
- Salt River Fire Department Integrated Community Paramedic Program
- Disease Management
- Corporate Health
- Health Screenings
- Geriatric Health
- Longevity Institute
- Desert Mission Food Bank
- Desert Mission Adult Day Health Care
- NOAH- Behavioral Health
- NOAH- Health Screenings

For each initiative, the Implementation Strategy also describes the anticipated impact, programs and resources that HonorHealth plans to commit, and the anticipated collaboration with others to meet the community's needs. Wherever possible, specific metrics have been identified to assist in the evaluation of the impact of each initiative."

The information in the charts below lists the progress on each of the initiatives during fiscal years 2016, 2017, and 2018.

Initiative	Anticipated Impact	Metrics	Outcomes
	Total volume of patients seen by CPR	Q4 2017 - Q1 2018	2,807 patients seen by CPR
	Total volume of patients seen by NP	Q4 2017 - Q1 2018	1,045 patients seen by NPs
Behavioral Health Service Plan	Readmission rates for behavioral health	Q4 2017 - Q1 2018	28% decrease from 3.1% to 2.2%
	ED Length of Stay	Q4 2017 - Q1 2018	62% decrease from 6.3 days to 2.4 days
	Observation Length of Stay (hours)	Q4 2017 - Q1 2018	3% decrease from 32.8 hours to 31.8 hours
	Increase number of eligible patients seen after discharge.	Q1 2016 - Q3 2016	3,419 eligible patients seen after discharge
Care Management	Percent of hospital readmissions	Q1 2016 - Q4 2017	11% decrease in readmissions from 55 to 49
	Reduce rate of specific-cause readmissions.	Data unavai	lable
Congestive Health Failure Coordination	Reduce rate 30-day readmission for congestive heart failure patients.	Q1 2016 - Q4 2017	19% increase in readmissions from 84 to 100
Sepsis Care Coordination	Reduce rate of 30-day readmission.	Q1 2016 - Q4 2017	5% decrease in admissions from 75 to 71
C. Difficile Prevention Initiative	Decrease number of C. difficile infections.	Q1 2016 - Q3 2016	4% decrease in infections from 154 to 148
Palliative Care	Increase number of patients receiving palliative care.	Q1 2016 - Q3 2016	71% increase in patients from 150 to 257
	Increase percent of diabetic patients with A1c at or below goal	Q1 2016 - Q1 2017	6% decrease from 59 to 56
Discoss	Increase percent of diabetic patients with blood pressure at or below goal	Q1 2016 - Q1 2017	4% increase from 80 to 83
Disease Management	Increase percent of diabetic patients with lipids (LDL) at or below goal	Q1 2016 - Q1 2017	8% increase from 38 to 41
	Increase percent of hypertensive patients with blood pressure at or below goal	Q1 2016 - Q1 2017	5% increase from 67 to 71
	Number of adults screened for heart disease	Q1 2016 - Q2 2017	55% decrease from 62 % to 28%
Health Screenings	Number of adults screened for oral cancer	Data unavailable	
	Number of adults screened for skin cancer.	Q2 2016 - Q2 2016	480 adults screened for skin cancer
Health Screenings	Number of adults screened for stroke	Q2 2016 - Q2 2017	369 adults screened for stroke
Longevity Institute	Number of wellness/educational offerings in the community	Q1 2016 - Q3 2016	1,758 wellness/education offerings in the community

	Number of seniors receiving geriatric health assessments	Q1 2016 - Q3 2016	405 seniors received geriatric health assessments	
	Number of Seniors with Advanced Directives	Q1 2016 - Q3 2016	576 seniors	
	Reduce number of seniors with home-based falls with injury	Q2 2016 - Q4 2016	2% increase in adults with home- based falls with injury	
	Number of adults (12 years and older) screened for depression	Q1 2016 - Q3 2016	6,247 adults screened for depression	
NOAH - BH	Number of adults receiving disease self-management education.	Q1 2016 - Q3 2016	949 adults received education	
	Number of adults receiving mental health counseling.	Q1 2016 - Q3 2016	334 adults received mental health counseling	
NOAH - Health	Number of persons receiving	Q1 2016 -	3,222 persons received	
Screenings	recommended screenings	Q3 2016	recommended screenings	

Note: The Salt River Fire Department Integrated Community Paramedic Program, Transition Specialists, Mobile Integrated Healthcare Practice, and Corporate Health initiatives were discontinued. **Source:** HonorHealth implementation plan, 2018.

Appendix

Appendix A: CHNA Data Sources and Dates **Demographics**

Indicator Variable	Data Source
Total Population	US Census Bureau, American Community Survey. 2012-16.
Change in Total Population	US Census Bureau, Decennial Census. 2000 - 2010.
Families with Children	US Census Bureau, American Community Survey. 2012-16.
Female Population	US Census Bureau, American Community Survey. 2012-16.
Male Population	US Census Bureau, American Community Survey. 2012-16.
Median Age	US Census Bureau, American Community Survey. 2012-16.
Population Under Age 18	US Census Bureau, American Community Survey. 2012-16.
Population Age 0-4	US Census Bureau, American Community Survey. 2012-16.
Population Age 5-17	US Census Bureau, American Community Survey. 2012-16.
Population Age 18-64	US Census Bureau, American Community Survey. 2012-16.
Population Age 18-24	US Census Bureau, American Community Survey. 2012-16.
Population Age 25-34	US Census Bureau, American Community Survey. 2012-16.
Population Age 35-44	US Census Bureau, American Community Survey. 2012-16.
Population Age 45-54	US Census Bureau, American Community Survey. 2012-16.
Population Age 55-64	US Census Bureau, American Community Survey. 2012-16.
Population Age 65+	US Census Bureau, American Community Survey. 2012-16.
Population with Any Disability	US Census Bureau, American Community Survey. 2012-16.
Population in Limited English Households	US Census Bureau, American Community Survey. 2012-16.
Population with Limited English Proficiency	US Census Bureau, American Community Survey. 2012-16.
Population Geographic Mobility	US Census Bureau, American Community Survey. 2012-16.
Foreign-Born Population	US Census Bureau, American Community Survey. 2012-16.
Hispanic Population	US Census Bureau, American Community Survey. 2012-16.
Urban and Rural Population	US Census Bureau, Decennial Census. 2010.
Veteran Population	US Census Bureau, American Community Survey. 2012-16.

Social and Economic Factors

Indicator Variable	Data Source			
Children Eligible for Free/Reduced Price Lunch	National Center for Education Statistics, NCES - Common Core of Data. 2015-16.			
Food Insecurity Rate	Feeding America. 2016.			

Head Start	US Department of Health & Human Services, Administration for Children and Families. 2016.					
High School Graduation Rate (EDFacts)	US Department of Education, EDFacts. 2014-15.					
High School Graduation Rate (NCES)	National Center for Education Statistics, NCES - Common Core of Data. 2008-09					
Households with No Motor Vehicle	US Census Bureau, American Community Survey. 2012-16.					
Housing Cost Burden (30%)	US Census Bureau, American Community Survey. 2012-16.					
Income - Families Earning Over \$75,000	US Census Bureau, American Community Survey. 2012-16.					
Income - Inequality (GINI Index)	US Census Bureau, American Community Survey. 2012-16.					
Income - Median Family Income	US Census Bureau, American Community Survey. 2012-16.					
Income - Per Capita Income	US Census Bureau, American Community Survey. 2012-16.					
Income - Public Assistance Income	US Census Bureau, American Community Survey. 2012-16.					
Insurance - Population Receiving Medicaid	US Census Bureau, American Community Survey. 2012-16.					
Insurance - Uninsured Adults	US Census Bureau, Small Area Health Insurance Estimates. 2015.					
Insurance - Uninsured Children	US Census Bureau, Small Area Health Insurance Estimates. 2014.					
Insurance - Uninsured Population	US Census Bureau, American Community Survey. 2012-16.					
Lack of Social or Emotional Support	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveilland System. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12.					
Population Receiving SNAP Benefits (ACS)	US Census Bureau, American Community Survey. 2012-16.					
Population Receiving SNAP Benefits (SAIPE)	US Census Bureau, Small Area Income & Poverty Estimates. 2015.					
Population with Associate's Level Degree or Higher	US Census Bureau, American Community Survey. 2012-16.					
Population with Bachelor's Degree or Higher	US Census Bureau, American Community Survey. 2012-16.					
Population with No High School Diploma	US Census Bureau, American Community Survey. 2012-16.					
Poverty - Children Below 100% FPL	US Census Bureau, American Community Survey. 2012-16.					
Poverty - Children Below 200% FPL	US Census Bureau, American Community Survey. 2012-16.					
Poverty - Population Below 100% FPL	US Census Bureau, American Community Survey. 2012-16.					
Poverty - Population Below 185% FPL	US Census Bureau, American Community Survey. 2012-16.					
Poverty - Population Below 200% FPL	US Census Bureau, American Community Survey. 2012-16.					
Poverty - Population Below 50% FPL	US Census Bureau, American Community Survey. 2012-16.					
Student Reading Proficiency (4th Grade)	US Department of Education, EDFacts. 2014-15.					
Teen Births	Centers for Disease Control and Prevention, National Vital Statistics System. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12.					
Unemployment Rate	US Department of Labor, Bureau of Labor Statistics. 2018 - February.					

Violent Crime	Federal Bureau of Investigation, FBI Uniform Crime Reports. 2012-14.
Violent Crime	Federal Bureau of Investigation, FBI Uniform Crime Reports. 2012-14.

Clinical Care

Indicator Variable	Data Source				
Access to Dentists	US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2015.				
Access to Mental Health Providers	University of Wisconsin Population Health Institute, County Health Rankings. 201				
Access to Primary Care	US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2014.				
Cancer Screening - Mammogram	Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas Health Care. 2014.				
Cancer Screening - Pap Test	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12.				
Cancer Screening - Sigmoidoscopy or Colonoscopy	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12.				
Dental Care Utilization	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2006-10.				
Diabetes Management - Hemoglobin A1c Test	Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas Health Care. 2014.				
Facilities Designated as Health Professional Shortage Areas	US Department of Health & Human Services, Health Resources and Services Administration, Health Resources and Services Administration. April 2016.				
Federally Qualified Health Centers	US Department of Health & Human Services, Center for Medicare & Medicaid Services, Provider of Services File. Dec. 2016.				
High Blood Pressure Management	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2006-10.				
HIV Screenings	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2011-12.				
Lack of a Consistent Source of Primary Care	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2011-12.				
Lack of Prenatal Care	Centers for Disease Control and Prevention, National Vital Statistics System. Centers for Disease Control and Prevention, Wide-Ranging Online Data for Epidemiologic Research. 2007-10.				
Pneumonia Vaccination	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12.				
Population Living in a Health Professional Shortage Area	US Department of Health & Human Services, Health Resources and Services Administration, Health Resources and Services Administration. April 2016.				
Preventable Hospital Events	Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas of Health Care. 2014.				
Recent Primary Care Visit	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2015.				

Health Behaviors

Indicator Variable	Data Source					
Alcohol Consumption	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12.					
Alcohol Expenditures	Nielsen, Nielsen SiteReports. 2014.					
Fruit/Vegetable Consumption	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. US Department of Health & Human Services, Health Indicators Varehouse. 2005-09.					
Fruit/Vegetable Expenditures	Nielsen, Nielsen SiteReports. 2014.					
Physical Inactivity	Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2013.					
Soda Expenditures	Nielsen, Nielsen SiteReports. 2014.					
Tobacco Expenditures	Nielsen, Nielsen SiteReports. 2014.					
Tobacco Usage - Current Smokers	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12.					
Tobacco Usage - Former or Current Smokers	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2011-12.					
Tobacco Usage - Quit Attempt	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2011-12.					
Walking or Biking to Work	US Census Bureau, American Community Survey. 2012-16.					

Health Outcomes

Indicator Variable	Data Source
Asthma Prevalence	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2011-12.
Cancer Incidence - Breast	State Cancer Profiles. 2010-14.
Cancer Incidence - Cervical	State Cancer Profiles. 2009-13.
Cancer Incidence - Colon and Rectum	State Cancer Profiles. 2010-14.
Cancer Incidence - Lung	State Cancer Profiles. 2010-14.
Cancer Incidence - Prostate	State Cancer Profiles. 2010-14.
Depression (Medicare Population)	Centers for Medicare and Medicaid Services. 2015.
Diabetes (Adult)	Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2013.
Diabetes (Medicare Population)	Centers for Medicare and Medicaid Services. 2015.
Heart Disease (Adult)	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2011-12.
Heart Disease (Medicare Population)	Centers for Medicare and Medicaid Services. 2015.
High Blood Pressure (Adult)	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12.
High Blood Pressure (Medicare Population)	Centers for Medicare and Medicaid Services. 2015.

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High Cholesterol (Adult)	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2011-12.					
High Cholesterol (Medicare Population)	Centers for Medicare and Medicaid Services. 2015.					
Infant Mortality	US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2006-10.					
Low Birth Weight	Centers for Disease Control and Prevention, National Vital Statistics System. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12.					
Mortality - Cancer	Centers for Disease Control and Prevention, National Vital Statistics System. 201 16.					
Mortality - Coronary Heart Disease	Centers for Disease Control and Prevention, National Vital Statistics System. 2012- 16.					
Mortality - Drug Poisoning	Centers for Disease Control and Prevention, National Vital Statistics System. 2012- 16.					
Mortality - Heart Disease	Centers for Disease Control and Prevention, National Vital Statistics System. 2012- 16.					
Mortality - Homicide	Centers for Disease Control and Prevention, National Vital Statistics System. 2012- 16.					
Mortality - Lung Disease	Centers for Disease Control and Prevention, National Vital Statistics System. 2012- 16.					
Mortality - Motor Vehicle Crash	Centers for Disease Control and Prevention, National Vital Statistics System. 2012- 16.					
Mortality - Pedestrian Motor Vehicle Crash	US Department of Transportation, National Highway Traffic Safety Administration, Fatality Analysis Reporting System. 2011-2015.					
Mortality - Premature Death	University of Wisconsin Population Health Institute, County Health Rankings. 2014- 16.					
Mortality - Stroke	Centers for Disease Control and Prevention, National Vital Statistics System. 2012- 16.					
Mortality - Suicide	Centers for Disease Control and Prevention, National Vital Statistics System. 2012- 16.					
Mortality - Unintentional Injury	Centers for Disease Control and Prevention, National Vital Statistics System. 2012- 16.					
Obesity	Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2013.					
Overweight	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2011-12.					
Poor Dental Health	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2006-10.					
Poor General Health	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12.					
STI - Chlamydia Incidence	Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. US Department of Health & Human Services, Health Indicators Warehouse. 2014.					
STI - Gonorrhea Incidence	Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. US Department of Health & Human Services, Health Indicators Warehouse. 2014.					
STI - HIV Prevalence	Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. US Department of Health & Human Services, Health Indicators Warehouse. 2013.					

Other Sources

"ARIZONA DEPARTMENT OF HEALTH SERVICES." ADHS | Status on Healthy People 2020 Objectives, Arizona Department of Health Services, 2016, pub.azdhs.gov/health-stats/menu/info/status.php.

"AZDHS | Opioid Epidemic." Opioid Epidemic, Arizona Department of Health Services, www.azdhs.gov/prevention/womenschildrens-health/injury-prevention/opioid-prevention/index.php.

Bureau of Health Workforce, Health Resources and Services Administration (HRSA), U.S. Department of Health & Human Services, Designated Health Professional Shortage Areas Statistics: Designated HPSA Quarterly Summary, as of December 31, 2017.

Trailor, MIchael. "Homelessness in Arizona Annual Report 2017." Arizona Department of Economic Security, Arizona Department of Economic Security, 2017, des.az.gov/sites/default/files/dl/des_annual_homeless_report_2017.pdf.

"Substance Abuse and Mental Disorders in the Phoenix-Mesa-Glendale MSA." The National Survey on Drug Use and Health Report, Substance Use and Mental Health Administration,

www.samhsa.gov/data/sites/default/files/NSDUHMetroBriefReports/NSDUHMetroBriefReports/NSDUH-Metro-Phoenix.pdf.

Appendix B: List of Individuals and Organizations Represented in Key Informant Interviews

Organization	Title	Area of Focus		
Arizona Alliance for Community Health Center	Chief Operations Officer	Primary care for the medically underserved, federally qualified health centers		
Balsz School District	Director of Student Services	Education, children and family services		
Department of Economic Security	Community Engagement Liaison	Housing, economic development		
Desert Mission	Board Member	Housing, economic development		
Desert Mission	Executive Director	Food insecurity, nutrition, education		
HonorHealth	System leadership	Thompson Peak and Deer Valley facilities, services provided, and key needs and characteristics of patient populations		
HonorHealth	System leadership	Shea, Osborn, and JCL, facilities, services provided, and key needs and characteristics of patient populations		
HonorHealth	System leadership	Government and community affairs		
HonorHealth Board of Directors	Board Member	General community perspective		
Maricopa County Department of Public Health	Strategic Initiatives Coordinator	Health Improvement Partnership of Maricopa County		
Neighborhood Outreach to Access Health (NOAH)	Executive leadership	NOAH facilities, services provided, and key needs and characteristics of patient populations		
Vitalyst Health Foundation	Director of State Health Policy	Access to care for the medically underserved		
Washington Elementary School District	Health Services Coordinator	Education, children and family services		

Appendix C: Key Informant Interview Guide

General Information

- Individual information:
 - Current position and role
 - Previous relevant experiences
 - o Confirm contact information in case of follow-up requests

Internal Stakeholder Questions

- What are the strengths of [Facility Name]?
- What are the unmet needs of residents in the [Facility Name] service area?
- Could you identify some broad areas of social determinants of health that need to be addressed within the [Facility Name] service area that impact community health and ability to access care?
- Could you share your thoughts about [Facility Name] in terms of:
 - o Clinical, office, and administrative staff engagement with patients
 - o Level of community engagement
 - Available services and gaps in services
 - o Patients' satisfaction with services and with interactions with clinical and office staff
- What are some areas of community health improvement that you can identify for your facility/services provided/staff/equipment?
- What types of barriers do patients of [Facility Name] encounter when seeking services? (eg, not enough translators, lack of social workers)
- What is [Facility Name] doing to address health disparities in the service area?
 - Medical/clinical services
 - o Non-clinical
 - o Social determinants of health (eg, food, housing, stress, addiction, social support, etc)

Internal and External Stakeholder Questions

- What is your vision of a healthy community?
- Are there any known major risks for community safety?
- What are the most important health needs that have the greatest impact on overall health in the community?
- What are the specific populations that are most adversely affected by the health needs you just mentioned?
- What resources need to be developed or increased to address these health needs?
- Who might be responsible for funding the change you suggest? Similarly, who should be responsible for moving those ideas forward?
- What are the opportunities for community partners and HonorHealth to address top health issues? Who are some current or potential partners that we have not yet engaged who could help to impact these issues?

Appendix D: Focus Group Screener and Discussion Guide

Focus Group Composition

Group 1

- **Geography:** Community 2, includes zip codes 85028, 85050, 85054, 85250, 85253, 85254, 85255, 85258, 85259, 85260, 85262, 85266, 85268, 85331, 85377
- Demographic Criteria: Ages 55+, HHI \$100K+
- Language: English
- **Primary HonorHealth Facilities Serving Group 1:** HonorHealth Scottsdale Shea Medical Center, HonorHealth Scottsdale Thompson Peak Medical Center, HonorHealth Rehabilitation Hospital, HonorHealth Greenbaum Surgical Specialty Hospital

Group 2

- Geography: Community 1, includes zip codes: 85024, 85027, 85053, 85085, 85086, 85308, 85383
- Demographic Criteria: Ages 25 to 55, HHI \$50K to \$100K
- Language: English
- **Primary HonorHealth Facilities Serving Group 2:** HonorHealth Deer Valley Medical Center, HonorHealth Rehabilitation Hospital, HonorHealth Greenbaum Surgical Specialty Hospital

Group 3

- Geography: May reside in any zip codes listed for Community 1, 2, or 3
- Demographic Criteria: Mix of ages and incomes; must be a primary Spanish speaker.
- Language: Spanish
- Primary HonorHealth Facilities Serving Group 3: All HonorHealth facilities

Group 4

- **Geography:** Community 3, includes zip codes 85008, 85018, 85020, 85021, 85022, 85023, 85029, 85032, 85051, 85201, 85203, 85251, 85256, 85257, 85281, 85282, 85042, 85041, 85040, 85034, 85007, 85009, 85003, 85004, 85006, 85035, 85013, 85016, 85033, 85012, 85031, 85017, 85019, 85014, 85015, 85303, 85301, 85302, 85304, 85381, 85306, 85382
- **Demographic Criteria:** Ages 25 to 55, HHI Under \$50K
- Language: Spanish
- **Primary HonorHealth Facilities Serving Group 4:** HonorHealth John C. Lincoln Medical Center, HonorHealth Scottsdale Osborn Medical Center, HonorHealth Rehabilitation Hospital, HonorHealth Greenbaum Surgical Specialty Hospital

Focus Group Screener

- 1. Do you or does anyone in your household work for:
 - A market research firm
 - An advertising agency
 - Healthcare organization or facility
- 2. Have you participated in a focus group discussion in the past 12 months?
 - Yes
 - No
- 3. Which of the following best describes your involvement with the healthcare decisions for your household? Are you the . . .
 - Primary decision maker
 - Share the healthcare decisions with others in your household
 - · Influence healthcare decisions of your household
 - Have little or no influence over healthcare decisions Thank and terminate
- 4. Are you . . . ?
 - 18 to 24
 - 25 to 34
 - 35 to 44
 - 45 to 54
 - 55 to 64
 - 65 to 74
 - 75+
 - Prefer not to answer
- 5. Do you consider yourself to be:
 - Hispanic
 - Non-Hispanic
 - Prefer not to answer
- 6. And, what is your race?
 - American Indian/Alaskan Native/Native American
 - Asian
 - Black or African American
 - Native Hawaiian or Other Pacific Islander
 - White
 - · Prefer not to answer
- 7. In which zip code do you reside?

- 8. What was your total household income before taxes in 2017?
 - Less than \$25,000.
 - \$25,000 to \$34,999.
 - \$35,000 to \$49,999.
 - \$50,000 to \$74,999.
 - \$75,000 to \$99,999.
 - \$100,000 to \$149,999.
 - \$150,000 to \$199,999.
 - \$200,000 or more
 - Prefer not to answer
- 9. Gender
 - Male
 - Female

Focus Group Discussion Guide

Focus Group Objective: Explore health care needs and priorities among Maricopa County residents.

Healthy Communities

- 1. Before we start the discussion, using a scale from 1 to 10, with 1 being not at all healthy and 10 being very healthy, please rate your community in terms of being healthy. For the purpose of our discussion. let's assume that health is more than just the absence of disease...
- 2. What makes a community healthy? What characteristics should be present in a healthy community? Write on flip chart.
 - Which of these are most important?
- 3. Discuss healthy community ratings:
 - Why did you rate your community the way you did?
 - Thinking about the characteristics that you said were most important, which of these does your community do well? Which of these does your community fall short on?

Top Community Health Concerns

- 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?
- 5. Card Sort: each participant is given a set of "cards," each containing a community health need. Participants sort the cards according to how big of an issue this is in their community.
 - Discuss results of card sort.
 - Why did you put them in this order?
- 6. Show results of survey

- . How does this align with the most important issues you've identified tonight?
- What are the differences?
- Why do you think there are differences?
- Which sub-segments of the population are more / less impacted by these concerns?

Available Resources

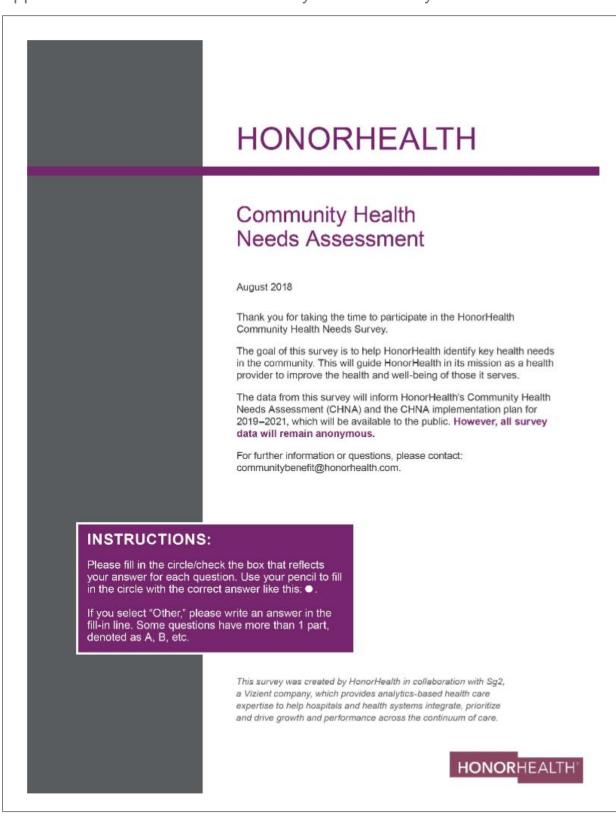
- 7. What resources are available in your community to address these issues?
 - How do you find out about these resources? Where do you go for information?
 - What are the barriers (if any) to accessing these resources?
 - Which sub segments of the population are most affected by these barriers?

Needed Resources

- 8. What are some ideas you have to help your community get or stay healthy? What else do you (your family, community) need to maintain or improve your health?
- If needed, what about ...
 - Services, support or information to manage a chronic conditions or change health behaviors such as smoking, eating habits, physical activity, or substance use?
 - Preventive services such as flu shots or immunizations?
 - Specialty healthcare services or providers?
 - o Access to these?
- 9. What actions, programs, and strategies do you think would make the biggest difference in your community?

Health Care Organization Role

10. What should be the role of a health care organization in addressing these issues, if any?



Appendix E: HonorHealth Community Needs Survey

HONORHEALTH Community Health Needs Assessment

- In general, how would you rate your overall physical health?
 - O Excellent
 - O Very good
 - O Good
 - O Fair
 - O Poor
- In general, how would you rate your overall mental or emotional health?
 - O Excellent
 - O Very good
 - O Good
 - O Fair
 - O Poor
- Have you or anyone in your household ever experienced issues with, or have history related to, any of the following?
 - O Cancer
 - O Cardiovascular/heart condition(s) (such as heart disease or high blood pressure)
 - O Diabetes
 - O Mental health condition(s) (such as depression, suicide or bipolar)
 - O Obesity or being overweight
 - O Respiratory condition(s) (such as asthma, lung disease or emphysema)
 - O Substance abuse (such as drugs or alcohol)
 - O Other (please list):

- During an average week, how many days do you exercise for more than 30 minutes? Exercise includes moderate activities such as walking or biking OR more vigorous activities like running or swimming.
 - O 0 days
 - O 1-2 days
 - O 3-4 days
 - O 5-6 days
 - O All 7 days
- Within the past 12 months, was there a time when you or anyone in your household was worried about whether food would run out before you would get money to buy more?
 - O Yes O No
 - O Do not know
- During an average week, how many days do you smoke cigarettes or use other tobacco products? Tobacco products include cigarettes, cigars, smokeless tobacco (such as chewing tobacco, snuff or dip), little cigars or cigarillos, electronic cigarettes (e-cigarettes) and vaping devices.
 - O 0 days
 - O 1-2 days
- O 3-4 days
- O 5-6 days
- O All 7 days

- Do you have 1 or more people you think of as your personal health care provider? A personal health care provider is a health professional who knows you well and is familiar with your health history. This can be a primary care doctor, a specialist, a nurse practitioner, a physician's assistant or another type of provider.
 - O Yes
 - 7A. How long has it been since you last visited this person(s)?
 - O <1 year
 - O <2 years
 - O 3-5 years
 - O More than 5 years
 - O Never
 - O No
 - 7B. If you do not have a personal health care provider, is it because you:
 - O Cannot get a convenient appointment due to work or personal conflicts?
 - O Cannot afford payments due, regardless of insurance status?
 - O Cannot arrange transportation?
 - O Do not have motivation or reason to go?
 - O Other (please list):

O Do not know

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HONORHEALTH Community Health Needs Assessment

- If you or anyone in your household has a health care need:
 - 8A. Do you have a dentist you can go to?
 - O Yes
 - O No
 - O Not applicable (no health care need)
 - O Do not know
 - 8B. Do you have a mental health specialist you can
 - go to?
 - O Yes
 - O No
 - O Not applicable (no health care need)O Do not know

- 8C. Do you have a substance abuse counselor you can go to?
 - O Yes
 - O No
 - O No
 - O Not applicable (no health care need)
 - O Do not know
- What do you think is the biggest safety concern in your community? (Please select up to 3 concerns.)
 - O Access to firearms
 - O Child abuse
 - O Domestic abuse
 - O Domestic abus
 - O Drug production/distribution
 - O Gang violence
 - O Motor vehicle safety (such as drunk driving or wrongway driving)

- O Peer-to-peer violence (bullying)
- O Racism/intolerance
- O School violence
- O Seat belt, safety seat and helmet use
- O Substance abuse
- O Other (please list):

O Do not know

 Please select the top health issues for your household and your community. (Check up to 5 health issues in each category.)

Health Issue	Household	Community	Health Issue	Household	Community	
Ability to pay for health care			Language barriers			
Access to early childhood education			Mental health			
Access to health care			Obesity			
Access to healthful food/groceries			Poverty			
Chronic diseases			Substance abuse			
Child abuse or neglect			Unsafe sex, including sexually transmitted diseases			
Domestic violence			Teen pregnancy			
Elder problems			Tobacco use			
Homelessness/housing			Violence			
Lack of health insurance			Other (please list):			
Lack of transportation						

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HONORHEALTH Community Health Needs Assessment

11. For health issues related primarily to seniors, how much of a need is there for the following services for you or people in your household (on a scale of 0-4, with 4 being "very high need" and 0 being "no need")?

	Very High Need (4)	High Need (3)	Some Need (2)	Little Need (1)	No Need (0)	Do Not Know
Elder housing						
Adequate nutrition for seniors						
Transportation to health care services						
Access to nursing home care						
Elder day care						
Access to long-term health care						

12. For health issues related primarily to children and families, how much of a need is there for the following services for you or people in your household (on a scale of 0–4, with 4 being "very high need" and 0 being "no need")?

	Very High Need (4)	High Need (3)	Some Need (2)	Little Need (1)	No Need (0)	Do Not Know
More childcare resources						
Adequate nutrition for children						
After-school programming						
Parenting education						
Access to dental care for children						
Access to long-term health care						

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Initiative	Description
1. Behavioral Health Service Plan	 Develop a comprehensive, integrated behavioral health service plan including: Crisis assessment and intervention Psychiatric consultation Coordinated discharge planning Behavioral health assessment Services in outpatient, inpatient and emergency department settings Partner with nationally recognized provider with three-phase implementation
2. Care Management	 Expand care coordination within Scottsdale Health Partners Accountable Care Organization, a joint venture with HonorHealth Assist recently discharged Medicare patients using care coordinators and transition care manager to: Connect with community resources Conduct medication reconciliations Perform safety checks of home Partner with senior centers and government agencies Create integrated ACO model
3. Congestive Heart Failure Care Coordination	 Implement care coordination program Address social and healthcare needs: Safety checks Food insecurity Medication reviews Partner with skilled nursing facilities, rehabilitation hospitals and others
4. Sepsis Care Coordination	 Implement care coordination program Address social and healthcare needs: Safety checks Food insecurity Medication reviews Partner with skilled nursing facilities, rehabilitation hospitals and others
5. C. Difficile prevention Initiative	 Develop systemwide initiative focusing on: Hand hygiene Antimicrobial stewardship Environmental cleaning protocol Partner with skilled nursing facilities and rehabilitation hospitals
6. Palliative Care	 Develop coordinated palliative care plan Partner with clinical and nonclinical providers Improve quality of life through: Pain management Nutritional support Psychological support

Table 1. HonorHealth Initiatives

Initiative	Description
7. Mobile Integrated Healthcare Practice	 Develop an integrate healthcare practice Partner with City of Scottsdale and Scottsdale Fire Department Improve health outcomes for high-risk community members by providing: Care coordination Patient navigation Medication review Home checks Participate in Care Coordination Council to identify community resources to address unmet social needs Explore options for expanding program to other communities
8. Salt River Fire Department Integrated Community Paramedic Program	 Develop and integrated healthcare practice Partner with Salt River Fire Department Provide care management to community members living with: Diabetes Congestive heart failure Chronic obstructive pulmonary disease Asthma Heart attack Pneumonia Improve health outcomes for high risk community members by providing: Care coordination Patient navigation Medication review
9. Disease Management	 Home checks Develop biometric goals with HonorHealth Medical Group Focus on patients with: Diabetes Hypertension
10. Corporate Health	 Develop wellness plans for local businesses' employees Partner with senior centers to provide wellness programs
11. Health Screenings	 Conduct health screening for: Heart disease Includes fasting glucose Stroke Skin cancer Oral cancer

Initiative	Description
12. Longevity Institute	 Develop longevity institute Partner with senior centers and communities Create Senior Advisory Board to assists in identifying health needs of seniors Coordinate with Senior Advisory Board to identify community resources Develop wellness program to address: Fall prevention Medication management Chronic disease prevention Health screenings
13. NOAH – Behavioral Health	 Partner with NOAH to provide behavior health services, including disease self-management education, to community members who are: Low income Uninsured Underinsured
14. NOAH – Health Screenings	 Partner with NOAH to provide health screenings to community members who are: Low income Uninsured Underinsured

	2015 Prioritized Needs				
Initiative	Mental Health	Substance Abuse	Geriatric Health	Chronic Disease	Anticipated Impact
1. Behavioral Health Service Plan	X	X	X	X	 Reduce time in emergency department Reduce time for assessment of needs Reduce time for consult Reduce time to complete behavioral health assessment
2. Care Management			X	X	 Reduce rate of all-cause readmissions Reduce rate of specific-cause readmissions Increase number of eligible patients seen after discharge
3. Congestive Heart Failure Care Coordination			X	X	 Reduce 30-day readmission for congestive heart failure patients
4. Sepsis Care Coordination		X	X		Reduce 30-day readmission
5. C. Difficile prevention Initiative			X		Decrease number of C. difficile infections
6. Palliative Care			X	X	 Increase number of patients receiving palliative care
7. Mobile Integrated Healthcare Practice	X	X	X	X	 Reduce rate of unplanned ambulance transports to emergency department Reduce rate of all-cause hospital admissions Reduce rate of all-cause readmissions Increase number of patients with primary care provider Increase number of medication reviews

Table 2. Initiatives: Needs Addressed and the Anticipated Impacts

In the state	2015 Prioritized Needs				
Initiative	Mental Health	Substance Abuse	Geriatric Health	Chronic Disease	Anticipated Impact
8. Salt River Fire Department Integrated Community Paramedic Program	X	X	X	X	 Reduce hospital readmissions Decrease low acuity emergency department visits
9. Disease Management				X	 Increase percent of diabetic patients with A1c at or below goal Increase percent of diabetic patients with blood pressure at or below goal Increase percent of diabetic patients with lipids (LDL) at or below goal Increase percent of hypertensive patients with blood pressure at or
10. Corporate Health			X	X	 below goal Increase number of wellness participants meeting goals for: BMI. Cholesterol. Blood glucose. Blood pressure. Increase number of wellness participants receiving flu shots. Decrease number of wellness participants using tobacco. Increase number of seniors receiving screenings for: Stroke. Bone density. Skin cancer. Increase number of seniors meeting goals for: BMI. Cholesterol. Blood glucose

Table 2. Initiatives: Needs Addressed and the Anticipated Impacts (Continued)

		2015 Priori	tized Needs		
Initiative	Mental Health	Substan ce Abuse	Geriatric Health	Chronic Disease	Anticipated Impact
11. Health Screenings				X	 Increase health screenings for heart disease Increase health screenings for stroke Increase health screenings for skin cancer Increase health screenings for oral cancer
12. Longevity Institute			X		 Reduce hospital readmissions Reduce number of home-based falls with injury Increase number of seniors with Advanced Directives Increase number of health screenings Increase wellness/educational offerings
13. NOAH – Behavioral Health	X	X		X	 Increase number of community members screened for depression (12 years and older) Increase number of community members receiving mental health counseling Increase number of community members receiving disease self- management education
14. NOAH – Health Screenings				X	Increase number of community members receiving recommended screenings

Table 2. Initiatives: Needs Addressed and the Anticipated Impacts (Continued)

Appendix G: Community Resources Available to Address Prioritized Health Needs

Resources potentially available to address identified needs include services and programming provided by hospitals, federally qualified health centers, rural health centers, county health departments, state departments and other community organizations and government agencies, among others. Below are some potential resources to address prioritized community health needs, found through publicly available information sources as of October 2018:

Network Name	Hospital
	Abrazo Arizona Heart Hospital
Abrazo Community Health	Abrazo Arrowhead Campus
	Abrazo Anownead Gampus
Network	Abrazo Central Campus
	Abrazo Scottsdale Campus
Aurora Behavioral Health Care	Aurora Behavioral Health System - West
	Banner - University Medical Center Phoenix
Banner Health	Banner Behavioral Health Hospital (Scottsdale)
	Banner Thunderbird Medical Center
Cura Health Hospitals	CuraHealth Hospital - Phoenix Northwest
	Barrow Neurological Institute
Dignity Health	St Joseph's Hospital and Medical Center
	The Orthopedic and Spine Inpatient Surgical Hospital
Encompass Health	Encompass Health Rehabilitation Hospital of Scottsdale
Corporation	Encompass Health Valley of the Sun Rehabilitation Hospital
Haven Behavioral Healthcare	Haven Senior Horizons of Phoenix
	HonorHealth Deer Valley Medical Center
	HonorHealth Greenbaum Surgical Specialty Hospital
	HonorHealth John C Lincoln Medical Center
HonorHealth	HonorHealth Osborn Medical Center
	HonorHealth Shea Medical Center
	HonorHealth Scottsdale Rehabilitation Hospital
	HonorHealth Thompson Peak Medical Center
L	1

Mayo Clinic Health System	Mayo Clinic - Arizona			
Nobilis Health Corp	Scottsdale Liberty Hospital			
Phoenix Area Indian Health Services	Phoenix Indian Medical Center			
Promise Healthcare	Promise Hospital of Phoenix			
	Select Specialty Hospital - Arizona			
Select Medical Corporation	Select Specialty Hospital - Phoenix			
	St Luke's Behavioral Health			
Steward Health Care System	St Luke's Medical Center			
	Tempe St Luke's Hospital			
Surgical Care Affiliates	CORE Institute Specialty Hospital			
	Calvary Healing Center			
Universal Health Services	Quail Run Behavioral Health			
	Valley Hospital			
VA Desert Pacific Healthcare Network	Phoenix VA Medical Center			
	Arizona State Hospital			
Other	Maricopa Medical Center			
	Phoenix Children's Hospital			

Community 1	Location Name
Primary Care	HHMG - 27th Avenue
	HHMG - Calavar
	HHMG - Cave Creek
	HHMG - Deer Valley
	HHMG - Gavilan Peak IC
	HHMG - Tramonto
	HHMG - Wellness Center
	HHMG - West Bell Road IC
	HHMG - West Union Hills
Specialty Care	Breast Health & Research Center - Deer Valley
	HH Care for Women
	HH Gastroenterology - North Valley
	HH Heart Institute - Arrowhead
Other	HH Corp Health - Deer Valley
	HH Outpatient Therapy Services - Anthem
	Infusion (Glendale Health Center)
	Outpatient Therapy (Glendale Health Center)
	Radiology (Glendale Health Center)
	HH Outpatient Therapy Services - Osborn
	HH Outpatient Therapy Services - Tatum

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Location Name				
HHMG - 92nd Street				
HUMC Carofree Highway IC				
HHMG - Carefree Highway IC				
HHMG - Chaparral				
HHMG - Dynamite				
HHMG - McDowell Mountain Ranch				
HHMG - Mescal				
HHMG - Paradise Valley				
HHMG - Shea				
HHMG - Thompson Peak				
HH Bariatric Center				
HH Center for Endocrine & Pancreas Surgery				
HH Gastroenterology - Shea				
HH Gastroenterology - Thompson Peak				
HH Heart Group - Shea				
HH Inpatient Psychiatry				
HH Neurology - Shea				
Cholla Health Center				
HH Corp Health - Shea				
HH Corp Health - Thompson Peak				
HH Outpatient Therapy Services - Grayhawk				
HH Outpatient Therapy Services - Shea				
HH Outpatient Therapy Services - Thompson Peak				
HH Sleep Disorders Center				

Community 3	Location Name			
	HHMG - Arcadia			
	HHMG - Arcadia 100			
	HHMG - Arcadia 101			
	HHMG - Beatitudes			
	HHMG - Central Bell			
	HHMG - Moon Valley			
Primary Care	HHMG - East Tempe			
	HHMG - Hatcher			
	HHMG - McKellips			
	HHMG - North Phoenix			
	HHMG - Osborn			
	HHMG - Saguaro IC			
	HHMG - Tatum			
	HHMG - West Tempe			
Specialty Care	Comprehensive Care Center NM			
	HH Gastroenterology - Osborn			
Specialty Care	HH Heart Institute - North Mountain			
	HH Heart Institute - Tatum			
	HH Neurology - North Mountain (inpatient only)			
	HH Pulmonology			
	HH Spine Group Arizona			
	HH Surgical & Trauma Specialists			

Community 3	Location Name
	Balsz Educare Arizona Center for Health (BEACH)
	Desert Mission Health Center
	HH Audiology
	HH Corp Health - North Mountain
Other	HH Corp Health - Osborn
	HH Corp Health - Tempe
	HH Outpatient Therapy Services - North Mountain
	HH Outpatient Therapy Services - Osborn
	HH Outpatient Therapy Services - Tatum

Appendix H: Community Health Data Detail

Health Outcomes by Race and Ethnicity

Cancer

Metric	Maricopa County	AZ	US	Healthy People 2020
Breast Cancer Incidence Rate	120.3	112.4	123.5	
White	121.4	114.4	124.5	-
Black	110.7	101.3	122.8	-
Asian / Pacific Islander	77	75.6	90.2	-
American Indian / Alaskan Native	67.7	58.7	72.7	-
Hispanic or Latino	90	88.9	92.3	-
Cervical Cancer Incidence Rate	6.6	6.7	7.6	7.1
White	6.7	6.8	7.3	-
Black	7.4	7.2	9.5	-
Asian / Pacific Islander	-	4.5	6.2	-
American Indian / Alaskan Native	-	6.3	6.8	-
Hispanic or Latino	9.8	8.7	9.8	-
Colon and Rectum Cancer	34.6	34.2	39.8	38.7
White	34.1	34.1	38.9	-
Black	38.2	35.8	46.7	-
Asian / Pacific Islander	25.3	23.3	31.4	-
American Indian / Alaskan Native	36.4	28	30.7	-
Hispanic or Latino	35.7	35	35	-
ung Cancer Incidence Rate	50.6	50.1	61.2	-
White	50.7	51.1	62	-
Black	55.5	51.6	63.9	-
Asian / Pacific Islander	34.2	33.1	35.1	-
American Indian / Alaskan Native	39.4	20.3	44.3	-
Hispanic or Latino	31.6	31.6	31.9	-
Prostate Cancer Incidence Rate	87.8	80.8	114.8	-
White	84	77.8	105.5	-
Black	121.8	115.1	182.9	-
Asian / Pacific Islander	44.1	40.4	58.1	-
American Indian / Alaskan Native	60.9	66.3	61.8	-
Hispanic or Latino	70	66.2	96.8	-
Cancer Mortality	141.6	120.9	160.9	160.6
White	144.3	147.9	165.7	-
Black	166.5	162.8	190.0	-
Asian / Pacific Islander	96.6	93.1	99.7	-
American Indian / Alaskan Native	110.0	109.6	107.7	-
Hispanic or Latino	121.7	120.9	112.6	-

Cardiovascular and Stroke

Metric	Maricopa County	AZ	US	Healthy People 2020
% of Adults with High Blood Pressure	25%	25%	28%	
Medicare FFS Population	51%	50%	55%	
% of Adults with High Cholesterol	40%	40%	39%	
White		42%	40%	
Black		33%	34%	
Hispanic or Latino		38%	36%	
% of Adults with Heart Disease	4%	4%	4%	
White		5%	5%	
Black		3%	4%	
Hispanic or Latino		2%	3%	
Medicare FFS Population	24%	23%	26%	
Coronary Heart Disease Mortality per Pop. (100,000)	88.5	77.7	99.6	103.4
White	89.2	95.3	101.8	
Black	115.8	113.6	115.8	
Asian / Pacific Islander	52.1	49.8	56.4	
American Indian / Alaskan Native	74.6	79.2	75.4	
Hispanic or Latino	75.2	77.7	76.5	
Stroke Mortality per Pop. (100,000)	28.7	29.5	36.9	33.8
White	28.1	28.3	35.7	
Black	47.1	48.2	51.2	
Asian / Pacific Islander	27.6	28.3	29.8	
American Indian / Alaskan Native	20.2	27.8	24.7	
Hispanic or Latino	28.1	30.8	30.9	

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Other Chronic Diseases

Metric	Maricopa County	AZ	US
Lung Disease Mortality: Age- Adjusted Death Rate Per Pop. (100,000)	42.9	20.2	41.3
White	46.5	48.2	46.3
Black	37.5	37.0	29.7
Asian / Pacific Islander	15.9	15.1	12.5
American Indian / Alaskan Native	24.0	17.6	30.2
Hispanic or Latino	20.0	20.2	17.8
Overweight: % of Adults Ages 18+ Reporting BMI of 25.0-30.0	37%	37%	36%
White		36%	36%
Black		39%	34%
Other Race		31%	32%
Hispanic or Latino		40%	38%
Obesity: (% Adults Ages 20+ with BMI >30.0)	25%	26%	28%
Diabetes: % of Medicare FFS Beneficiaries with Diabetes	22%	22%	27%

Accidental Deaths and Homicides

Metric	Maricopa County	AZ	US	Healthy People 2020
Homicide Mortality: Age- Adjusted Death Rate per Pop. (100,000)	5.6	6.2	5.5	5.5
White	3.4	3.8	2.6	
Black	16.9	15.7	20.1	
Asian / Pacific Islander	2.6	2.3	1.7	
American Indian / Alaskan Native	9.9	12.7	6.0	
Hispanic or Latino	6.8	6.2	4.8	
Motor Vehicle Crash Mortality: Age-Adjusted Death Rate per Pop. (100,000)	10.8	11.9	11.3	
White	9.9	10.9	11.8	
Black	14.3	13.2	12.3	
Asian / Pacific Islander	5.7	5.7	4.8	
American Indian / Alaskan Native	20.4	40.7	16.6	
Hispanic or Latino	11.2	11.9	10.0	
Unintentional Injury Mortality: Age-Adjusted Death Rate Per Pop. (100,000)	44.3	46.5	41.9	36
White	46.5	49.2	47.4	
Black	47.0	44.8	36.8	
Asian / Pacific Islander	20.6	20.6	15.7	

American Indian / Alaskan Native	68.2	106.3	50.2	
Hispanic or Latino	37.2	38.6	28.1	

Maternal and Child Health

Metric	Maricopa County	AZ	US	Healthy People 2020
Infant Mortality Rate: Infant Deaths per 1,000 Births	6.1	6.3	6.5	6
White	5.4	5.7	5.5	
Black	14.2	13.7	12.7	
Asian / Pacific Islander		6.3	4.5	
American Indian / Alaskan Native		7.8	8.5	
Hispanic or Latino	5.7	6	5.4	
Low Birth Weight: % of Births Considered Low Birth Weight (<2,500 g)	7%	7%	8%	
White	7%	7%	7%	
Black	12%	12%	14%	
Asian / Pacific Islander	8%	8%	8%	
American Indian / Alaskan Native				
Hispanic or Latino	7%	7%	7%	

Asthma

Metric	Maricopa County	AZ	US	Healthy People 2020
Asthma Prevalence: % of Adults Aged 18+ With Asthma	6.1	6.3	6.5	6
White	5.4	5.7	5.5	
Black	14.2	13.7	12.7	
Other Race		6.3	4.5	
Hispanic or Latino	5.7	6	5.4	