St. Joseph's Hospital and Medical Center

Community Health Needs Assessment 2022

Adopted April 2022

Dignity Health.
St. Joseph's Hospital and Medical Center

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Executive Summary

CHNA Purpose Statement

The purpose of this community health needs assessment (CHNA) is to identify and prioritize significant health needs of the community served by St. Joseph's Hospital and Medical Center (SJHMC). The priorities identified in this report help to guide the hospital's community health improvement programs and community benefit activities, as well as its collaborative efforts with other organizations that share a mission to improve health. This CHNA report meets requirements of the Patient Protection and Affordable Care Act that non-for-profit hospitals conduct a community health needs assessment at least once every three years.

CommonSpirit Health Commitment and Mission Statement

The hospital's dedication to engaging with the community, assessing priority needs, and helping to address them with community health program activities is in keeping with its mission. As CommonSpirit Health, we make the healing presence of God known in our world by improving the health of the people we serve, especially those who are vulnerable, while we advance social justice for all.

CHNA Collaborators

The ACA requirements are mirrored in the Public Health Accreditation Board's (PHAB) standard mandating that health departments participate in or conduct a community health assessment every three to five years. Limited resources for comprehensive health assessments and the move toward new population health models have created the need for an organized, collaborative, public-private approach for conducting assessments. As a result, the Synapse Partnership (Banner Health, Dignity Health, Mayo Clinic Hospital, Native Health, Neighborhood Outreach Access to Health (NOAH), Phoenix Children's Hospital, and Valleywise Health) has joined forces with the Health Improvement Partnership of Maricopa County (HIPMC) and Maricopa County Department of Public Health (MCDPH) to identify the communities' strengths and greatest needs in a coordinated community health needs assessment. SJHMC participates in Synapse and contracted with MCDPH to lead the development of the CHNA report. With input from Synapse, MCDPH spearheaded development of the CHNA survey, and partnered with many diverse local community-based organizations to provide stipends for survey translation, distribution and promotion. MCDPH contracted with Arizona State University Southwest Interdisciplinary Research Center (ASU SIRC) to conduct and analyze focus groups.

Community Definition

SJHMC's service area community covered in this report spans the entirety of Maricopa County, the fourth most populous county in the United States. With an estimated population of over 4.3 million and growing, Maricopa County is home to well over half of Arizona's residents. Maricopa County encompasses 9,224 square miles, includes 27 cities and towns, as well as the whole or part of five sovereign American Indian reservations.[i] Maricopa County is ethnically and culturally diverse, as it is home to more than 1.3 million

Latino/Hispanic individuals (31% of all residents); 302,042 African Americans; 233,328 Asian Americans; and 124,128 American Indians.[i] According to the U.S. Census Bureau, 15% percent of the population does not have a high school diploma[ii], 14% are living below the federal poverty level[iii], and over 456,584 are uninsured.[iv]

Located in the heart of Phoenix, Arizona, SJHMC draws populations from Maricopa County, other Arizona counties, and even from outside the state. SJHMC's primary service area is within the urban inner-city areas, and it also serves the suburban and rural communities for high-risk services. According to the Community Need Index (CNI), a proprietary tool developed by Dignity Health, the primary service area includes both moderate and high-risk areas with significant socio-economic barriers.[v] Zip code areas with the highest risks and a CNI score of 4.0 and higher include 85003, 85004, 85006, 85007, 85008, 85009, 85014, 85015, 85016, 85017, 85019, 85020, 85021, 85023, 85029, 85031, 85032, 85033, 85034, 85035, 85037, 85040, 85041, 85042, 85043, 85051, 85301, 85302, 85303, 85323, and 85353.

Assessment Process and Methods

Health needs were identified through the combined analysis of primary and secondary data with four rounds of community input. **Primary data sources** include the 2019 and 2021 community surveys and focus groups. **Secondary data sources** include health and social indicators from local, state, and sources that encompass health outcomes, economic factors, health behaviors, physical environment, and health care. The first round of community data collection occurred in the fall of 2019 and involved a community survey as well as a series of focus groups. In response to the severe changes in the community health landscape due to the COVID-19 pandemic, a supplemental survey and focus group cycle was conducted in the summer of 2021. Local organizations including SJHMC partnered with MCDPH to recruit members of diverse communities to take the surveys. In both rounds of data collection, focus groups included representatives of minority and underserved populations who identified community concerns and assets.

Data was analyzed by MCDPH and shared with the Synapse group, as well as representatives from the community, healthcare organizations, and other local initiatives. Through a structured feedback process, the data was narrowed down to eight priorities of focus for SJHMC.

Process and Criteria to Identify and Prioritize Significant Health Needs

The health needs prioritization process began with an initial review and analysis of primary and secondary data sources. Primary sources included data that was derived from the 2019 and 2021 community survey and focus group sessions. Secondary sources included data that was derived from County inpatient hospitalization, emergency department, and death rates to assemble 27 total health indicators. Additionally, external data sources such as PolicyMap were utilized to analyze and highlight seven social indicators. The health and social indicators were established in collaboration with the SJHMC Community Benefit and Health Equity Department by selecting indicators of interest that have historically demonstrated high rates or have known disparities when broken out by race/ethnicity, gender and age.

Compiled primary and secondary data sources were presented at four meetings with two different "community groups", the Community Benefit and Health Equity Committee (CBHEC) and the Health Equity Alliance (HEA). The CBHEC is a subcommittee of the SJHMC Community Board, comprised of members who provide stewardship and direction for the hospital as a community resource. The HEA is a large group

of community organizations that the SJHMC community benefit staff bring together quarterly to work on the shared goal of improving the health and well-being of Maricopa County residents while reducing health disparities.[vi] Delivered data presentations were interactive, embedding virtual polling and breakout sessions which opened an opportunity for the community to share their voices into the refinement and prioritization process of significant health needs for SJHMC. All feedback received from CBHEC and HEA meetings was compiled and evaluated through a health equity lens, which led to the prioritization of eight significant health needs.

List of Prioritized Significant Health Needs

The following statements summarize each of the areas of priority for SJHMC and are based on data and information gathered through the CHNA.

Mental Health

Mental health was selected as a top priority issue for SJHMC. Mental health includes emotional, psychological, and social well-being, and affects how individuals think, feel, and act.[vii] In the 2021 COVID-19 impact survey, almost half of Maricopa County residents noted that in addition to COVID-19, mental health issues were one of the health conditions that had the greatest impact on the community's overall health and wellness. In the 2019 and 2021 focus groups, mental health including suicide, depression, anxiety, and isolation was noted as a frequently cited community concern.

Chronic Health Conditions

Chronic health conditions (obesity, diabetes, and cardiovascular disease) were selected as priority issues for SJHMC. In the 2021 COVID-19 impact survey, Maricopa County residents ranked obesity as the second, diabetes as the fifth, and CVD as the seventh most important health conditions in their community. The 2019 focus group participants also mentioned high blood pressure/cholesterol, diabetes, and overweight/obesity as some of the greatest threats to community health.

- **Obesity** is a complex health issue resulting from a combination of causes and individual factors such as behavior and genetics. Behaviors can include physical activity, inactivity, dietary patterns, medication use, and other exposures.[viii]

- **Diabetes** is a chronic, metabolic disease characterized by elevated levels of blood glucose (or blood sugar). The most common is type 2 diabetes and simple lifestyle measures such as being physically active, consuming a healthy diet, and avoiding tobacco use have been shown to be effective in preventing or delaying the onset of this disease.[ix]

- **Cardiovascular Diseases (CVDs)** are a class of diseases that affect the heart or blood vessels. The most important behavioral risk factors of heart disease and stroke are unhealthy diet, physical inactivity, tobacco use and harmful use of alcohol.[x]

Addiction/Substance Abuse

Addiction/substance abuse was selected as a priority issue for SJHMC. Substance abuse is caused by multiple factors, including genetic vulnerability, environmental stressors, social pressures, individual personality characteristics, and psychiatric problems. In the 2021 COVID-19 impact survey, alcohol/substance abuse was ranked as the third most important health condition that had the greatest community impact. In the 2019 focus groups and supplemental survey, alcohol and substance abuse were rated as top threats to community health.

Cancer

Cancer was selected as a priority issue for SJHMC, particularly lung and breast cancer. Cancer is a large group of diseases that can start in almost any organ or tissue of the body when abnormal cells grow beyond their usual boundaries to invade adjoining parts of the body and/or spread to other organs.[xi] In the 2021 COVID-19 impact survey, Maricopa County residents noted that in addition to COVID-19, cancers were ranked in the top ten health conditions that had the greatest impact in their community. In 2019 focus groups, cancer was noted as one of the greatest threats to community health.

Affordable Housing/Homelessness

Affordable housing/homelessness was selected as a priority issue for SJHMC. Housing is often identified as an important social determinant of health due to the range of ways in which a lack of housing, or poor quality housing, can negatively affect health and wellbeing. In the 2021 COVID-19 impact survey, almost one fifth of residents in Maricopa County noted that since March of 2020, they did not have enough money to pay for essentials such as housing. Affordable housing and homelessness were frequently cited concerns mirrored in the 2019 and 2021 focus groups.

Access to Healthcare

Access to healthcare was selected as a priority issue for SJHMC. Health insurance helps individuals and families access needed primary care, specialists, and emergency care.[xii] In the 2021 COVID-19 impact survey, Maricopa County residents noted that since March of 2020, one of the top five barriers to seeking or accessing healthcare was difficulty finding the right provider for their care. In the 2019 and 2021 focus groups, participants shared several major barriers to healthcare access including financial limitations, transportation, insurance, inconvenience, communication issues, lack of awareness of existing services and resources, and lack of cultural understanding and sensitivity.

- **Maternal and Child Health** - Maternal health refers to the health of women during pregnancy, childbirth and the postnatal period. There are opportunities at each stage provide support so that ensuring women and their babies reach their full potential for health and well-being.[xiii] In the

United States, women of color face increased instances of inadequate prenatal care, preterm delivery, and maternal mortality and morbidity.[xiv]

- **Financial Security –** Health care expenses can be a major burden for vulnerable communities. Financial barriers can create issues with access to care, quality of care received, and overall well-being.

Food Insecurity

Food insecurity was selected as a priority issue for SJHMC. The causes of food insecurity are complex, but some may include: poverty, unemployment, low income, lack of affordable housing, chronic health conditions and lack of access to healthcare.[xv] In the 2021 COVID-19 impact survey, Maricopa County residents noted food was one of the top five essentials that they sometimes or never had enough money to pay for since March of 2020. In the 2021 focus groups, getting enough food to eat was distinguished as one of the largest quality of life challenges that respondents experienced during the COVID-19 pandemic.

Safety & Violence

Safety and violence was selected as a priority issue for SJHMC. Injuries and violence are a significant cause of death burden of disease, and some people are more vulnerable than others depending on the conditions in which they are born, grow, work, live and age. In both the 2019 focus groups and the 2021 COVID-19 impact survey, Maricopa County residents noted domestic violence/sexual assault as one of the top ten issues that had the greatest impact on their community's health and wellness.

- **Unintentional Injuries** – Many unintentional injuries can be predictable and preventable. Leading causes of nonfatal injury include traffic-related injuries, falls, burns, poisonings, and drownings.

Prioritized Health Needs: Disparities

Using a Health Equity Lens: "Health equity means that everyone has a fair and just opportunity to be healthier. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care" (Robert Woods Johnson Foundation). At SJHMC we are dedicated to improving access to care and promoting health equity for all across all prioritized significant health needs.

Mental and Behavioral Health – In 2019, men had higher rates of inpatient hospitalization and emergency department visits than women.[lviii]

Chronic Health Conditions – In 2019, Black/African Americans followed by American Indians had the highest inpatient hospitalization rates.[lviii]

Addiction/Substance Use – In 2019, American Indians had the highest death rate for unintentional drug overdoses and the highest rate for alcohol-related hospitalization.[xlii,lviii]

Cancer – From 2014-2018, the rate for all types of cancer was greatest among White/Caucasians.[xvi]

Housing/Homelessness – From 2015-2019, 58.34% of renters aged 65+ were considered cost-burdened (rent is 30% or more of household income).[xlv]

Access to Healthcare – In 2019, 14.1% of adults under the age of 65 were uninsured.[xlv]

Food Insecurity – Since the beginning of the pandemic, 32% of Arizona households experience food insecurity compared to 25% the year prior.[liv]

Safety & Violence – In 2019, violence-related emergency department visits were highest among Black/African Americans and American Indians.[lviii]

Resources Potentially Available

SJHMC has developed a strong network of local partners who are specifically positioned to meet some of the heath needs identified. Organizations who work in the **Access to Care** space include health insurance providers; direct services including mobile health, maternal health, preventative screening, and postpartum substance use recovery; employment and rental assistance; and healthcare navigators including community health workers, senior care resources, and programs that focus on Native American and Latino/Hispanic populations. **Affordable Housing/Homelessness** resources include 21 local organizations focused on transitional housing, food access, and emergency shelter. Partners working on **Food Insecurity** provide services from meal preparation and delivery to community gardening to food pantry access. SJMHC coordinates with eight domestic violence and human trafficking partners to combat **Safety & Violence.**

Along with providing direct services for **mental health**, **chronic health conditions, substance abuse**, and **cancer**, SJHMC partners with many local organizations to provide continuity of care for patients. These include over 15 organizations focused on serving and supporting diverse populations, providing education and counselling, navigating healthcare systems, and leading prevention initiatives. Overall, SJHMC continues to develop and leverage these networks to reach the community.

Report Adoption, Availability, and Comments

This CHNA report was adopted by the SJHMC community board in April 2022. The report is widely available to the public on the hospital's web site, and a paper copy is available for inspection upon request at St. Joseph's Hospital and Medical Center's Community Benefit and Health Equity Department. Written comments on this report can be submitted to the Community Benefit and Health Equity Department at 3033A N. 7th Avenue, Phoenix, Arizona 85013 or by email to CommunityHealth-SJHMC@DignityHealth.org.

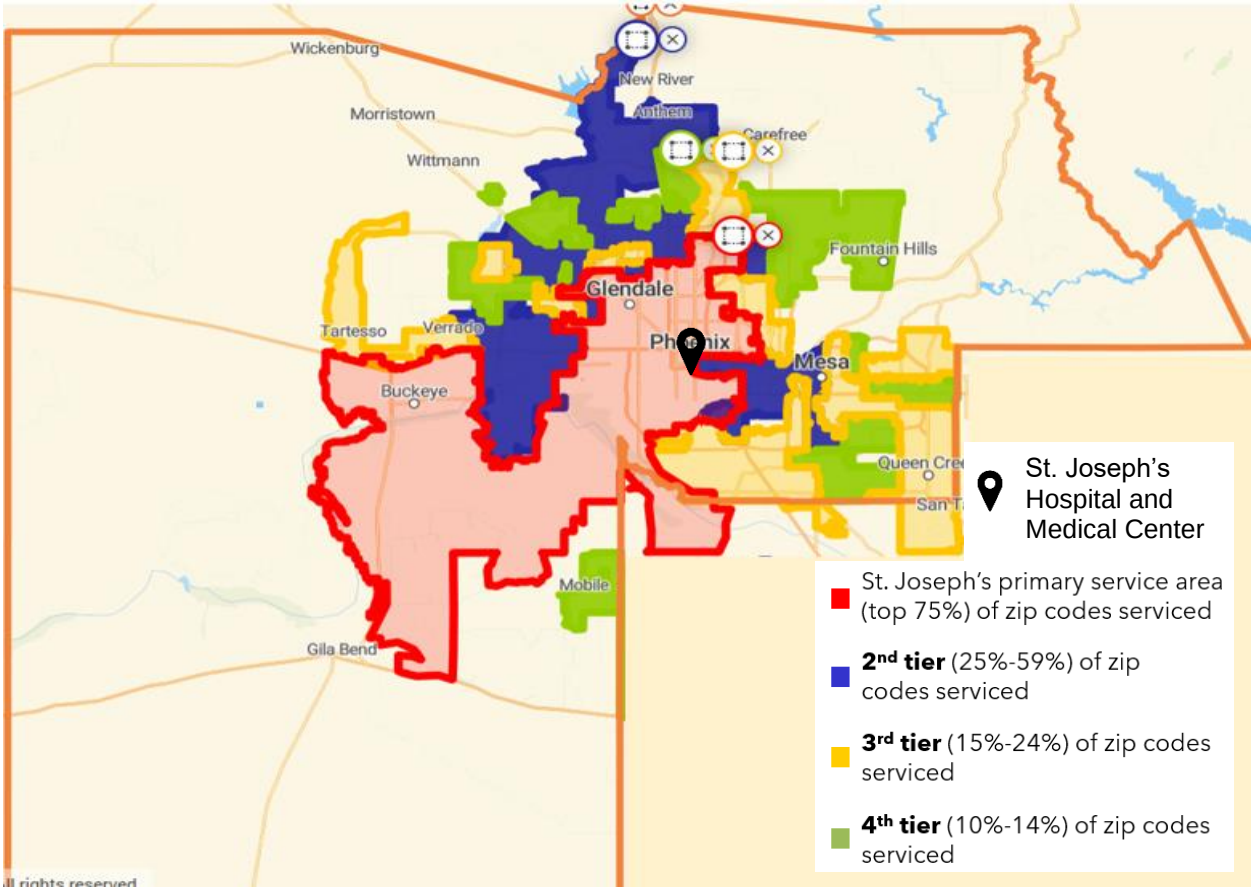
Community Definition

St. Joseph's Hospital and Medical Center's community is defined as Maricopa County. The entire County was chosen as the community definition due to the broad range of SJHMC's service area. Figure 1 below encompasses the first, second, third, and fourth tier patient zip codes serviced by SJHMC – which span Maricopa County. SJHMC's primary service area-specific information is also provided when available.

Maricopa County is the fourth most populous county in the United States. Based on 2019 American Community Survey (ACS five-year estimates, Maricopa County has an estimated population of over 4.3 million and growing, home to well over half of Arizona's residents. Maricopa County encompasses 9,224 square miles, includes 27 cities and towns, as well as the whole or part of five sovereign American Indian reservations. A list of all Maricopa County zip codes is located in Appendix D.

SJHMC serves patients across Maricopa County, hence the community definition extends beyond its physical location in the City of Phoenix. The City of Phoenix is primarily served by SJHMC for acute care and trauma services. Phoenix is the 5th largest city in the United States by population, making it the most populous state capital. Its population in 2019 was 1,633,017 with a median age of 33.8.[xvii] The City of Phoenix is made up of predominantly Caucasian/White individuals (76.1%), followed by Latino/Hispanic (42.6%), Black/African American (8.6%), Asian (5.0%), American Indian/Alaska Native (3.0%), and Native Hawaiian and Other Pacific Islander (0.5%).[xviii] In 2019, the median household income in Phoenix was $57,459 with a poverty rate of 18.0%.[xix] The educational attainment statistics in Phoenix in 2019 were as follows: less than high school graduate (18.0%), high school graduate (36.0%), some college/associate's degree (37.6%), and bachelor's degree or higher (8.4%).[xx]

Figure 1. SJHMC Service Areas in Maricopa County



For this report, the focus will be on the geographic area of Maricopa County since SJHMC serves zip codes spanning a majority of the county. A list of all Maricopa County zip codes is located in Appendix D.

Primary Care Area (PCA) Statistical Profiles are revised annually and provide detailed information on the demographics, health resources, hospital utilization, and health status indicators in defined geographic areas throughout Arizona. According to the 2020 Arizona Department of Health Services (ADHS) Arizona Medically Underserved Areas Biennial Report, the Alhambra Village, Avondale, Buckeye, Camelback East Village, Central City Village, El Mirage & Youngtown, Estrella Village & Tolleson, Fort McDowell Yavapai Nation, Glendale Central, Laveen Village, Maryvale Village, Mesa Central, Mesa West, New River/Cave Creek, North Gateway/Rio Vista Village, North Mountain Village, Peoria South, Salt River Pima-Maricopa Indian Community, Scottsdale South, South Mountain Village & Guadalupe, Sun City, Surprise North & Wickenburg, and Tempe North PCAs have been federally designated as a Medically Underserved Areas.[xxi]

Demographic and Socioeconomic Profile

Table 1 provides the specific age, sex, and race/ethnicity distribution and data on key socio-economic drivers of health status of the Maricopa County population compared to the state of Arizona.

Table 1.

	Maricopa County	Arizona
Population: estimated 2019	4,328,810	7,050,299
Gender		
• **Male**	49.4%	49.7%
• **Female**	50.6%	50.3%
Age		
• **0-9 yrs**	13.0%	12.6%
• **10-19 yrs**	13.8%	13.4%
• **20-34 yrs**	21.3%	20.6%
• **35-64 yrs**	37.2%	36.3%
• **65-84 yrs**	13.1%	15.2%
• **85+ yrs**	1.7%	1.9%
Race		
• **White**	*77.6%	*77.2%
• **Asian/Pacific Islander**	*4.2%	*3.3%
• **Black/African American**	*5.6%	*4.5%
• **American Indian/Alaska Native**	*2.0%	*4.5%
• **Other/Unknown**	*6.7%	*6.5%
Ethnicity		
• **Hispanic**	*31.0%	*31.3%
Median Income	$64,468	$58,945
Uninsured	10.6%	10.4%
Unemployment	5.0%	5.9%
No HS Diploma	14.8%	15.6%
% of Population 5+ non-English speaking	26.9%	27.2%
Renters	*37.8%	*35.6%
CNI Score	3.4	-

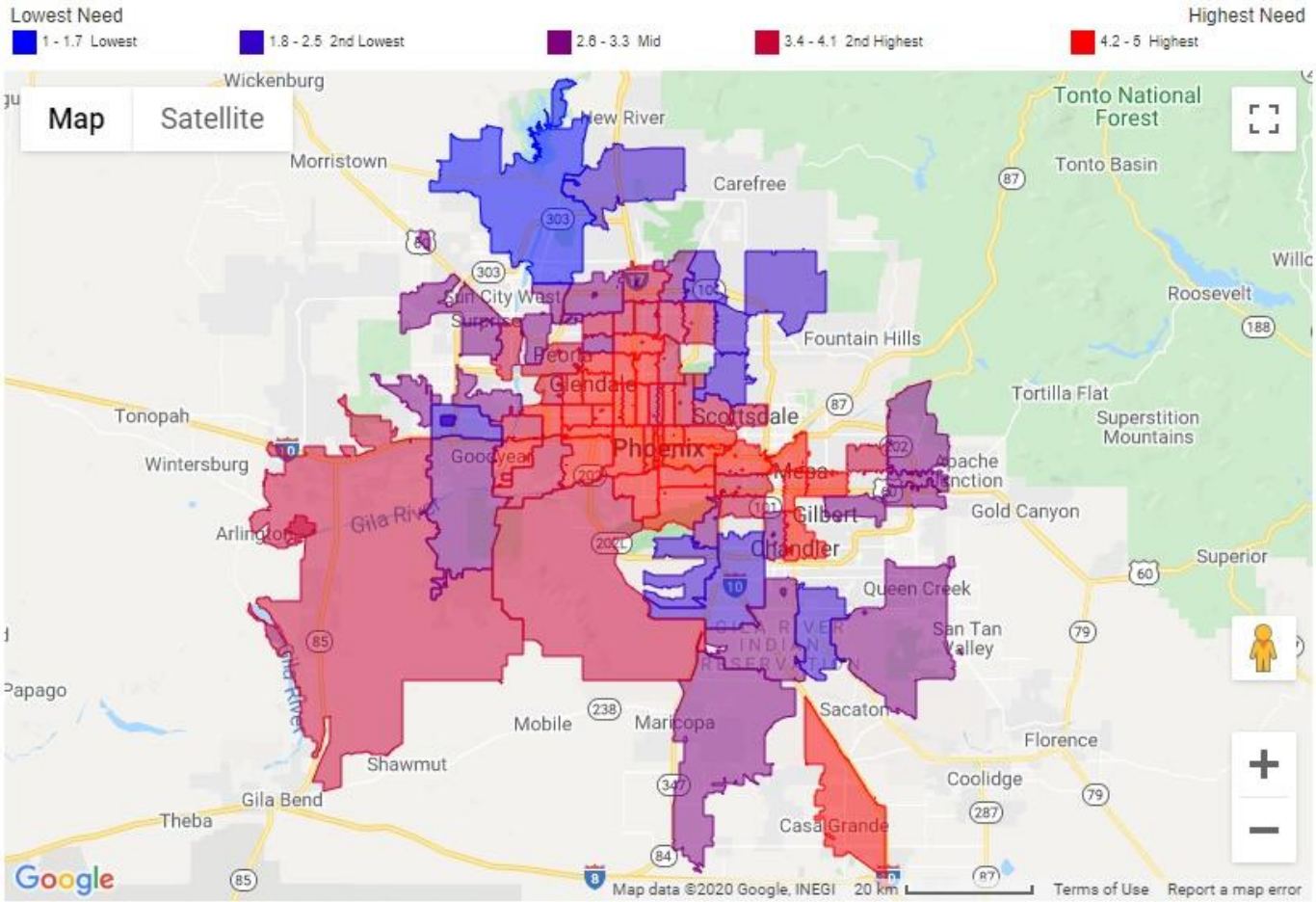
*Source: PolicyMap; Census ACS 2019 5-Year Estimates[xxii]

Community Need Index

One tool used to assess health need is the Community Need Index (CNI). The CNI analyzes data at the zip code level on five factors that facilitate or prevent health care access: income, culture/language, education, housing status, and insurance coverage. Scores from 1.0 (lowest barriers) to 5.0 (highest

barriers) for each factor are averaged to calculate a CNI score for each zip code in the community. Research has shown that communities with the highest CNI scores experience twice the rate of hospital admissions for ambulatory care sensitive conditions as those with the lowest scores. According to the CNI illustrated in Figure 2, the primary service area has a mean CNI score of 3.8. Zip code areas with the highest risks (CNI score of 4.0 or higher) include: 85003, 85004, 85006, 85007, 85008, 85009, 85014, 85015, 85016, 85017, 85019, 85020, 85021, 85023, 85029, 85031, 85032, 85033, 85034, 85035, 85037, 85040, 85041, 85042, 85043, 85051, 85301, 85302, 85303, 85323, and 85353.

Figure 2



Mean(zipcode): 3.7 / Mean(person): 3.7 CNI Score Median: 3.8 CNI Score Mode: 2.8

Assessment, Process and Methods

Maricopa County hospitals and health centers play significant roles in the region's overall economy and health. In addition to providing safe and high-quality medical care, these institutions work to improve regional health through programs that promote health in response to identified community needs. Additionally, health care partners are often serving the same or portions of the same communities across Maricopa County. As a result, Banner Health, Dignity Health, Mayo Clinic Hospital, Native Health, Neighborhood Outreach Access to Health, Phoenix Children's Hospital, and Valleywise Health have joined forces with MCDPH through the Synapse partnership to identify the communities' strengths and greatest needs in a coordinated community health needs assessment. SJHMC, as a member of Synapse, contracted with MCDPH to conduct the CHNA process. The CHNA utilizes a mixed-methods approach that includes the collection of secondary data from existing data sources and community input data from focus groups, surveys, and meetings with community stakeholders. The process was iterative as both the secondary and primary data were used to help inform each other. The advantage of using this approach is that it validates data by cross-verifying from a multitude of sources.

Primary Data

The first round of community data collection occurred in the fall of 2019 and involved a community survey as well as a series of focus groups. MCDPH contracted with ASU SIRC to conduct the focus group analysis. In response to the severe changes in the community health landscape due to the COVID-19 pandemic, a supplemental survey and focus group cycle was conducted in the summer of 2021. Both data sources are included in this assessment to provide a robust evaluation of community needs, both before and during the pandemic.

2019 Coordinated Community Health Needs Assessment Focus Groups (Appendix B)

A total of 52 focus groups were conducted between August 2018 and December 2019 with medically underserved populations across Maricopa County including youth in the third and final cycle. The groups consisted of specific ethnic groups: (1) African Americans, (2) Native American, (3) Congolese, (4) Hispanic, and (5) Filipino. Other groups represented were: (6) homeless populations, (7) Lesbian, Gay, Bisexual, Transgender, and Questioning (LGBTQ) persons including veterans, and migrant seasonal farmworkers, (8) people who've been incarcerated, (9) people in rural communities, (10) new parents, and (11) parents of children with special health care needs. Six groups were conducted in Spanish, one in Mandarin, one in Swahili and the remainder in English.

The focus group design and execution proceeded through five phases: (1) initial review of literature; (2) focus group discussion guide development; (3) focus group recruitment; (4) focus group data collection; and (5) report writing and presentation of findings. Focus group participants were asked to complete a survey that assessed a variety of factors that could have an important impact on individual and community health and quality of life. These were mainly closed-ended questions to augment the focus group discussions. The focus group data were analyzed and organized thematically to highlight prevalent ideas across the groups as well as surprising/unique responses from particular focus groups.

COVID-19 Focus Groups (Appendix B)

Between February and June 2021, a series of 33 focus groups were conducted which included 186 participants across various community regions, service providers and individual residents to better understand the impact of COVID19 on Maricopa County residents. Focus groups helped to identify and address health needs, resource allocation, and long-term services needed for COVID-19 response efforts. Members of the community representing subgroups, defined as groups with unique attributes (race and ethnicity, age, sex, culture, lifestyle, or residents of a particular area of Maricopa County), were recruited to participate in focus groups. A standard protocol was used for all focus groups (See Appendix B) to understand the experiences of these community members as they relate to the impact of COVID-19 on Maricopa County residents. In all, a total of 33 focus groups were conducted with 186 community members from five geographic Maricopa County locations based on the following groups: (1) older adults; specific ethnic groups (2) African American; (3) Hispanics/Latino; (4) Native American; (5) Asian American; (6) ethnic minority young adults; (7) Lesbian, Gay, Bisexual, Transgender, and Questioning (LGBTQ) persons; (8) veterans; (9) new parents; (10) parents of young children, and (11) refugees.

The focus groups explored the topics of COVID-19 impact, barriers, concerns, messaging, trust in public health, vaccine intent, vaccine choices, and vaccine hesitancy. Participants also spent a great deal of time discussing health care, obstacles to care, access to food, financial well-being, and quality of life. To complement the focus groups, 158 respondents (most but not all of whom participated in the focus groups) completed an online anonymous questionnaire that asked about COVID-19 concerns, social determinants of health, medical trust, and mental and physical health. Participants discussed declines in mental health and physical health and barriers to the vaccine as well as vaccine hesitancy and confusion. Suggestions were offered for messages and for who would influence their vaccine decisions, noting that one size does not fit all. The focus group data were analyzed and organized thematically to highlight prevalent ideas across the groups as well as surprising/unique responses from particular focus groups.

2019 Maricopa County Community Health Assessment Community Survey (Appendix B)

Between February and June 2019, MCDPH collected community surveys from residents and professionals within Maricopa County. This survey is part of the Coordinated Maricopa County Community Health Needs Assessment (CCHNA) designed to identify priority health issues, resources and barriers to care within Maricopa County through a community-driven process known as Mobilizing for Action through Planning and Partnerships (MAPP). A total of 22 survey questions were included, organized by the following sections: Physical and Mental Health, Health Care and Living Expenses, Barriers and Strengths of the Community, and Health and Wellness of the Community.

The survey questionnaire was originally developed by the National Association of County and City Health Officials (NACCHO). The survey was modified from its original version by SJHMC, members of the Synapse Coalition, a group of non-profit hospitals and federally qualified health care providers, the Health Improvement Partnership of Maricopa County (HIPMC), and MCDPH staff. Response options were expanded from the original format to include additional health issues and social determinants of health. The questionnaire was provided on a digital platform using Qualtrics® in addition to a paper format. All surveys were provided in English and Spanish. There was minimal request for additional language translations, so we worked with partners who were able to assist individuals as translators to complete the survey.

The goal for the community survey was 15,000 responses, however once all data was cleaned to ensure usability, a total of 11,893 surveys were collected from community residents ages 14 and above. The digital survey was sent out via extensive community partner networks throughout Maricopa County, hospital/healthcare systems, municipalities, school districts, and social media, our internal programs allowing us to maximize resources. The survey was widely publicized with community and healthcare partners prior to March 1, 2019 to secure presence at community events and provide online advertisement to redirect individuals to the survey.

COVID-19 Community Impact Survey (Appendix B)

COVID-19 was declared a global pandemic in March of 2020, and this set off a series of drastic changes to everyday life for residents of Maricopa County. From May - July 2021, MCDPH mobilized data collection resources and community partnerships to explore how COVID-19 had impacted residents. This COVID-focused survey is part of the Coordinated Maricopa County Community Health Needs Assessment (CCHNA) designed to identify priority health issues, resources, and barriers to care. Survey questions were grouped into the following sections: Demographics, Physical and Mental Health, Health Care and Living Expenses, COVID-19 Impact on Employment, Barriers, Strengths, Health Conditions, Community Issues, Survey Usability, and Other Noteworthy COVID-19 Experiences. The questionnaire was primarily provided on a digital platform using Alchemer© and was provided in over 12 languages (Arabic, Burmese, Chinese, English, French, Kinyarwanda, Korean, Lao, Spanish, Swahili, Tagalog, Thai, and Vietnamese).

The foundation for this survey questionnaire was developed by the National Association of County and City Health Officials (NACCHO). The survey was modified from its original version by SJHMC, members of the Synapse Coalition, a group of non-profit hospitals and federally qualified health care providers, the Health Improvement Partnership of Maricopa County (HIPMC), and MCDPH staff. Additional questions and response options were added and modified from the original format to assess the impact of COVID-19 on Maricopa County residents and explore additional health issues and social determinants of health. Free response questions were analyzed through a thematic analysis. A codebook was developed inductively based on the response data, and key themes were identified with the consensus of the MCDPH epidemiology team. At least 50% of the collected responses from each region in Maricopa County were analyzed and coded with key themes, totaling 2,186 responses analyzed. Key themes were ranked by frequency.

The goal for the community survey was 15,000 responses, however a total of 14,380 surveys were completed by residents of Maricopa County. MCDPH partnered with an extensive network of community-based organizations and healthcare partners to collect community surveys from residents and professionals within Maricopa County. The MCDPH team wanted to ensure diverse community representation and that the survey provided insight from all regions (Northeast, Northwest, Central, Southeast, and Southwest) of the county. MCDPH collaborated with several community-based organizations to provide stipends from $2,000 - $5,000 to support survey translation, distribution & completion, social media outreach via networks, purchase of incentives for survey completion, and administrative expenses.

In addition, SJHMC also solicited input on the CHNA process from two community groups.

Secondary Data

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

Quantitative data used in this report are high quality, population-based data sources and were analyzed by MCDPH, Office of Epidemiology. Secondary data was collected from local, state, and national sources such as the Maricopa County Department of Public Health, Arizona Department of Health Services, Arizona Criminal Justice Commission, American Census Survey, and U.S. Centers for Disease Control and Prevention (CDC). Secondary data includes Maricopa County Hospital Discharge Data, Maricopa County Death Data, Maricopa County Birth Data, Behavioral Risk Factor Surveillance Survey (BRFSS), Youth Risk Factor Surveillance Survey (YRBSS), PolicyMap, and the American Census Survey.

Hospital Discharge Data, Death Data, and Birth Data

MCDPH receives Hospital Discharge Data (HDD) bi-annually from the Arizona Department Health Services (ADHS). HDD consists of inpatient (IP) and emergency department (ED) discharge data for most Maricopa County hospitals. Data is collected based on the discharge date of the patient. Since 2015, diagnoses are coded using ICD-10.

MCDPH receives vital Death data annually from ADHS for the previous year. This data includes deaths in Maricopa County regardless of residency status. The finalized and cleaned vital data consists of death data for residents of Maricopa County. Data is collected based on the event date of the patient, i.e. date of death. The death database is coded using ICD-10. MCDPH receives vital Birth data annually from ADHS. This data includes births in Maricopa County regardless of residency status. Data is collected based on the event date of the patient, e.g. birth date.

Hospital Discharge Data, Death and Birth Data are obtained from ADHS and cleaned by MCDPH to use for analyses. These datasets are used along with population estimates from the American Census Survey to analyze health indicators for Maricopa County residents. All health indicator rates are age adjusted using the 2000 Standard Population.[lviii] Age-adjustment methods allow for fairer comparisons between population groups even if the size of the groups is different. The National Center for Health Statistics recommends using the 2000 Standard Population when calculating age-adjusted rates. In this report, the 2000 Standard Population is used to standardize HDD and vitals data. Health indicators that were analyzed include fatal and nonfatal chronic conditions, fatal cancer indicators, fatal and non-fatal injuries, mental and behavioral health indicators, and infant birth indicators. Each indicator is analyzed as an overall rate for Maricopa County, and then further analyzed by age, race, and gender to highlight disparities. In 2019, there were around 4.5 million Maricopa County residents.

Other Secondary Data

Other secondary data includes publicly accessible data from the U.S. Census, CDC, and PolicyMap to elaborate on health and social indicators. The Behavioral Risk Factor Surveillance System and Youth Risk Behavior Surveillance System surveys are developed by the CDC and conducted for each state to monitor the health and social behaviors of adults and youth. In this assessment, BRFSS and YRBSS are analyzed by county and state levels. The American Census Survey by the U.S. Census Bureau measures the social and economic characteristics of U.S. populations. For this assessment, 2019 data is used to analyze Maricopa County population and demographics. PolicyMap provides geographic data that maps demographic, social, and health indicators across the United States. PolicyMap is used in this assessment to evaluate social indicators in Maricopa County for 2018, 2019, and 2020 when accessible.

Synapse partners selected approximately 100 data indicators to help examine the health needs of the community. These indicators were based on the Center for Disease Control and Prevention's (CDC) Community Health Assessment for Population Health Improvement: Most Frequently Recommended Health Metrics report.[xxv] From the approximately 100 data indicators, Table 2 displays the initial round of 27 health indicators and eight social indicators that SJHMC selected for further analysis. For the health indicators, hospital discharge and death databases were utilized to perform these analysis.

Table 2.

Initial Round Health Indicators
Alcohol-Related Injuries
All Mental and Behavioral Disorders
Mood and Depressive Disorders
Schizophrenia Disorders
Drug-induced Mental and Behavioral Disorder
Non-drug induced Mental and Behavioral Disorders
Alzheimer's
Arthritis
Asthma
Breast Cancer
Cardiovascular Disease
Heart Failure
Chronic Obstructive Pulmonary Disease
Diabetes
Falls
Lung Cancer
Motor Vehicle Crashes
Injury to an Occupant
Pedestrian-related
Injury to a pedal cyclist
Opioid-related
Unintentional Drug Overdose
Intentional Self-Harm/Suicide
Intentional Drug Overdose

Initial Round Social Indicators
Housing
Homelessness
Transportation
Food Insecurity
Access to healthcare
Maternal and Child Health
Financial Security
Racial Equity

Stroke
Uterine/Ovarian Cancer
Victim of Violence/Interpersonal Violence

Input from the Community

SJHMC engaged in a community-based process to gather input from the community. SJHMC met with the Community Benefit and Health Equity Committee (CBHEC) on April 29, 2021, and September 9, 2021, and with the Health Equity Alliance (HEA) on June 2, 2021, and August 18, 2021, to narrow indicators down from 100 to 27 to finally eight priorities. The CBHEC is a subcommittee of the SJHMC Community Board, comprised of members who provide stewardship and direction for the hospital as a community resource. The HEA is a large group of community organizations that the SJHMC community benefit staff bring together quarterly to work on the shared goal of improving the health and well-being of Maricopa County residents while reducing health disparities. A full list of organizations who participated in the CBHEC and HEA meetings can be found in Appendix F.

The process involved iterations of data presentations co-led by MCDPH, strategic planning sessions, and feedback from the SJHMC Community Board. St. Joseph's Hospital and Medical Center invited written comments on the most recent CHNA report and Implementation Strategy both in the documents and on the website where they are widely available to the public. No written comments have been received. Details of the prioritization process is detailed under the section "Prioritized Description of Significant Community Health Needs."

Assessment Data and Findings

This section includes overall data and findings from the community surveys, focus groups, and health indicator analysis. These combined assessments provide a comprehensive picture of the top issues and concerns facing the community, from looking at rates of health conditions to the social and environmental factors that contribute to well-being. Whenever possible, the measures of interest are evaluated through a health equity lens to identify any disparities based on race, gender, age, or other factors.

In this Section:

- **Indicator data for top social issues and top health issues (Tables 3-5)**
- **Qualitative data themes from 2019 and 2021 focus groups and open-ended survey questions. (Table 6)**
- **Quantitative data from 2019 and 2021 community surveys**
- Top health and social issues from 2021 COVID-19 Impact Survey
- Comparison of top issue rankings from 2019 and 2021 survey results (Table 7)
- Top health and social issue rankings analyzed by race and special populations (Tables 8-9)

Top Social and Health Needs

Social determinants of health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. Some examples of SDOH include housing, access to care, transportation, financial security, food insecurity, and racial equity. SDOH can contribute to wide health disparities and inequities.[xxvi] Table 3 displays the top social issues identified in Maricopa County and Arizona.

Table 3.

Top Social Issues Identified in Maricopa County (MC) and Arizona		
Indicator	Significance to MC	Significance to AZ
 **Housing**	45.1% of renters were considered cost-burdened. 21.7% of homeowners are cost-burdened.	44.5% of renters were considered cost-burdened. 21.6% of homeowners are cost-burdened.
 **Access to Care**	10.62% of residents were considered uninsured.	10.4% of residents were uninsured.
 **Maternal & Child Health**	In 2018, 7.5% of infants were born with a low birth weight (<2,500 grams). In 2018, there were 74.1% of births where prenatal care began during the first trimester.	In 2018, 7.6% of infants were born with a low birth weight (<2,500 grams). In 2018, there were 71.2% of births where prenatal care began during the first trimester.
 **Transportation**	5.9% of residents had no vehicle availability. 87.0% of residents drive to work in a car and 1.9% of residents use public transit to get to work.	6.2% of residents had no availability to a vehicle. 87.2% of residents drive to work in a car, and 1.8% of residents use public transit to get to work.
 **Financial Security**	In 2020, the unemployment rate for MC residents (7.4% increased by 3% compared to 2019 (4.2%).	In 2020, the unemployment rate for AZ residents (7.9%) increased by 3% compared to 2019 (4.9%).

Food Insecurity	In 2018, 9.5% of residents received food stamps.	In 2018, 11.3% of residents received food stamps. Since the beginning of the pandemic, 32% of Arizona household experience food insecurity compared to 25% the year prior.
Racial Equity*	Maricopa County ranked #248 out of 359 on the Racial Equity Index at the county level.	Arizona ranked #33 out of 50 on the Racial Equity Index at the state level.
Source: PolicyMap & National Equity Atlas - data in this table was collected in 2019 unless stated otherwise		

The Racial Equity Index is a data tool designed to help communities identify priority areas for advancing racial equity, track progress over time, and set specific goals for closing racial gaps. The Index is based on nine Atlas indicators (median wage, unemployment, poverty, educational attainment, disconnected youth, school poverty, air pollution, commute time, and rent burden). The Racial Equity Index value is based on the inclusion score and prosperity score. The **inclusion score measures how a given geography is doing compared to its peers in terms of **racial gaps** across nine indicators. The **prosperity score** measures how a given geography is doing compared with its peers in terms of overall **population outcomes** for the nine indicators included in the equity index.*[xxvii]

IP/ED/Death Ranking
Top 5
6-9
10+

Of the 27 health indicators that were analyzed, the following indicators displayed in table 4 had the highest overall rates per 100,000 for in patient hospitalization (IP), emergency department visits (ED), and deaths. Each number within the table represents the ranking of each health indicator for IP, ED, and deaths. The color gradients are used to help visualize the different rankings among the health indicators.

Table 4.

Top Health Indicators Identified in Maricopa County			
Indicator	Inpatient Hospitalizations (IP)	Emergency Department Visits (ED)	Deaths
Cardiovascular Disease	1	2	1
Mental & Behavioral Health	2	3	.

Falls	3	1	10
Arthritis	4	11	18
Stroke	5	12	4
Diabetes	6	7	7
Motor Vehicle Crash	8	4	13
COPD	9	9	2
Asthma	11	6	17
Lung Cancer	12	18	5
Breast Cancer	18	17	9
Alzheimer's	19	19	3

Health Equity

According to the Robert Wood Johnson Foundation, "Health equity means that everyone has a fair and just opportunity to be healthier. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and healthcare."[xxviii] Addressing health equity requires understanding differences in health outcomes based on race, gender, age, and socio-economic status – among other factors. The following health indicators are broken down by race, gender, and age in Table 5 to highlight potential health disparities. For each disparity, the percentage difference between the population groups with the highest rate were compared to the overall rate. Please refer to Appendix E for specific rate values.

Table 5.

Top Health Indicators Disparities in Maricopa County *(% difference between highest population group and overall rate when available)*			
Indicator	Gender Disparity	Age Disparity	Racial Disparity
Cardiovascular Disease (CVD)	Males had a higher IP (+14%) and death rate (+5%) while females had a higher ED rate (+1%).	Patients aged 75+ had the highest IP (+502%), ED (+322%) and death (+910%) rate.	Black/African American patients had the highest IP (+44%) and ED rate (+104%) while White/Caucasian patients had the highest death rate (+47%).
Mental and Behavioral Health	Males had a higher IP (+12%), ED (+13%), and death rate (+113%) than females.	Patients aged 15-19 had the highest IP rate (+69%), patients aged 25-34 had the highest ED rate (+76%), and patients aged 75+ had the highest death rate.	Black/African American patients had the highest IP rate (+88%), while American Indian patients had the highest ED (+189%) and death rate (+202%).

Falls	Females had a higher IP (+13%), ED (+12%), and death rate (+4%) than males.	Patients aged 75+ had the highest IP (+704%), ED (+239%), and death rate (+1,108%).	White/Caucasian patients had the highest IP (+52%) and death rate (+58%), while Black/African American patients had the highest ED rate (+31%).
Arthritis	Females had a higher IP (+12%) and death rate (+170%) while males had a higher ED rate (+7%).	Patients aged 65-74 had the highest IP (+361%) and death rate while patients aged 75+ had the highest ED rate (+176%).	White/Caucasian patients had the highest IP rate (+57%), Black/African American patients had the highest ED rate (+226%), and Hispanic patients had the highest death rate (+300%).
Stroke	Males had a higher IP rate (+6%), males had a higher ED rate (= to total), and females had a higher death rate (+13%).	Patients aged 75+ had the highest IP (+533%), ED (+437%), and death rate (+977%).	White/Caucasian patients had the highest IP (+36%) and death rate (+45%) while Black/African American patients had the highest ED rate (+41%).
Diabetes	Males had a higher IP (+21%), ED (+1%), and death rate (+20%) than females.	Patients aged 75+ had the highest IP (+91%) and death rate (+508%) while patients aged 55-64 had the highest ED rate (+77%).	Black/African American patients had the highest IP (+107%), ED (+155%), and death rate (+113%).
Motor vehicle	Males had a higher IP (+27%), ED (+12%), and death rate (+46%) than females.	Patients aged 75+ had the highest IP (+45%) and death rate (+94%) while patients aged 20-24 had the highest ED rate (+104%).	American Indian patients had the highest IP (+60%) and death rate (+53%) while Black/African American patients had the highest ED rate (+175%).
COPD	Females had a higher IP (+17%) and ED rate (+14%) while males had a higher death rate (+3%).	Patients aged 75+ had the highest IP (+400%), ED (+281%), and death rate (+873%).	White/Caucasian patients had the highest IP (+53%) and death rate (+60%) while Black/African American patients had the highest ED rate (+59%).
Asthma	Females had a higher IP (+19%), ED (+3%), and death rate (+9%) than males.	Patients aged 5-9 had the highest IP (+136%) and ED rate (+134%) while patients aged 75+ had the highest death rate (+227%).	Black/African American patients had the highest IP (+239%), ED (+350%), and death rate (+236%).
Lung Cancer	Females had a higher IP rate (+11%), males and females had the same ED rate (= to total), and males had a higher death rate (+2%).	Patients aged 75+ had the highest IP (+426%), ED (+374%), and death rate (+640%).	White/Caucasian patients had the highest IP (+49%) and death rate (+55%), while Black/African American patients had the highest ED rate (+76%).
Breast Cancer		Patients aged 65-74 had the highest IP rate (+174%), patients aged 55-64 had the highest ED rate (+157%), patients aged 75+ had the highest death rate (+388%).	White/Caucasian patients had the highest IP rate (+31%) while Black/African American patients had the highest ED (+219%) and death rate (+46%).
Alzheimer's	Males had a higher IP rate (+1%) while females had a higher ED (+12%) and death rate (+31%).	Patients aged 75+ had the highest IP (+1,042%), ED (+1,134%), and death rate (+1,313%).	White/Caucasian patients had the highest IP (+59%), ED (+41%), and death rate (+58%).

Source: Maricopa County's 2019 Hospital Discharge and Death Database

Qualitative Themes from Focus Groups

The following themes were identified from 2019 and 2021 focus groups data and open-ended survey responses from the 2021 COVID-19 impact survey. In focus groups, participants were asked questions about how they perceive their own health status, how COVID-19 affected their family, where they get information about health/COVID-19, barriers and facilitators to accessing care, and how health/COVID-19 messaging could be improved.

Table 6. Qualitative focus group themes from 2019 and 2021.

Themes	2019	2021
Mental Health	- Access to social connections and sense of community - Depression, suicide, and substance abuse increasingly important issues - Need for mental health services	- Decline in mental health due to isolation, depression, and anxiety - Difficulty accessing mental health services -Importance of social gatherings and mental health
Healthcare	-Inaccessible healthcare appointments with long wait times -Need more clinics, pharmacies, and specialists -Need greater insurance coverage	- Perceived medical discrimination - Lack of trust in healthcare - Issues with accessing physical health and pharmaceutical services
Finances for living essentials	-High cost of medical care -Make too much to qualifying for AHCCCS but still can't cover daily costs -Transportation, housing financially inaccessible	- Financial burden on food, rent/mortgage utilities, clothing, childcare - Difficulty paying for medical expenses - Challenge accessing financial services
Information/ education	- Lack of education regarding insurance - Need more information about health conditions, sex-ed, and nutrition -Indicate medical misinformation is a problem	-COVID-19 vaccine misinformation/rumors - Merits/utility of doctors, primary health care providers, social media and news as information sources - Frustrations with politicization of COVID-19 prevention and vaccination measures
Laws/ Infrastructure	-Access to public libraries, spaces, and events is important -Suggest laws to improve nutrition	- Adherence/ambivalence toward COVID-19 prevention measures (face masks, physical distancing, hand washing, testing)

Maricopa County Overall COVID-19 Impact Survey Results

The following data from the 2021 CHNA survey reflect top healthcare barriers, health conditions, community issues, and community strengths experienced by Maricopa County participants.

Top Healthcare Barriers

46% of respondents said they had no barriers to healthcare. The three barriers for others were:

- Fear of exposure to COVID-19 in a healthcare setting **28%**
- Unsure if healthcare need is a priority during this time **15%**
- Difficulty finding the right provider for my care **12%**

Top Health Conditions

48% of respondents reported that mental health issues have had the greatest impact on their community.

48%	40%	29%
Mental Health Issues	Overweight/ Obesity	Alcohol/ Substance Use

Community Issues

30% of respondents reported that lack of people immunized to prevent disease has had the greatest impact on their community.

1. Lack of people immunized to prevent disease **30%**
2. Distracted driving **29%**
3. Homelessness **26%**

Community Strengths

47% of respondents reported that access to COVID-19 vaccine events has been the greatest strength of their community.

1. Access to COVID-19 vaccine events **47%**
2. Access to COVID-19 testing events **41%**
3. Access to safe walking and biking routes **30%**

Comparison of 2019 & 2021 Community Survey Results

**Response was not available in 2019 survey*

Some health priorities changed due to COVID-19, while others were merely exacerbated. From 2019 to 2021, the top three community health issues remained the same, but *mental health* rose to the top. Community issues still included *distracted driving* and *homelessness*, with *lack of people immunized* as a leading issue. *Access to outdoor spaces and biking paths* remained a top community strength. *Fear of COVID-19 exposure* and *uncertainty if healthcare is a priority at this time* rose to the top for barriers to healthcare, but *difficulty finding the right provider* remained a top choice.

Table 7. Ranked Community Survey Results 2019 and 2021

Rank	2019	2021
Community Issues		
1	Distracted driving (46.1%)	Lack of people immunized to prevent disease (29.5%)
2	Homelessness (28.9%)	Distracted driving (28.5%)
3	Illegal drug use (24.1%)	Homelessness (25.8%)
Community Strengths		
1	Access to parks and recreation sites (55.9%)	*Access to COVID-19 vaccine events (46.7%)
2	Access to public libraries and community centers (50.3%)	*Access to COVID-19 testing events (41.1%)
3	Clean environments and streets (39.1%)	Access to safe walking and biking routes (29.7%)
Health Conditions		
1	Alcohol/substance abuse (48.3%)	Mental health issues (47.8%)
2	Overweight/obesity (38.4%)	Overweight/obesity (39.6%)
3	Mental health issues (37.5%)	Alcohol/substance abuse (28.6%)
Barriers to Accessing Healthcare		
1	Not enough health insurance coverage (32.9%)	*Fear of exposure to COVID-19 in a healthcare setting (28.2%)
2	Difficulty finding the right provider for my care (32.1%)	*Unsure if healthcare need is a priority during this time (14.7%)
3	Inconvenient office hours (25.4%)	Difficulty finding the right provider for my care (11.6%)

In the 2021 COVID-19 Impact survey, participants were asked: "Since March of 2020, which of the following issues have had the greatest impact on your community's health and wellness?". The following tables display the greatest community issues broken out by race/ethnicity and special populations.

Table 8. Greatest Community Issues – Race/Ethnicity

	1	2	3
African American/Black	Racism/discrimination	Lack of affordable housing	Homelessness
American Indian/Native American	Homelessness	Distracted driving	Lack of affordable housing
Asian/Native Hawaiian/ Pacific Islander	Racism/discrimination	Lack of people immunized to prevent disease	
Caucasian/White	Lack of people immunized to prevent disease	Distracted driving	Homelessness
Hispanic/Latinx	Homelessness	Lack of affordable housing	Distracted driving
Two or more races		Racism/discrimination	Lack of affordable housing
Unknown/Not Given	Distracted driving	Homelessness	

Table 9. Greatest Community Issues – Special Populations

	1	2	3
Adult with Kids	Lack of people immunized to prevent disease	Distracted driving	Lack of affordable housing
Single Parent	Lack of affordable housing	Homelessness	Lack of people immunized to prevent disease
LGBTQI+	Racism/discrimination	Lack of affordable housing Homelessness	
Person experiencing homelessness	Lack of affordable housing Homelessness		Racism/discrimination
Person with disability	Lack of people immunized to prevent disease	Lack of affordable housing	Homelessness
Immigrant	Homelessness	Distracted driving Racism/discrimination	
Refugee	Distracted driving	Racism/discrimination	Lack of people immunized to prevent disease
Veteran		Lack of people immunized to prevent disease	Homelessness
Person with living HIV/AIDS	Racism/discrimination		

Prioritized Description of Significant Community Health Needs

The top social and health issues were identified based on data collection and community feedback. Health conditions and outcomes were assessed from County inpatient hospitalization, emergency department and death data, along with external data sources. All data were presented to community partners, who provided feedback about what they experience in their life and work. A total of 27 health indicators with several subcategories were analyzed. These indicators were established in collaboration with SJHMC by selecting health indicators of interest that have historically demonstrated high rates or those with known disparities when broken out by race/ethnicity, gender and age.

Of the 27 indicators that were analyzed, a chart ranking the top five rates for inpatient hospitalizations, emergency department visits, and death was presented to community partners. For each top ranked indicator, existing data trends and disparities broken out by race/ethnicity, age group, and gender were also shared. Throughout several data presentations, the Health Equity Alliance (HEA) and the Community Benefit and Health Equity Committee (CBHEC) participated in virtual polls that asked participants the following questions:

- What is the top social issue affecting your community?
- These social issues accurately reflect what I see in my community.
- What is the top health issue affecting your community?
- Do these highest ranked health indicators accurately reflect what you see in your community?
- Do these disparities accurately reflect what you see in your community?

A list of organizations who participated in the HEA and CBHEC can be found in Appendix F. Based on the feedback received from community partners throughout each interactive poll, word clouds were developed. The bigger and bolder the words appeared in the word cloud, the more often it was mentioned. All poll responses received from HEA and CHBEC meetings were compiled and evaluated through a health equity lens (represented by the funnel to the right), acknowledging that health equity is an underlying factor for many health and social needs. Community partners also participated in virtual breakout room activities to discuss and give their insight about the presented top identified social and health needs.

Improving health and health care requires a focus on equity – equity of access, treatment, and outcomes. Health equity is realized when each individual has a fair opportunity to achieve their full health potential.[xxix] Health data shows that racial and ethnic minority groups experience higher rates of illness and death across a wide range of health conditions, including diabetes, hypertension, obesity, asthma, and heart disease, when compared to their White counterparts.[xxx] Acknowledging and addressing the

fairway between racial inequities and poor health outcomes is necessary to bridge the health equity gap. MCDPH and SJMHC utilized a health equity lens to investigate disparities in health and wellbeing based on race, gender, age, economic status, and other social factors. These differences are detailed throughout the report, to provide a framework for next steps in addressing ways in which the social and built environments impact health.

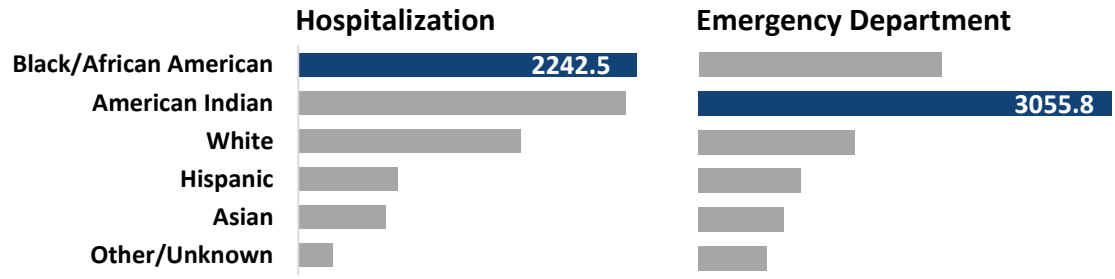
Four top social issues were identified by community partners: affordable housing/homelessness, access to healthcare (including maternal/child health and financial security), food insecurity, and safety and violence (including unintentional injuries). A similar process was utilized to determine the top health issues identified by community partners. The following top health issues were identified: mental health, chronic health conditions (obesity, diabetes, and cardiovascular disease), addiction/substance abuse, and cancer. Based on the identified top health and social needs, approval was granted from community partners to move forward with the focus of eight significant health needs.

Mental health

Mental health was selected as a priority issue for SJHMC. The prevalence and severity of mental health issues continue to be on the rise and have been exacerbated by the COVID-19 pandemic. The dynamics of working from home, temporary unemployment, losing childcare and in-person school options, and lack of physical contact with other family members, friends and colleagues, exacerbated anxiety and depression for many individuals and families. In the 2019 community survey, 43.8% of residents in Maricopa County rated their mental health including mood, stress level, and the ability to think as excellent or very good. In the 2021 COVD-19 impact survey, only 32.5% of Maricopa County residents rated their mental health as excellent or very good. In 2019, mental and behavioral health issues ranked number one for inpatient hospitalization visits, and second for emergency department visits in Maricopa County, with Black/African Americans and American Indians having the highest rates (Figure 3).[lviii]

Figure 3

Black/African Americans and **American Indians** have the highest hospitalization and emergency department rates due to mental and behavioral health.



The 2021-2025 Arizona Health Improvement Plan demonstrates how the pandemic impacted mental health. In mid-2021, most Americans reported heightened stress, nearly half reported struggling with mental health and/or substance abuse, and self-reported depression increased by over 300%.[xxxi] A participant from the COVID-19 impact survey reflected these trends when sharing how the pandemic impacted mental health in their community:

"COVID created new levels of isolation and social anxiety for many and division from those who failed to take precautionary measures."

(*25-34 years old, COVID-19 Impact Survey*)

Fear, worry, and stress are normal responses to perceived or real threats, especially when individuals are faced with uncertainty.[xxxii] The following participant from the COVID-19 impact survey shared their experience of losing a family member while battling COVID-19 themself:

"I feel my year was most impacted by anxiety and uncertainty and the feeling of isolation. My husband passed in Sept 2020. When I had COVID, I was alone and relied on internet for info and support. I wasn't sure who to contact for advice or support."

(*65-74 years old, COVID-19 Impact Survey*)

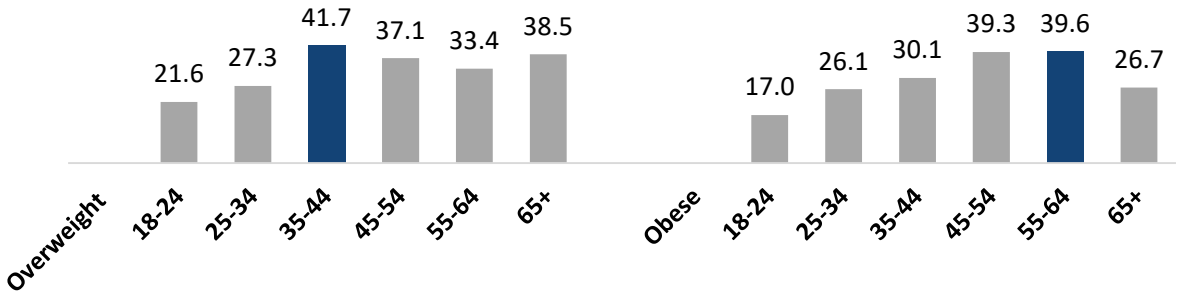
Chronic Health Conditions (Obesity, Diabetes, CVD)

Obesity

Obesity was selected as a priority issue for SJHMC. Obesity is a complex health issue resulting from a combination of causes and individual factors such as behavior and genetics. Some contributing factors include the access to food and physical activity, education and skills, and food marketing and promotion.[xxxiii] Obesity is associated with the leading causes of death in the United States and worldwide, including diabetes, heart disease, stroke, and some types of cancer. According to the Behavioral Risk Factor Surveillance System (BRFSS), in 2019 34.4% of Arizona residents were considered overweight *(BMI 25.0 - 29.9)* and 31.4% were considered obese *(BMI 30.0 - 99.8).*[xxxiv] In Maricopa County, 34.0% of residents were considered overweight and 30.1% were considered obese in 2019. The prevalence of overweight individuals in Maricopa County is greatest among ages 35-44 while the prevalence of obese individuals is greatest among ages 55-64 (Figure 4).[xxxv]

Figure 4

In 2019, the prevalence of **overweight** individuals was greatest among ages **35-44**, while the prevalence of **obese** individuals was greatest among ages **55-64**.



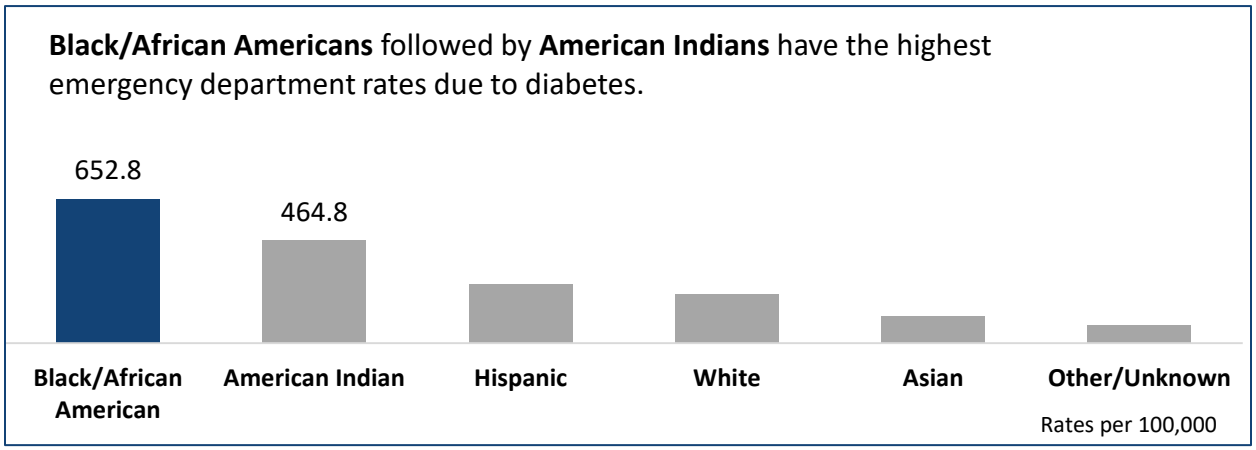
Stress and anxiety levels can lead to challenges maintaining a healthy weight, especially when access to gyms, public spaces, and other recreational facilities are reduced.[xxxvi] Access to safe and clean outdoor space is poignant area of disparity for many communities. Some participants in the COVID-19 impact survey highlighted benefitting from outdoor activities in their neighborhoods and local parks. Other individuals reported not having access to quality outdoor spaces due to neighborhood design, safety concerns, lack of walkable paths, and other factors often related to socio-economic status. A participant from the COVID-19 impact survey shared how the pandemic impacted their health and ability to stay physically active:

> "I gained weight overall through covid because I wasn't able to go outside and exercise."
>
> (*55-64 years old, COVID-19 Impact Survey*)

Diabetes

Diabetes was another chronic health condition selected as a priority issue for SJHMC. Diabetes occurs when the body cannot produce enough insulin or cannot respond appropriately to insulin. Without a properly functioning insulin signaling system, blood glucose levels become elevated and other metabolic abnormalities occur, leading to the development of serious, disabling complications. Diabetes affects an estimated 29.1 million people in the United States and is the 7th leading cause of death.[xxxvii] In 2019, diabetes was ranked sixth for inpatient hospitalization visits, and seventh for emergency department visits in Maricopa County, with Black/African Americans and American Indians having the highest rates for emergency department visits (Figure 5).[lviii]

Figure 5



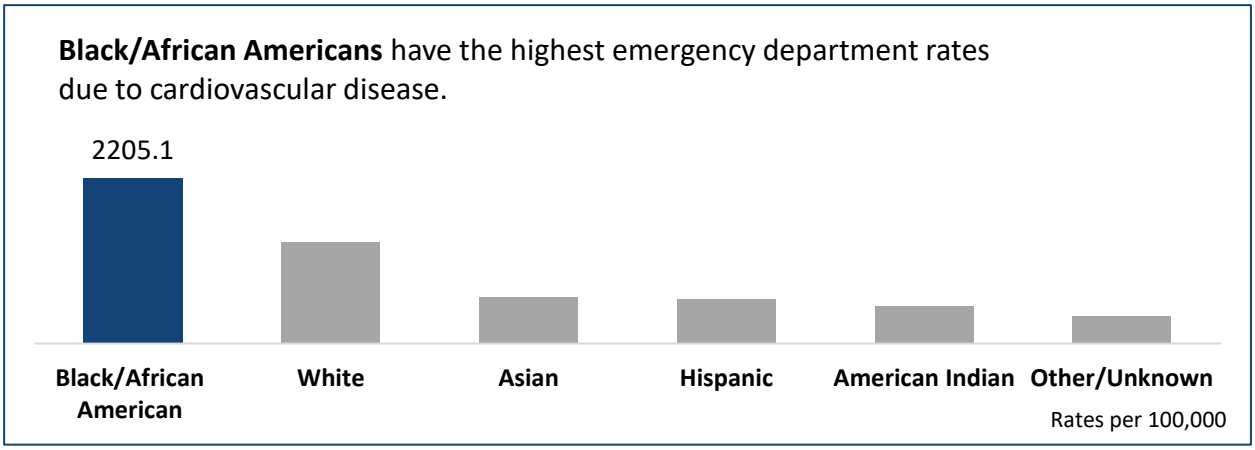
Type 2 diabetes is largely preventable through several lifestyle factors such as staying physically active, maintaining a healthy diet, and monitoring blood sugar. The following participant from the COVID-19 impact survey shared their concern on the prevalence of diabetes in Arizona:

> "…We need to focus on reinforcing healthy eating/lifestyles. Arizona has too much diabetes prone citizens. We must be healthy to ward off illness."
>
> (*55-64 years old, COVID-19 Impact Survey*)

<u>Cardiovascular Disease (CVD)</u>

CVD was selected as a priority issue for SJHMC. Heart disease is the leading cause of death in the United States. Currently more than 1 in 3 adults (85.6 million) live with 1 or more types of cardiovascular disease. The leading modifiable (controllable) risk factors for heart disease and stroke are high blood pressure, high cholesterol, cigarette smoking, diabetes, unhealthy diet, physical inactivity, and overweight and obesity. Addressing risk factors early and consistently can prevent potential complications of chronic cardiovascular disease.[xxxviii] In 2019, CVD was ranked second for inpatient hospitalization visits, and third for emergency department visits in Maricopa County, with Black/African Americans having the highest rate for emergency department visits (Figure 6).[lviii]

Figure 6



Individuals with cardiovascular disease faced higher rates of hospitalization and death due to COVID-19. According to the American Heart Association, nearly one-fourth of those hospitalized with COVID-19 have been diagnosed with cardiovascular complications, which have been shown to contribute to roughly 40% of all COVID-19 related deaths.[xxxix] The following participant from the COVID-19 impact survey shared their experience losing a family member due to COVID-19:

"My wife died in February, 2021, a month after she contracted COVID. The presenting cause was heart trouble which had not previously been a problem. Our cardiologist stated that COVID likely weakened her heart causing her death."

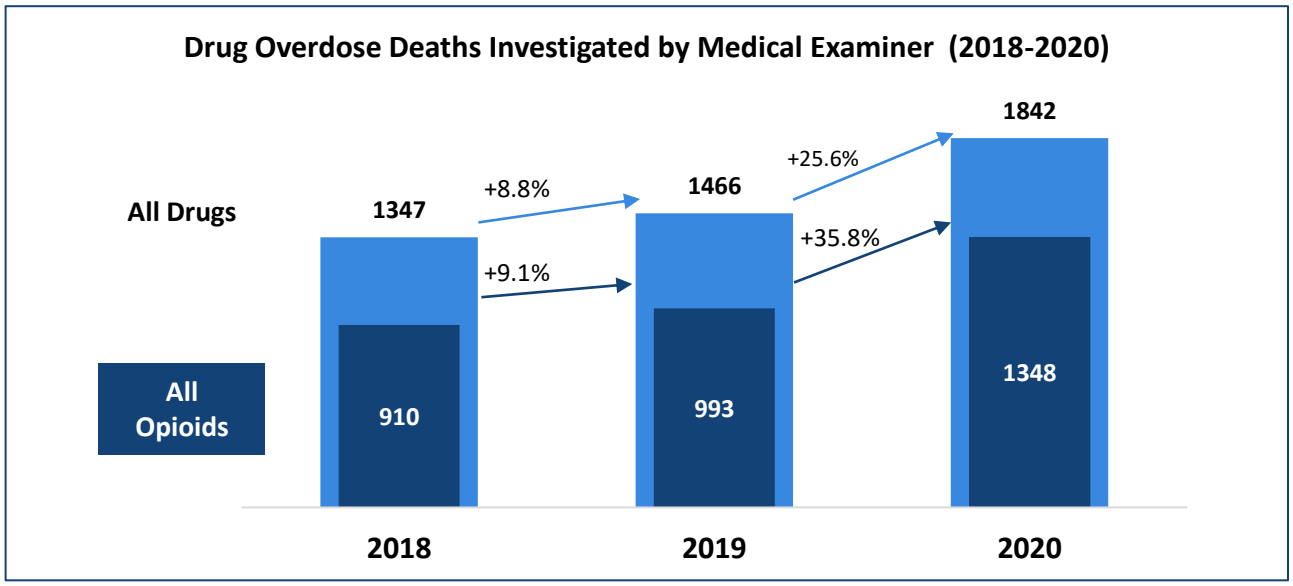
(*75+ years old, COVID-19 Impact Survey*)

Addiction/Substance Abuse

Addiction and substance abuse was selected as one of SJHMC's top priorities. In in 2019, substance overdoses ranked eighth for inpatient hospitalization visits and ninth for emergency department visits. As of 2019, American Indians had the highest death rate for unintentional drug overdoses and the highest alcohol-related hospitalization rate. Adults aged 35-44 had the highest drug overdose death rate and those 55-64 had the highest alcohol-related hospitalization rate. Males experienced higher rates of hospitalization and death due to substance abuse than females.

According to drug overdose deaths investigated by Maricopa's medical examiner, from 2019 to 2020 all drug-related overdoses increased by 25.6% and opioid-related overdoses increased by 35.8%. Fentanyl became an increasingly high proportion of opioid-related overdoses (Figure 7).[xl]

Figure 7



Social isolation and anxiety due to COVID-19 have likely contributed to an increase in substance use and related injuries and death.[xli] Substance use rose as a theme both in COVID-19 impact focus groups and the open-ended portion of the survey. One individual described the negative impact COVID-19 had on their substance use recovery:

"I have been VERY isolated and that is hard on my mental health and my long term recovery from substance abuse (28 years)."

(55-64 years old, COVID-19 Impact Survey)

Many healthcare facilities saw an increase in substance-related visits. The following survey participant shared their experience working on the frontlines of the pandemic and seeing the related health issues:

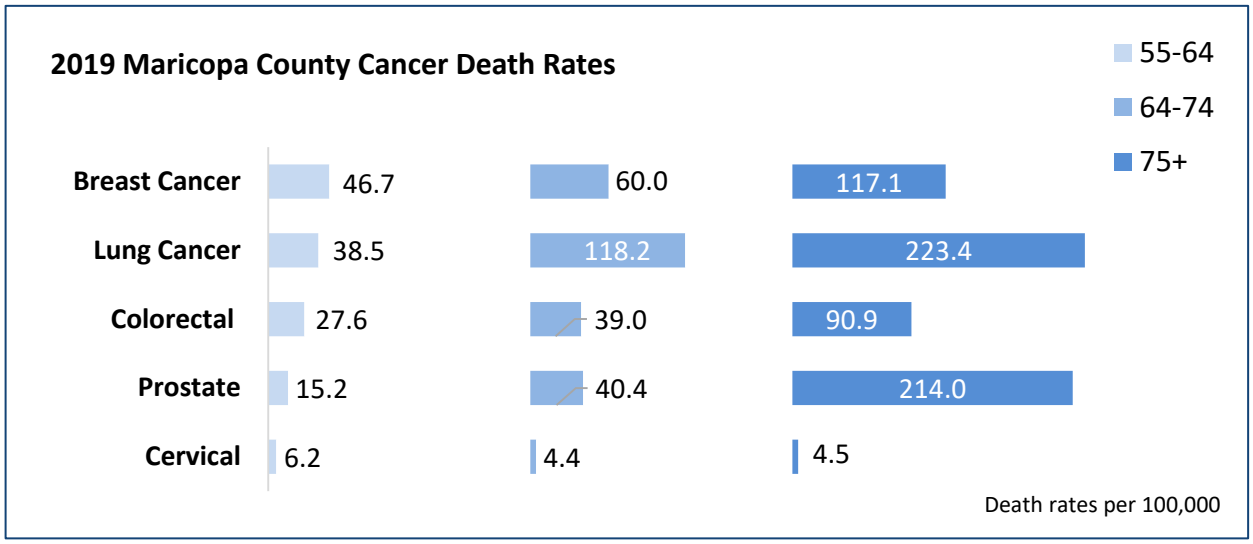
"I am an RN who was working on the COVID unit....We are seeing a lot of drug and alcohol cases- from loss: loss of jobs, families, support. I think we need more help getting people help at home- detoxing safely, outlets etc."

(35-44 years old, COVID-19 Impact Survey)

Cancer

Cancer is a significant health issue facing the population today. Lung cancer is the 5th leading cause of death, and breast cancer the 8th leading cause of death for Maricopa residents.[xlii] Rates of deaths due to cancer increase with age, except for cervical cancer which typically occurs in women 64 and younger. In 2019, lung cancer was the leading type of cancer-related death for individuals 64-75+ (Figure 8).[xlii]

Figure 8



Cancer was selected as a priority issue for SJHMC due to the high rates of incidence among the St. Joe's service area population. COVID-19 has exacerbated cancer-related death and illness. According to a study conducted in 2020, the impact of the COVID-19 pandemic on cancer care in the US has resulted in decreases and delays in identifying new cancer and delivery of treatment. If unmitigated, these problems will increase cancer morbidity and mortality for years to come.[xliii]

Participants in the COVID-19 impact survey shared experiences that reflected the trends seen for delayed cancer screening and care. This participant described how fear of COVID-19 infection and exposure at healthcare clinics led to a family member not receiving their cancer diagnosis early enough to pursue treatment:

> "My mother died of pancreatic cancer because she was scared to go to the doctor in a timely manner. She started experiencing symptoms in March of 2020, and by the time we were able to force her to the doctor when we were finally able to see her, it was too late and she was dead by the end of September 2020."
>
> (*45-54 years old, COVID-19 Impact Survey*)

Individuals with cancer faced even greater risk of COVID-19 infection due to their weakened immune system and underlying conditions. Furthermore, crisis standards of care across the state led to the cancellation of routine treatments and procedures that may have improved cancer patients' chances of recovery. The following participant shares their experience of losing family members both to COVID-19 and to cancer:

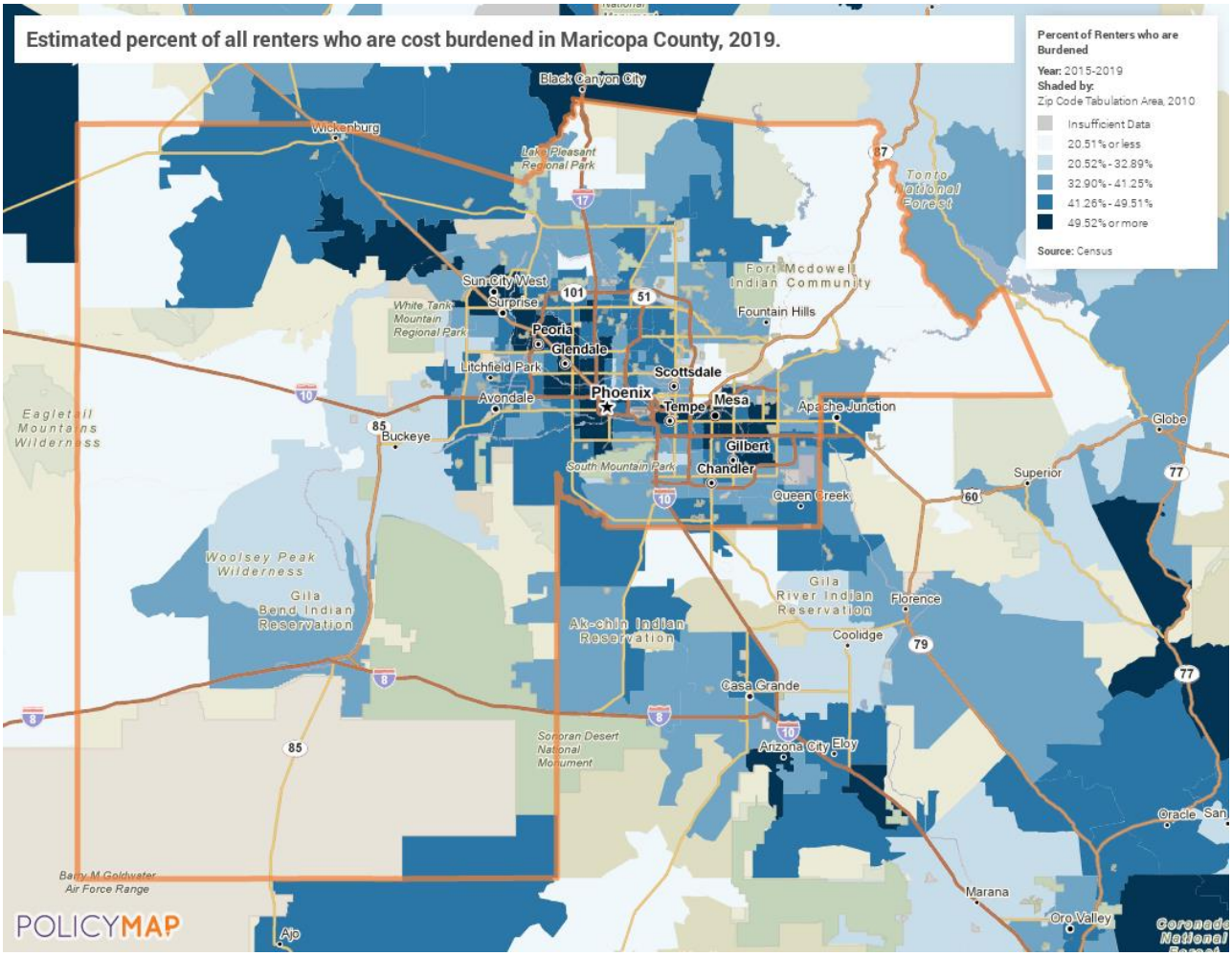
> "I had family 3 members die because of covid. One person is dying now of cancer because they could not get cancer treatment during covid & now it has spread to the point they can't do anything for them. We tried to be careful but work required us to meet with the public."
>
> (*55-64 years old, COVID-19 Impact Survey*)

Affordable Housing/Homelessness

Affordable housing/homelessness was selected as a priority issue for SJHMC. The lack of affordable housing and the limited scale of housing assistance programs contributes to the current housing crisis and to homelessness. High rent burdens, overcrowding, and substandard housing, has increased the number of people without housing and at risk of losing housing.[xliv] In the 2019 community survey, 21.1% of participants indicated lack of affordable housing as one of the issues that had the greatest impact on their community's health and wellness. In the 2021 COVD-19 impact survey, affordable housing was deemed as a more prominent issue with 24.6% of respondents indicating this concern.

Housing and homelessness are issues that have been exacerbated by the pandemic. COVID-19 is widening the racial and economic gaps in access to safe, affordable, and stable housing. In 2019, almost half (45.1%) of renters in Maricopa County were considered cost-burdened, meaning that gross rent is 30% or more of household income (Figure 9).[xlv]

Figure 9



Affordable housing was an issue before COVID-19 and was greatly exacerbated by the pandemic. A participant from the COVID-19 impact survey shared their experience of struggling to pay for rent as a single parent:

> "We need more affordable housing in the valley...I have seen too many people lose their jobs as even before the pandemic they were barely able to pay rent. Rent is way too high even in certain affordable housing apartments. My rent has increase 3 times in 3 years and I live in a affordable housing apartment. Rent is over $900 now and that is tough for a single parent."
>
> (*25-34 years old, COVID-19 Impact Survey*)

Along with the many other burdens of the pandemic, many families had to navigate losing their homes unexpectedly. This participant described their homelessness experience due to the lack of affordable housing on the market:

> "I am currently homeless with my disabled veteran husband and our 7 children because affordable homes are unavailable. We lost our home because our landlord decided to sell while prices were high, and we had no protections because we paid our rent in full and on time. We have been looking for 2 months, and have had no luck. This isn't right."
>
> (*25-34 years old, COVID-19 Impact Survey*)

Access to Healthcare

Access to Care

Access to healthcare has been a longstanding challenge for many communities, and the current COVID-19 pandemic has only exacerbated this issue. Having access to care allows individuals to enter the health care system, find care easily and locally, pay for care, and get their health needs met. Access to affordable, quality health care is important to physical, social, and mental health. Health insurance helps individuals and families access needed primary care, specialists, and emergency care, but does not necessarily ensure access – providers are needed to offer available and affordable care within adequate proximity to patients.[xlvi]

Financial Security

Financial security was selected as a priority issue for SJHMC. Those without insurance, and even those with insurance, have higher out of pocket expenses which can quickly accumulate for individuals with chronic conditions. Many people face barriers that prevent or limit access to needed health care services, which may increase the risk of poor health outcomes and health disparities. Inadequate health insurance coverage is one of the largest barriers to health care access. Out-of-pocket medical care costs may lead individuals to delay or forgo needed care (such as doctor visits, dental care, and medications), and medical debt is common among both insured and uninsured individuals.[xlvii] In the 2021 survey, only 46% of respondents reported that they had not experienced any barriers accessing health care.

The COVID-19 pandemic has shocked the health care system. Since the beginning of the pandemic, visits to primary care physicians and outpatient specialists have declined, and many hospitals have postponed or cancelled elective procedures. Meanwhile, some hospitals have seen a surge in patients and have had to expand capacity and purchase expensive personal protective equipment. These trends have compounded problems in a fragmented health care system that has persistent gaps in access to affordable coverage and care, especially for people of color.[xlviii] According to the CDC's Research and Development Survey (RANDS), nearly 40% of people have reduced access to medical care due to COVID-19, with the

largest age range of 45-64 years to report not receiving planned care.[xlix] Affordability of health care has been and continues to be a long-standing problem faced by many communities. A participant from the COVID-19 impact survey shared their experience with healthcare affordability:

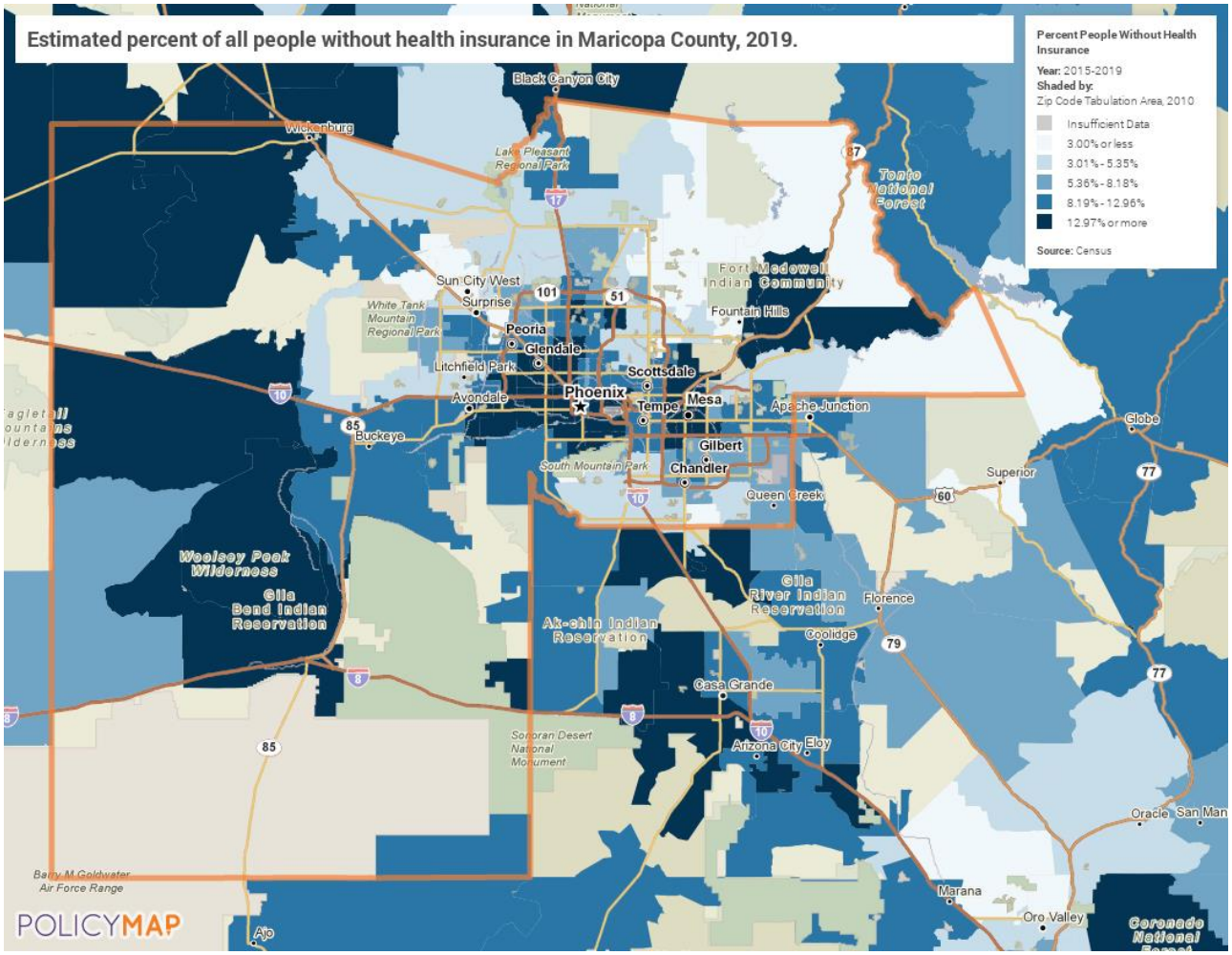
> "Even as someone who has remained employed, at an above average salary, I cannot afford the copays required for frequent doctor visits, let alone dental care and mental health care. I have had many chronic symptoms for months that sound like long covid but just can't afford to get thoroughly checked out."
>
> (*35-44 years old, COVID-19 Impact Survey*)

Another participant from the COVID-19 impact survey shared their positive experience with access to health insurance throughout their unemployment period:

> "I am very grateful for the access to health insurance that I was given when I went on unemployment. That was a lifesaver for me, especially when I contracted covid. I wish Phoenix would create a universal healthcare system with this wonderful insurance."
>
> (*35-44 years old, COVID-19 Impact Survey*)

Uninsured adults are less likely to receive preventive services for chronic conditions such as diabetes, cancer, and cardiovascular disease.[l] In 2019, almost 11% of residents in Maricopa County were uninsured (Figure 10).

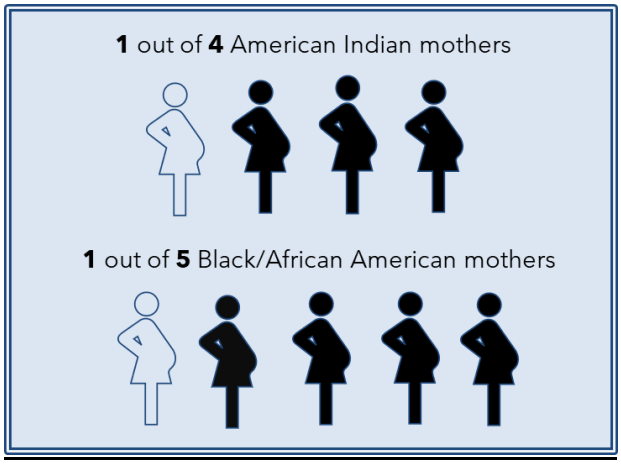
Figure 10



Maternal and Child Health

Maternal and child health was selected as a priority issue for SJHMC. In many communities, women, newborns, and children are the most vulnerable to health problems.[li] Mothers who do not receive the prenatal care that they need or do not have the ability to acquire health care, both for mental and physical, are at an increased risk of experiencing a low-birth weight baby, pre-term delivery, or even infant death. A pre-term baby or a baby born with a low-birth weight is in turn at higher risk for other serious complications. In 2019, Black/African American and American Indian mothers in Maricopa County were most likely to receive inadequate prenatal care (Figure 11).[lii]

Figure 11



According to the CDC, pregnant and recently pregnant women face a higher risk for severe illness from COVID-19 than nonpregnant women.[liii] Pregnant women with COVID-19 face a higher risk for preterm birth and other adverse pregnancy outcomes. For many, potential COVID-19 infections added severe strain to women and families during the pregnancy period and created heightened risk during routine medical care and exposure in hospitals during delivery. One survey respondent described their experience contracting COVID-19 after giving birth:

> "I was pregnant during the pandemic and gave birth [in December 2020]. I was exposed to COVID while in the hospital and became very ill postpartum. I am currently dealing with long COVID."
>
> (*25-34 years old, COVID-19 Impact Survey)*

Along with posing physical health risks, the pandemic reduced the typical social and mental health supports women benefit from during pregnancy and postpartum. Many mothers struggled during the pandemic with the stress of keeping themselves and their children safe, as well as going through pregnancy, birth, and postpartum with limited social support. One mother who responded to the community survey noted that isolation turned what was supposed to be a joyous event into a very stressful and somewhat depressing event.

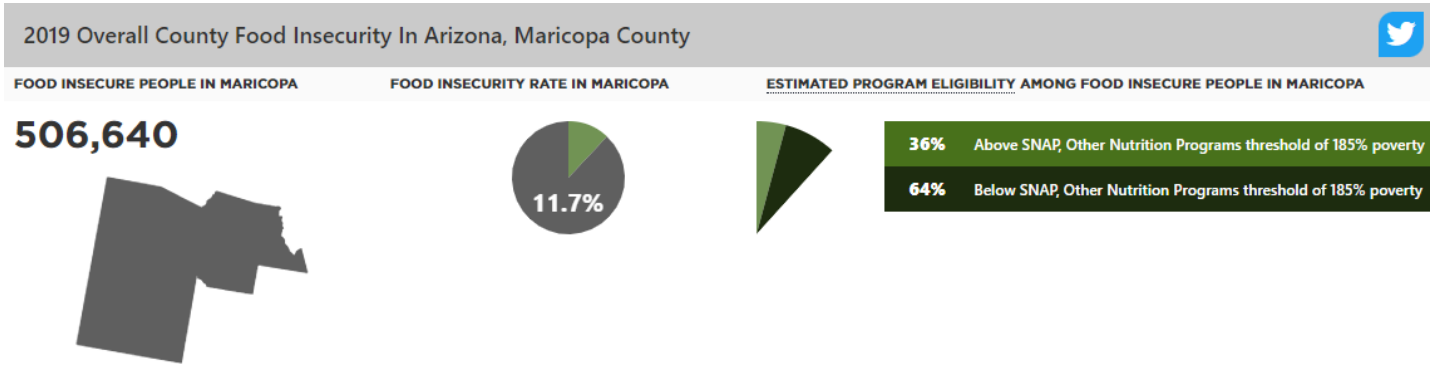
> "Had a baby in April 2020 and navigating that during the pandemic was incredibly stressful. Giving birth, follow-up appointments with pediatrician and only one parent allowed, no support from family...all of this made what was supposed to be a joyous event very stressful and somewhat depressing."
>
> (*35-44 years old, COVID-19 Impact Survey)*

Food Insecurity

Food insecurity was selected as a priority issue for SJHMC, as it continues to be a long-standing concern among many communities. Food insecurity does not exist in isolation, as low-income families are affected by multiple overlapping issues like affordable housing, economic/social disadvantage resulting from structural racism, chronic/acute health problems, high medical expenses, and low wages. COVID-19 has exposed and exacerbated serious disparities in food security due to employment issues, inflated prices, and food system interruptions. In collaboration with the National Food Access and COVID-19 Research Team, Arizona State University's College of Health Solutions surveyed more than 600 households in Arizona from July 1 to August 10, 2020, to get a better understanding of the impact of COVID-19 on food insecurity in Arizona. Some key findings include that almost 1 in 3 (32%) of Arizona households experienced food insecurity since COVID-19 – a 28% increase from the year prior, when the food insecurity rate was 25%. Additionally, about 1 in 8 households bought food on credit (14%), borrowed money from friends and family for food (12%), and/or received food from food pantries (13%) during the pandemic.[liv]

In the 2021 COVD-19 impact survey, almost one-fifth (16.0%) of Maricopa County residents indicated that they sometimes or never had enough money to pay for essentials such as food since March of 2020. To assist with the essential cost of living expenses such as food, a number of Maricopa County residents indicated that since March of 2020 they applied for financial assistance such as Women, Infant, and Children (WIC) (2.0%) and SNAP food stamps (6.4%). Figure 12 displays the number of food insecure people, food insecurity rate, and the estimated program eligibility among food insecure people in Maricopa County.[lv] In 2019, the food insecurity rate in Maricopa County was 11.7% compared to Arizona's rate of 12.6%.[lv]

Figure 12



Food hardships became very evident among many communities, especially throughout the pandemic. The following participant from the COVID-19 impact survey shared their experience about their financial struggle in attaining groceries:

> "During the pandemic due to the lack of money it was difficult to get food in stores, but I want to take a moment to say thank you to the people that donated food to food banks because thanks to them, my family was able to have meals and be able to stretch the money from the food stamps benefits. Thanks very much."
>
> (*25-34 years old, COVID-19 Impact Survey*)

Nutrition assistance also became a barrier for individuals and families as many programs failed to accommodate their needs. This COVID-19 impact survey participant described their challenges in seeking nutrition assistance for their mother:

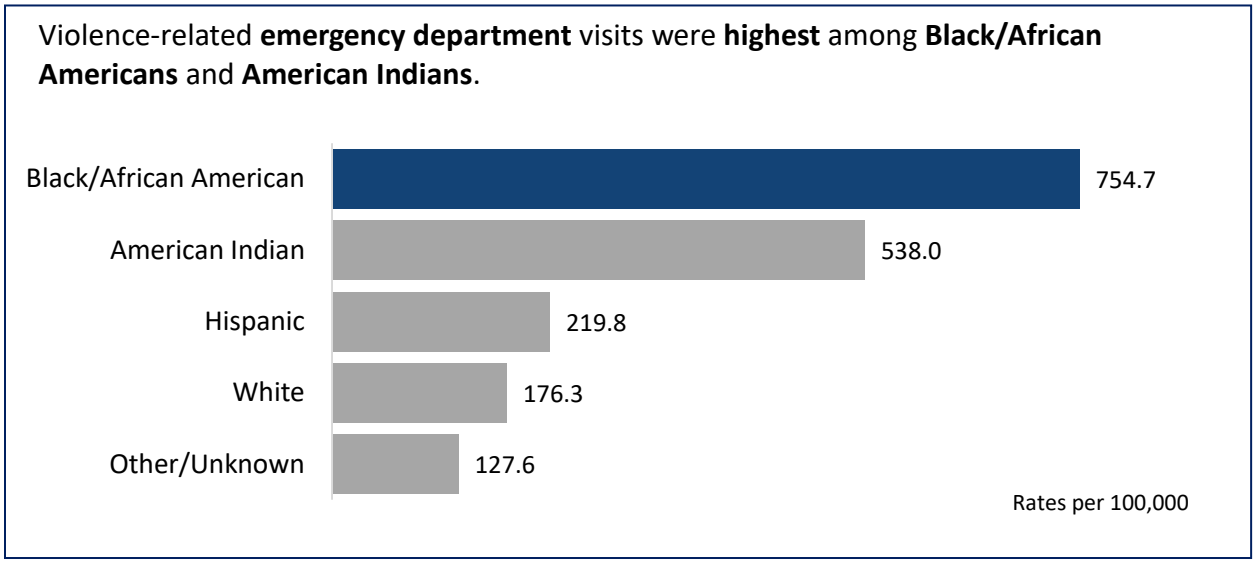
> "The difficulty I have had trying to get government assistance for my elderly mother (82yrs old)… She needs SNAP but doesn't qualify and continually doesn't have money for food at the end of the month."
>
> (*35-44 years old, COVID-19 Impact Survey*)

Safety & Violence: Unintentional Injuries

Safety & Violence

Safety and violence – including unintentional injuries – was selected as a priority issue for SJHMC. Both unintentional injuries and those caused by acts of violence such as intimate partner violence and child maltreatment are among the top leading causes of death of all ages. Most events resulting in injury, disability, or death are predictable and preventable. Beyond their immediate health consequences, injuries and violence have a significant impact on the long-term well-being of individuals, contributing to premature death, disability, poor mental health, high medical expenses, and lost productivity. The effects of injuries and violence extend beyond the injured person or victim of violence to family members, friends, coworkers, employers, and communities.[lvi] Victim violence was ranked seventh in emergency department visits. In 2019, violence-related emergency department visits were highest among Black/African Americans and American Indians (Figure 13).[lviii]

Figure 13



Unintentional injuries, such as falls and motor vehicle crashes, are a major issue in many communities. Accidental injuries can affect anyone, regardless of age, sex, race or socioeconomic background – but can be exacerbated by disparities in safe housing or transportation. Effective recovery often depends on appropriate access to care. Recognizing the social and economic contributors to and burdens of injury and violence is critical to determine the appropriate level of intervention and investment into prevention activities.[lvii] In 2019, falls ranked first in emergency department visits, third in inpatient hospitalization visits, and the tenth leading cause of death in Maricopa County.[lviii] Falls are highest within the younger and older populations. In 2019, rates of emergency department visits due to a motor vehicle crash were highest among teenagers and young adults between the ages of 15-34 in Maricopa County.

COVID-19 has impacted many communities far beyond the obvious physical implications of the disease, and the connections between COVID-19 and injury have become increasingly clear. Social distancing precautions, new sources of stress, and disruptions to daily routines can also take a toll on risk and protective factors related to injury and violence.[lix] A participant in the COVID-19 impact survey shared their family experience that reflected the trends seen for unintentional injuries:

"My father fell and was in a rehab facility where they had Covid -19 patients on a different floor. He got Covid-19 and died. He was healthy in general despite a muscular injury to his thigh."

(*75+ years old, COVID-19 Impact Survey*)

Throughout the pandemic, in addition to the soaring rates of unintentional injuries there has also been an increase in crime and violence. The following participant shared their experience of increased local gang violence and crime in their neighborhood:

> "In the last 3 months, local gang violence and crime has increased in our neighborhood. People drive crazy and there have been several accidents. We have had shootings as well. The area around 83 Ave. and Indian School/ Camelback is very concerning."
>
> (*45-54 years old, COVID-19 Impact Survey*)

Resources Potentially Available to Address Needs

Resources potentially available to address identified needs include services and program available through hospital, government agencies, and community-based organizations. Resources include access to hospital emergency and acute services. Federally Qualified Health Centers (FQHCs), food banks, homeless shelter, faith communities, transportation services, health navigators, and prevention-based community education.

Community Resources

The following community organizations have resources potentially available to address the identified significant health needs. SJHMC partners with several of these organizations to provide connected care to the Maricopa County community. A complete list of resources potentially available can be found in Appendix G.

Health Need	Resources Potentially Available
Access to Care • **Financial Security** • **Maternal and Child Health**	• Chicanos Por La Causa / Keogh Health Connection - Enrollment Specialists, Social Services, Economic Development • Foundation for Senior Living - hospital discharge transition • Mission of Mercy - mobile clinic • Mountain Park Health Center - access to healthcare • Adelante Healthcare - access to healthcare
Affordable Housing / Homelessness	• Chicanos Por La Causa - Housing • Maggie's Place • Central Arizona Shelter Services (CASS) - Homeless Shelter • Phoenix Rescue Mission - Homelessness • Circle the City - Respite Care, Homelessness
Food Insecurity	• St. Mary's Food Bank - Food Boxes • St. Vincent de Paul - Food Boxes, Food Pantry • Creighton Community Foundation - food boxes, community gardens, food and nutrition projects • Phoenix Rescue Mission - Food Bank • Diana Gregory Outreach Services Foundation - mobile produce market

Safety & Violence • **Unintentional Injuries**	• Phoenix Dream Center - Human Trafficking • Streetlight USA - Human Trafficking • A New Leaf - Domestic Violence • The Faithful City - Domestic Violence, Trafficking • Jewish Family & Children's Service - Domestic Violence
Mental Health	• Phoenix Indian Center - mental health services • Human Services Campus - mental health • Native American Connection - behavioral health
Chronic Health Conditions: • **Obesity** • **Diabetes** • **Cardiovascular Disease**	• Healthier Living Program - Chronic Disease Education Program, Cooking Class • American Diabetes Association - Diabetes Education and Support • Arizona Diabetes Foundation - Education Programs
Addiction / Substance Abuse	• Phoenix Indian Center - substance abuse • Tempe Community Action Agency - Substance Abuse Treatment • Jewish Family & Children's Service - Substance Abuse Counseling • Hushabye Nursery - Substance exposed babies and mothers
Cancer	• Cancer Support Community of Arizona - Cancer Resource Navigator, access to care • American Cancer Society

Hospital Resources

The following hospital programs have resources potentially available to address the identified significant health needs. SJHMC partners with various hospital departments to provide connected care to the Maricopa County community. A complete list of resources potentially available can be found in Appendix G.

Health Need	Hospital Resource
Access to Healthcare	• MOMobile • Financial Assistance Committee • Transportation Services (Lyft) • NaviHealth (community referrals) • 2MATCH • Docent Health • Keogh enrollment specialist • Cancer patient navigator • Homeless patient navigator • CATCH (Internal Medicine Clinic) • ACTIVATE & Kindness Closet • Mission of Mercy (primary care to uninsured)

Mental / Behavioral Health	• Prenatal & Parenting classes
	• Community Medical Services
	• Community Partnerships (Contracted or Community Grant)
	  ○ Y-VIPP
	  ○ Smooth Way Home

Chronic Disease	• Healthier Living with Chronic Conditions / Tomando Control de tu Salud • Diabetes Empowerment Education Program • Muhammed Ali Parkinson's Center Programs
Cancer	• Patient Navigator (American Cancer Society) • Lifestyle management workshops • Medication assistance • Support groups • Transportation support • SJHMC Cancer patient navigator (Cancer Support Community of Arizona)
Housing and Homelessness	• Homeless Initiative • 2MATCH • Homeless patient navigator • Circle the City partnership for medical respite • Coordinated Hospital Discharge and Diversion Program • Dignity Health Investments

	○ Chicanos Por La Causa ○ Foundation for Senior Living ○ Housing Solutions of Northern Arizona ○ Native American Connections ○ Arizona Community Foundation
Safety and Violence	• Stop the Bleed • Balance Masters • Wake up! Youth Program • Human Trafficking Taskforce • Barrow – Baseline Concussion Testing • Barrow – Brainbook • Barrow – Health professions education (concussion education for athletic trainers) • Barrow – Concussion telemed • Youth Violence Intervention and Prevention Program (Y-VIPP)

Impact of Actions Taken since the Preceding CHNA

From fiscal year 2019 through the fiscal year 2021, Dignity Health, St. Joseph's Hospital and Medical Center provided $488,164,212 in patient financial assistance, unreimbursed costs of Medicaid, community health improvement services, and other benefits. The hospital also incurred $396,456,942 in unreimbursed costs of caring for patients covered by Medicare. The number of persons served through financial assistance and other community health and benefit services over the last three years further demonstrates the impact St. Joseph's Hospital and Medical Center has had in the community. Over 70,500 people received financial assistance and 399,760 people received care resulting in unreimbursed costs of Medicaid. In addition, approximately 379,333 people were served through other community health services.

In 2017, Dignity Health's St. Joseph's Hospital and Medical Center received a five-year grant from the Center for Medicare and Medicaid Services (CMS) to implement the Accountable Health Communities Model (AHC). SJHMC named this program To Match and Align Through Community Hubs (2MATCH). 2MATCH addresses the health-related social needs of Medicare and Medicaid beneficiaries within St. Joseph's Hospital and 12 internal and external clinical sites.

The AHC model centers on emerging evidence that addressing health-related social needs through enhanced clinical-community linkages can improve health outcomes and reduce costs. Unmet health-related social needs, such as food insecurity, inadequate or unstable housing, may increase the risk of developing chronic conditions, reduce an individual's ability to manage these conditions, increase health care costs, and lead to avoidable healthcare utilization.

2MATCH conducted systematic health-related social determinants of health screenings of Medicaid and Medicare beneficiaries who received care at St. Joseph's Hospital and Medical Center. Since 2018, the twelve 2MATCH Clinical Delivery Sites screened 22,533 Medicaid and/or Medicare beneficiaries for social needs and provided navigation services to at least 3,829 high-risk beneficiaries who reported that they had visited and received care at an emergency room at least twice over the past 12 months and had at least one or more social needs: food insecurity, housing instability, transportation, utility assistance and exposure to violence.

Below is a listing of key community benefit programs that also had impact since the preceding CHNA.

- MOMobile
- Financial Assistance Committee
- Transportation Services
- NaviHealth
- 2MATCH
- Docent Health
- Keogh enrollment specialist
- Cancer patient navigator
- CATCH Program
- ACTIVATE & Kindness Closet
- Mission of Mercy
- Prenatal & Parenting classes
- Community Medical Services
- Y-VIPP
- Smooth Way Home
- Healthier Living with Chronic Conditions / Tomando Control de tu Salud
- Diabetes Empowerment Education Program
- Muhammed Ali Parkinson's Center Programs

- Improving the Health of Uninsured Patients with Diabetes
- Viva! A Family Centered Obesity and Diabetes Prevention Program
- SJHMC Cancer patient navigator
- Lifestyle management workshops
- Medication assistance
- Support groups
- Homeless patient navigator
- Circle the City
- Coordinated Hospital Discharge and Diversion Program
- Stop the Bleed
- Balance Masters
- Wake Up! Youth Program
- Human Trafficking Taskforce
- Barrow – Baseline Concussion Testing
- Barrow – Brainbook
- Barrow – Health Professions education
- Barrow – Concussion Telemed

Appendices

The appendix includes the following documents:

Appendix A
2019 & 2021 Focus Group Discussion Schedules

Appendix B
2019 CHNA Focus Group Questions
2021 COVID-19 Focus Group Questions
2019 CHNA Survey Questions
2021 COVID-19 Impact Survey Questions

Appendix C
2019 & 2021 Community Survey Demographics

Appendix D
Maricopa County Zip Codes

Appendix E
Top Health Indicators Disparities in Maricopa County

Appendix F
List of Participating Organizations in the CBHEC and HEA Meetings

Appendix G
Resources Potentially Available

Appendix H
Data Indicator Matrix

Appendix I
References

Appendix A – Focus Group Discussion Schedule

2019 Focus Group Schedule

Cycle 1

Date	Time	Population	Location
4/8 (Mon.)	6:00pm – 8:00pm	Native American Adult Males [n = 8]	**Native American Fatherhood & Families Association** (460 N. Mesa Dr, Suite 115, Mesa, AZ)
4/16 (Tues.)	10:00am – 12:00pm	Homeless Males over 60 [n = 10]	**St. Vincent de Paul** (420 W. Watkins Rd., Phoenix, AZ)
4/17 (Wed.) & 5/16 (Thurs.)	6:00pm -8:00pm & 5:30pm–7:30pm	Native American Adults [n = 17]	**Mesa Public Schools** (1025 N. Country Club, Mesa, AZ) & **Native Health (East Valley)** (777 W. Southern Ave., Building C, Mesa, AZ)
4/18 (Thurs.)	10:30am - 12:30pm	Homeless Women with Children [n = 15]	**UMOM** (3333 E. Van Buren St., Phoenix, AZ)
4/18 (Tues.)	5:30pm - 7:30pm	African American Males [n = 7]	**Hatton Hall** (34 E. 7th St., Tempe, AZ)
4/23 (Tues.)	4:30pm - 6:30pm	LGBTQI Adults [n = 7]	**Southwest Center for HIV/AIDS (Parson's Center)** (1101 N. Central Ave, Phoenix, AZ)
4/24 (Wed.)	6:00pm – 8:00pm	Homeless Youth (14-21) [n = 7]	**Native American Connections/HomeBase** (931 E. Devonshire, Phoenix, AZ)
4/25 (Thurs.)	12:30pm- 2:30pm	Adults over 60 (New Retirees) [n = 13]	**Ahwatukee Foothills Family YMCA** (1030 E. Liberty Lane, Phoenix, AZ)
4/26 (Fri.)	10:30am- 12:30pm	New Parents [n = 7]	**Adelante Healthcare – WIC Office** (1705 W. Main St., Mesa, AZ)
4/27 (Sat.)	10:30am- 12:30pm	Homeless Veterans [n = 15]	**MANA House** (2422 W. Holly St., Phoenix, AZ)
4/29 (Mon.)	6:00pm - 8:00pm	Parents of Children with Special Health Needs [n = 9]	**Ignacio Conchos Elementary School** (1718 W. Vineyard Rd., Phoenix, AZ)
4/30 (Tues.)	6:00pm - 8:00pm	Parents of Children with Special Health Needs [SPANISH; n = 7]	**Ignacio Conchos Elementary School** (1718 W. Vineyard Rd., Phoenix, AZ)
5/4 (Sat.)	10:30am – 12:30pm	Filipino Adults [n = 8]	**Chandler Community Center** (125 E. Commonwealth Ave., Chandler, AZ)
5/14 (Tues.)	5:30pm - 7:30pm	Veterans [n = 7]	**Tanner Community Development Corporation** (700 E. Jefferson St., Phoenix, AZ)
5/16 (Wed.)	8:30am- 10:30am	New Parents [SPANISH; n = 11]	**Moon Mountain Elementary School** (13425 N. 19th Ave, Phoenix, AZ)

Cycle 2

Date	Time	Population	Location
4/8 (Mon.)	6:00pm – 8:00pm	Native American Adult Males [n = 8]	**Native American Fatherhood & Families Association** (460 N. Mesa Dr, Suite 115, Mesa)
4/16 (Tues.)	10:00am – 12:00pm	Homeless Males over 60 [n = 10]	**St. Vincent de Paul** (420 W. Watkins Rd., Phoenix)
4/17 (Wed.) & 5/16 (Thurs.)	6:00pm -8:00pm & 5:30pm–7:30pm	Native American Adults [n = 17]	**Mesa Public Schools** (1025 N. Country Club, Mesa, AZ) & **Native Health (East Valley)** (777 W. Southern Ave., Mesa)
4/18 (Thurs.)	10:30am - 12:30pm	Homeless Women with Children [n = 15]	**UMOM** (3333 E. Van Buren St., Phoenix)
4/18 (Tues.)	5:30pm - 7:30pm	African American Males [n = 7]	**Hatton Hall** (34 E. 7th St., Tempe)
4/23 (Tues.)	4:30pm - 6:30pm	LGBTQI Adults [n = 7]	**Southwest Center for HIV/AIDS (Parson's Center)** (1101 N. Central Ave, Phoenix)
4/24 (Wed.)	6:00pm – 8:00pm	Homeless Youth (14-21) [n = 7]	**Native American Connections/HomeBase** (931 E. Devonshire, Phoenix, AZ)
4/25 (Thurs.)	12:30pm- 2:30pm	Adults over 60 (New Retirees) [n = 13]	**Ahwatukee Foothills Family YMCA** (1030 E. Liberty Lane, Phoenix)
4/26 (Fri.)	10:30am- 12:30pm	New Parents [n = 7]	**Adelante Healthcare – WIC Office** (1705 W. Main St., Mesa)
4/27 (Sat.)	10:30am- 12:30pm	Homeless Veterans [n = 15]	**MANA House** (2422 W. Holly St., Phoenix, AZ)
4/29 (Mon.)	6:00pm - 8:00pm	Parents of Children with Special Health Needs [n = 9]	**Ignacio Conchos Elementary School** (1718 W. Vineyard Rd., Phoenix, AZ)
4/30 (Tues.)	6:00pm - 8:00pm	Parents of Children with Special Health Needs [SPANISH; n = 7]	**Ignacio Conchos Elementary School** (1718 W. Vineyard Rd., Phoenix, AZ)
5/4 (Sat.)	10:30am – 12:30pm	Filipino Adults [n = 8]	**Chandler Community Center** (125 E. Commonwealth Ave., Chandler, AZ)
5/14 (Tues.)	5:30pm - 7:30pm	Veterans [n = 7]	**Tanner Community Development Corporation** (700 E. Jefferson St., Phoenix, AZ)
5/16 (Wed.)	8:30am- 10:30am	New Parents [SPANISH; n = 11]	**Moon Mountain Elementary School** (13425 N. 19th Ave, Phoenix, AZ)

Cycle 3

Date	Time	Population	Location
10/16 (Wed.)	1:00 pm – 3:00 pm	Native Americans - Young adults (19-24)	**ASU Discovery Hall** 250 E Lemon St. Tempe 85281
10/17 (Thurs.)	10:00 am – 12:00 pm	Immigrants/Refugee/Asylum Seekers - Congolese	**IRC** 4425 W Olive #400 Glendale 85302
10/17 (Thurs.)	1:30 pm – 3:30 pm	Asian Americans - South and southeast Asia [n = 29]	**Asian Pacific Community in Action-IACRF Hall** 2809 W Maryland Phoenix 85017
10/22 (Tues)	4:00 pm – 6:00 pm	LGBTQ - Young adults (19-24)	**One.n.ten** 931 #202 Phoenix 85004
10/28 (Mon.)	11:00 am – 1:00 pm	Homeless - Young adults (19-24)	**Homebase** 931 E Devonshire Phoenix 85014
11/1 (Sat.)	1:00 pm – 3:00 pm	Youth Focus Groups (14 - 18) - African Americans 1	**Ironwood Library** 4333 E Chandler Phoenix 85048
11/5 (Tues.)	10:00 am – 12:00 pm	Adults over 65 - Hispanic/Latino [n = 6]	**Gila Bend Family Resource Center** 303 E Pima St, Gila Bend, AZ 85337
11/6 (Wed.)	5:30 pm – 7:30 pm	People Living with Special Healthcare Needs - Parents/caregivers	**Sunset Library** 4930 W Ray, Chandler
11/7 (Thurs.)	12:00 pm – 2:00 pm	Adults over 65 - African Americans [n = 12]	**Muriel Smith Center** 2230 W Roeser Rd, Phoenix 85041
11/7 (Thurs.)	5:00 pm – 7:00 pm	African Americans- Young adults (19-24) [n = 4]	**Muriel Smith Center** 2230 W Roeser Rd, Phoenix 85041
11/12 (Wed.)	5:00 pm – 7:00 pm	Youth Focus Groups (14-18) - Homeless	**UMOM** 2344 E Earll Drive
11/13 (Wed.)	8:30 am – 10:30 am	Youth Focus Groups (14 - 18) - Hispanic	**Natalie's room North High School** 1101 E Thomas Phoenix 85014
11/13 (Wed.)	4:00 pm – 6:00 pm	People who have been previously incarcerated – combined	**Black Canyon building** 2445 W Indianola
11/13 (Wed.)	5:00 pm – 7:00 pm	Youth Focus Groups (14 - 18) - Native American	**Seewa Tomteme Community Center** 8066 S Avenida del Yaqui Guadalupe 85283

2021 Focus Group Schedule

FG#	Date	Region	Group (Location/provider)	Number
1	2/16/2021	SE	I-HELP Chandler	8
2	2/17/2021	Central	Native Health- Phoenix	8
3	2/18/2021	NE	Paiute - South Scottsdale	4
4	2/18/2021	SE	Native Health - Mesa	5
5	2/25/2021	NW	Sun Health - NW Valley	5
6	3/02/2021	NW	Sun Health - NW Valley	5
7	3/10/2021	South Central	South Mountain	6
8	3/12/2021	NW	Family Resource Center –English	6
9	3/19/2021	NW	Family Resource Center-Spanish	5
10	3/24/2021	SW	Gila Bend - English	8
11	3/26/2021	SW	Gila Bend - Spanish	6
12	3/29/2021	NE	Paiute, S. Scottsdale – Spanish - 9am	8
13	3/29/2021	NE	Paiute, S. Scottsdale – Spanish -11:30	6
14	3/30/2021	South Central	South Phoenix (AA/Black)	6
15	4/07/2021	SE	Gilbert - AZCEND Moms Club Gilbert	6
16	4/26/2021	South Central	S Phoenix Young Parents	5
17	5/10/2021	SE	African American/Black Women 85048	5
18	5/12/2021	South Central	Parents w/minors living home 85041	4
19	5/14/2021	*	Asian Americans 65+	8
20	5/16/2021	NW	Parents of Young Children 85086	4
21	5/17/2021	*	Hispanic/Latino Men	6
22	5/17/2021	*	Asian Americans	7
23	5/20/2021	*	Racial/Ethnic Minority Young Adults	7
24	5/27/2021	*	Guadalupe	6
25	6/01/2021	*	LGBTQIA+ Community Members	3
26	6/02/2021	*	Veterans	5
27	6/04/2021	*	Parents with Young Children	8
28	6/07/2021	*	Expectant Mothers & Parents of Young Children	5
29	6/08/2021	*	Young Adults	5
30	6/09/2021	*	Seniors & Veterans	2
31	6/11/2021	*	Central Phoenix residents	10
32	6/14/2021	*	Immigrants - Spanish	4
33	6/14/2021	*	Refugees - Advocates	4
Total Participants				186

* Community members participated from various regions of Maricopa County

Appendix B – Primary Data Collection Tools

2019 Coordinated Community Health Needs Assessment Focus Group Questions

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

Opening Question (5 minutes)

To begin, why don't we go around the table and say your name (or whatever you would like us to call you) and what community event brings everybody out? (such as: festival, school play, sporting event, parade; what brings all the people together for fun)

General Community Questions (15 minutes)

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

1. What does quality of life mean to you?
2. What makes a community healthy?
3. When thinking about health, what are the greatest strengths in your community?
4. What makes people in the community healthy?
    a. Why are these people healthier than those who have (or experience) poor health?

Community Health Concerns (15 minutes)

Next, let's discuss any health issues you have in your community.

5. What do you believe are the 2-3 most important issues that should be addressed to improve health in your community?

    [Prompt – ask this if it does not come up naturally]

    i. What are the biggest health problems/conditions in your community?
    ii. Do other communities in this area have the same health problems?

6. A) What makes it hard to access healthcare for people in your community?

    [Prompt – ask this if it does not come up naturally]

    i. Are there any cost issues that keep you from caring for your health? (such as copays or high-deductible insurance plans)
    ii. If you are uninsured, do you experience any barriers to becoming insured?

iii. If you do not regularly seek care, are there provider concerns that keep you from caring for your health? (prompt – ask if there are concerns about providers not identifying with them)

B) How do these barriers affect the health of your community? Your family? Children? You?

7. For this question, think about the last year. Was there a time when you or someone in your family needed to see a doctor but could not? Did anything keep you from going?

Community Health Recommendations (15 minutes)

As the experts in your community, I would like to spend this final part of the focus group discussion talking about your ideas to improve community health.

8. What are some ideas you have to help your community get or stay healthy? To improve the health and quality of life?

9. A) What else do you (your family, your children) need to maintain or improve your health?

   [Prompt – ask this if it does not come up naturally]

   i. Services, support or information to manage a chronic condition or change health behaviors such as smoking, eating habits, physical activity, or substance use
   ii. Preventative services such as flu shots, screenings or immunizations
   iii. Specialty healthcare services or providers (such as heart doctors or dermatologists)

   B) What health services do you or your family need that aren't in your community?

10. What resources does your community have/use to improve your health?

    [Prompt – ask this if it does not come up naturally]

    i. Why do you use these particular services or supports?

Ending Question (5 minutes)

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

Facilitator Summary & Closing Comments (5-10 minutes)

Let's take a few minutes to reflect on responses you provided today. We will review the notes we took and the themes we observed. This is your opportunity to clarify your thoughts or to provide alternative responses. [Co-facilitator provides a brief summary of responses for each of the questions or asks clarifying questions if she thinks she may have missed something.]

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

2021 COVID-19 Focus Group Questions

A. Information about COVID-19
Let's start our conversation about how COVID-19 has affected you and your family.

1. How has COVID-19 affected you and your family?
2. What do people close to you (e.g., your family/friends) say about the COVID-19 vaccine?
    a. What about your neighbors? Faith/religious leaders or faith community?
    b. PROBE: And what about schools (if applicable)? Colleagues? Employers? Medical professionals? How has COVID-19 affected you differently because of your race or ethnicity?
3. Where have you seen information about the COVID-19 vaccine?
    a. PROBE: Word of mouth? TV? Radio? Social media (e.g., Facebook, Twitter, text message sources)? Online sources?
    b. Where are some places you've noticed health messages in general?
        i. PROBE: Grocery store? Shopping stores (e.g., Walmart, Costco, Walgreens, CVS)? Doctor's office? Health clinic? Community/faith-based organization? Other?
    c. What kind of messaging are you seeing? What do you think of these messages? Do you think they reach Arizona's communities?
4. Who do you trust and/or rely on information or updates about the COVID-19 vaccine?
    a. PROBE: Why do you trust this person/s?
    b. PROBE: Who don't you trust? Why?
5. Is there anything about COVID-19 or vaccine that you want to know more about?
    a. PROBE: Why would you like to know this information?
    b. PROBE: How would you like to receive this information?
    c. PROBE: Language preference? Radio? TV? Pamphlets?
6. Where do you usually go to get health care or for your health needs?
    a. PROBE: Urgent care? Hospital/ER? Clinic? Telehealth?
7. What thoughts do you have on preventing COVID-19?
    a. Where did you get that information?

B. Intent to get vaccinated against COVID-19

The following questions are about your intentions to get vaccinated against COVID-19 when a vaccine becomes available to the general public.

1. What do you think about a COVID-19 (Pfizer vaccine? Moderna? Johnson & Johnson)?
    a. PROBE: What are some reasons you think that (about each)?
2. What are some reasons why you and/or your family did/ would get vaccinated for COVID-19?
    a. PROBE: Where would you go?
3. What concerns do you have about getting vaccinated for COVID-19?
    a. **NOTE: List concerns and probe – ex. "I don't know what is in the vaccine?" ASK: What do you think is in it? What have you heard?
    b. PROBE: What concerns do you have about elders getting vaccinated for COVID19? Children?
4. In your opinion, what barriers do you think there may be to get vaccinated against COVID-19 (e.g., cost)?
   PROBE: perhaps you've already had the vaccine?
5. What challenges do you, your family, and/or your community have in getting the COVID19 vaccine?

C. Communication and Messaging

Now let's discuss communication about COVID-19 and messaging.

1. What information would your reluctant family/friends need before getting the vaccine?
2. What are some ways we can communicate updates on "COVID-19 vaccines and research information" specifically to [BLACK, INDIGENOUS, HISPANIC/LATINO] communities?
    a. PROBE: What are some things that may work?
3. What ways could community leaders build and maintain trust with your community [or BLACK, INDIGENOUS, HISPANIC/LATINO] communities?
4. What kind of messaging would you or your community need to know the vaccine is safe?
5. Do you think COVID has affected different groups of people differently? (Why do you think this is and how do you think we could we improve this situation?)

D. FINAL WRAP UP QUESTION

1. At this time, what do you and your family need to maintain or improve your health?
2. Is there anything else related to the topics we discussed today that you think I should know that I didn't ask or that you have not yet shared?

2019 Maricopa County Community Health Needs Assessment Survey

The purpose of this brief survey is to get your opinion about issues related to community health and quality of life here in Maricopa County. Information collected in this survey will be kept confidential and used only in combination with others participating in the survey. No personal identifying information will be collected. Your feedback will be used to help guide future community health improvement planning efforts. Thank you for supporting your community. This survey should take about 10 minutes. If you have questions about the survey or need it provided in an alternative format, please visit http://www.MaricopaHealthMatters.org.

In this survey, "community" is defined as the areas where you work, live, learn and/or play.

1. **In general, how would you rate your physical health?**

   Poor Fair Good Very Good Excellent

2. **How would you rate your mental health, including your mood, stress level, and your ability to think?**

   Poor Fair Good Very Good Excellent

3. **How often are you able to get the services you need to maintain your mental health?**

   Never Sometimes Always

4. **On a monthly basis, do you have enough money to pay for essentials such as food, clothing and housing?**

   Never Sometimes Always

5. **In your community, do people trust one another and look out for one another?**

   Never Sometimes Always

6. **On a monthly basis, do you have enough money to pay for health care expenses (e.g. doctor bills, medications, etc.)?**

   Never Sometimes Always

7. **How do you pay for your health care (including medications, dental and health treatments)? (Check all that apply.)**

☐ Health insurance purchased on my	☐ Health insurance purchased/provided through employer	☐ I do not use health care services	☐ Indian Health Services

own or by family member			
☐ Medicaid/AHCCCS	☐ Medicare	☐ Travel to a different country to afford health care	☐ Use free clinics
☐ Use my own money (out of pocket)	☐ Veterans Administration	☐ Other: _____	

8. **What are the biggest barriers to accessing healthcare in your community? (Check up to 3.)**

☐ Childcare	☐ Difficulty finding the right provider for my care	☐ Distance to provider	☐ Inconvenient office hours
☐ No health insurance coverage	☐ Not enough health insurance coverage	☐ Transportation to appointments	☐ Understanding of language, culture, or sexual orientation differences
☐ Other: _____			

9. **What are the greatest strengths of your community? (Check all that apply.)**

☐ Ability to communicate with city/town leadership and feel that my voice is heard	☐ Accepting of diverse residents and cultures	☐ Access to affordable after school activities	☐ Access to affordable childcare
☐ Access to affordable healthy foods	☐ Access to affordable housing	☐ Access to community classes and trainings	☐ Access to cultural events
☐ Access to fitness programs	☐ Access to good schools	☐ Access to jobs & healthy economy	☐ Access to medical care
☐ Access to mental health services	☐ Access to parks and recreation sites	☐ Access to public libraries and community centers	☐ Access to public transportation

☐ Access to religious or spiritual events	☐ Access to safe walking and biking routes	☐ Access to services for seniors	☐ Access to social services for residents in need or crisis
☐ Access to substsance abuse treatment services	☐ Access to support networks such as neighbors, friends, and family	☐ Clean environment and streets	☐ Good place to raise children
☐ Low crime/safe neighborhoods	☐ Other: _____		

10. **Which health conditions have the greatest impact on your community's overall health and wellness? (Check up to 5.)**

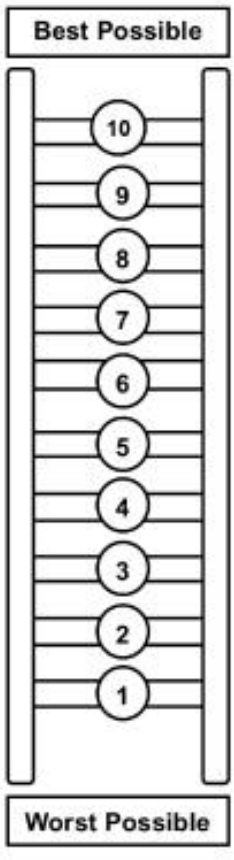
☐ Alcohol/Substance abuse	☐ Anorexia/bulimia and other eating disorders	☐ Arthritis	☐ Autism
☐ Cancers	☐ Chronic stress	☐ Chronic pain	☐ Dementia/Alzheimer's
☐ Dental problems (oral health)	☐ Diabetes	☐ Food allergies/anaphylaxis	☐ Heart disease and stroke
☐ High blood pressure or cholesterol	☐ HIV/AIDS	☐ Lung disease (asthma, COPD, emphysema)	☐ Vaccine preventable diseases such as flu, measles, and pertussis (whooping cough)
☐ Mental health issues (depression, anxiety, bipolar, etc.)	☐ Overweight/obesity	☐ Sexually transmitted diseases	☐ Suicide
☐ Tobacco use including vaping	☐ Other: _____	☐	☐

11. **Which <u>issues</u> have the greatest impact on your community's health and wellness? (Check up to 5.)**

☐ Bullying/peer pressure	☐ Child abuse/neglect	☐ Distracted driving (such as cell phone use, texting while driving)	☐ Domestic violence
☐ Dropping out of school	☐ Elder abuse/neglect	☐ Gang-related violence	☐ Gun-related injuries

☐ Homelessness	☐ Homicide (murder)	☐ Illegal drug use	☐ Limited access to healthcare
☐ Lack of affordable healthy food options	☐ Lack of affordable housing	☐ Lack of child car seats and seat belts use	☐ Lack of good jobs
☐ Lack of good schools	☐ Lack of people immunized to prevent disease	☐ Lack of public transportation	☐ Lack of quality and affordable childcare
☐ Lack of safe spaces to exercise and be physically active	☐ Lack of support networks such as neighbors, friends and family	☐ Limited places to buy groceries	☐ Motor vehicle & motorcycle crash injuries
☐ Racism/discrimination	☐ Rape/sexual assault	☐ Smoking/electronic cigarette use or vaping	☐ Suicide
☐ Teen pregnancy	☐ Unsafe working conditions	☐ Other: _____	

For the next four questions, please imagine a ladder with steps numbered from one at the bottom to ten at the top. The top of the ladder represents the <u>best possible life</u> and the bottom of the ladder represents the <u>worst possible life.</u>



12. **Which step represents the health of your community?**

1 2 3 4 5 6 7 8 9 10
Worst Possible Best Possible

13. **Indicate where on the ladder you feel you personally stand right now.**

1 2 3 4 5 6 7 8 9 10
Worst Possible Best Possible

14. **On which step do you think you will stand about five years from now?**

1 2 3 4 5 6 7 8 9 10
Worst Possible Best Possible

15. **Now imagine the top of the ladder represents the <u>best possible *financial situation*</u> <u>for you</u>, and the bottom of the ladder represents the <u>worst possible *financial situation*</u> <u>for you</u>. Please indicate where on the ladder you stand right now.**

1 2 3 4 5 6 7 8 9 10
Worst Possible Best Possible

The following information is used for demographic purposes and does NOT identify you; all responses are confidential.

16. **What is your ZIP code?** _____

17. **What is your gender?**

☐ Male	☐ Female	☐ Transgender	☐ Other

18. **What is your age?**

☐ 12-17	☐ 18-24	☐ 25-34	☐ 35-44
☐ 45-54	☐ 55-64	☐ 65-74	☐ 75+

19. **Which racial or ethnic group do you identify with? (Check only 1.)**

☐ White	☐ Asian	☐ American Indian: Tribal Affiliation _____	☐ Hispanic or Latino
☐ Black of African American	☐ Native Hawaiian or Other Pacific Islander	☐ Alaskan Native	☐ Multi-racial
☐ Other			

20. **Which group(s) do you most identify with? (Check all that apply.)**

☐ Adult with children	☐ Adult with no children	☐ Caregiver	☐ LGBTQI
☐ Person experiencing homelessness	☐ Person with a disability	☐ Refugee/Asylum Seeker	☐ Single parent
☐ Veteran	☐ Person living with HIV/AIDS	☐ Other: _____	☐ None

21. **What range is your household income?**

☐ Less than $20,000	☐ $20,000 - $29,000	☐ $30,000 - $49,000
☐ 50,000 - $74,000	☐ $75,000 - $99,999	☐ Over $100,000

22. **What is the highest level of education you have completed?**

☐ Less than a high school graduate	☐ High school diploma or GED	☐ Associate's Degree	☐ Currently enrolled at vocational school or college
☐ College degree or higher	☐ Other		

2021 COVID-19 Impact Community Health Survey

The purpose of this brief survey is to get your opinion about COVID-19's impact on community health and quality of life in Maricopa County since March of 2020. Information collected in this survey will be kept confidential and used only in combination with others participating in the survey. No personal identifying information will be collected. Your feedback will be used to help guide future community health improvement planning and funding efforts. This survey should take about 15 minutes. If you have questions about the survey or need it provided in an alternative language or format, please email Tiffany.Tu@maricopa.gov and we will do our best to accommodate.

The following information is used for demographic purposes and does NOT identify you; all responses are confidential. To learn more about why CHNAs are important, please visit https://www.cdc.gov/publichealthgateway/cha/plan.html.

1. **What is the ZIP code that you currently reside in?** _____
2. **What is your gender?**

☐ Female	☐ Male	☐ Transgender	☐ Prefer to self-describe	☐ Prefer not to answer

3. **What is your age range?**

☐ 12-17	☐ 18-24	☐ 25-34	☐ 35-44
☐ 45-54	☐ 55-64	☐ 65-74	☐ 75+

4. **Which racial and/or ethnic group do you identify with? (Check no more than two)**

☐ African American/Black	☐ American Indian/Native American	☐ Asian	☐ Hispanic/Latinx
☐ Native Hawaiian or other Pacific Islander	☐ Caucasian/White	☐ Other: _____	☐ Prefer not to answer

5. **Which group(s) do you most identify with? (Check all that apply)**

☐ Adult with children under age 18 or living in the same home	☐ Single parent	☐ LGBTQI	☐ Person experiencing homelessness
☐ Person living with a disability	☐ Immigrant	☐ Refugee	☐ Veteran
☐ Person living with HIV/AIDS	☐ Other	☐ Prefer not to answer	☐ None

6. **What range is your household income?**

☐ Less than $20,000	☐ $20,000 - $29,000	☐ $30,000 - $49,000
☐ 50,000 - $74,000	☐ $75,000 - $99,999	☐ Over $100,000
☐ Prefer not to answer		

7. **What is the highest level of education you have completed?**

☐ Less than a high school graduate	☐ High school diploma or GED	☐ Some College or Associate degree (2yr)	☐ Graduate of vocational/trade school
☐ Currently enrolled in college	☐ Bachelor's Degree (4yr)	☐ Postgraduate Degree	☐ Other
☐ Prefer not to answer			

In this survey, "community is defined as the areas where you work, live, learn and/or play.

8. **Since March of 2020 (the start of the COVID-19 pandemic), how would you rate your physical health?**

Excellent	Very Good	Good	Fair	Poor

9. **Would you rate your current physical health as Better, Similar, or Worse compared to your physical health prior to March of 2020?**

Better	Similar	Worse

10. **Since March of 2020 (the start of the COVID-19 pandemic), how would you rate your mental health, including your mood, stress level, and your ability to think?**

Excellent	Very Good	Good	Fair	Poor

11. **Would you rate your current mental health as Better, Similar, or Worse compared to your mental health prior to March 2020?**

Better	Similar	Worse

12. **Since March of 2020 (the start of the COVID-19 pandemic), if you sought services to address your mental health, including your mood, stress level and/or your ability to think, how often have you been able to get the services you need?**

Always	Sometimes	Never	Not Applicable

13. **What services would have improved overall mental and physical health of your family in the last year? (Check all that apply)**

☐ Childcare services	☐ In-person school	☐ Technology and internet service	☐ Assistance with finding employment
☐ Assistance with paying utilities	☐ Assistance with paying rent	☐ Assistance with finding healthcare	☐ Assistance with finding substance use treatment
☐ Assistance with mental health issues	☐ Assistance with finding COVID-19 vaccine	☐ Other _____	

14. **Since March of 2020, have you had enough money to pay for essentials such as:**

Food	Always	Sometimes	Never	N/A
Housing: Rent/Mortgage	Always	Sometimes	Never	N/A
Utilities	Always	Sometimes	Never	N/A
Car/Transportation	Always	Sometimes	Never	N/A
Insurance	Always	Sometimes	Never	N/A
Clothing/Hygiene Products	Always	Sometimes	Never	N/A
Medication/Treatments	Always	Sometimes	Never	N/A
Childcare	Always	Sometimes	Never	N/A
Tuition or Student Loans	Always	Sometimes	Never	N/A

15. **Since March of 2020, have you applied for any of the following financial assistance due to the impact of the COVID-19 pandemic to assist with the essential cost of living expenses listed above?**

COVID-19 Relief Funding for You/Family	Yes	No
COVID-19 Relief Funding for your business	Yes	No
Unemployment due to loss of job (laid off)	Yes	No
Unemployment due to staying home to care for children, elderly parents, or ill family members	Yes	No

Unemployment due to COVID-19 illness (self)	Yes	No
WIC (Women, Infant, and Children)	Yes	No
SNAP Food Stamps	Yes	No
Medicaid Insurance	Yes	No

16. **Since March of 2020, how often did you seek financial assistance to help pay for healthcare expenses (e.g. doctor bills, medications, medical treatments, doctor co-pay, etc.)**

Always	Sometimes	Never	N/A

17. **If you received a stimulus check in the fall of 2020 and spring of 2021, what impact did this have on alleviating your essential living expenses and access to healthcare?**

Strong Impact	Moderate Impact	Weak Impact	No Impact/No difference	Did Not Receive

18. **Since March of 2020, was your employment impacted due to the COVID 19 pandemic? (Check all that apply)**

☐ No, continued working the same number of hours	☐ No, required to continue working onsite	☐ Yes, work hours were reduced	☐ Yes, required to telework
☐ Yes, furloughed (temporary job loss, able to return to work once management contacts you)	☐ Yes, laid off	☐ Yes, quit to care for children due to school closure	☐ Yes, quit to care for ill family members
☐ Yes, quit due to COVID-19 illness (self)	☐ Yes, unable to return to work due to COVID-19 illness (long-term effects)	☐ Yes, started a new job	☐ Other: _____

19. **Since March of 2020, how do you currently pay for your healthcare including medications, dental, and health treatments? (Check all that apply)**

☐ Health insurance purchased on my own or by family member	☐ Health insurance provided through employer	☐ Indian Health Services	☐ Medicaid/AHCCCS
☐ Medicare	☐ Use free clinics	☐ Use my own money (out of pocket)	☐ Veterans administration

☐ Did not seek healthcare since March of 2020	☐ Other: _____		

20. **Since March of 2020, what have been the primary barriers to seeking or accessing healthcare in your community? (Check all that apply)**

☐ Lack of childcare	☐ Difficulty finding the right provider for my care	☐ Fear of exposure of COVID-19 in a healthcare setting	☐ Unsure if healthcare need is a priority during this time
☐ Distance to provider	☐ Inconvenient office hours	☐ No health insurance coverage	☐ Not enough health insurance coverage
☐ Transportation to appointments	☐ Understanding of language, culture, or sexual orientation differences	☐ I have not experienced any barriers	☐ Other: _____

21. **Since March of 2020, what have been the greatest strengths of your community? (Check all that apply)**

☐ Ability to communicate with city/town leadership and feel that my voice is heard	☐ Accepting of diverse residents and cultures	☐ Access to schools or school alternatives	☐ Access to affordable childcare
☐ Access to affordable healthy foods	☐ Access to COVID-19 testing events	☐ Access to cultural & educational events	☐ Access to medical care
☐ Access to affordable housing	☐ Access to COVID-19 vaccine events	☐ Access to quality online school options	☐ Access to mental health services
☐ Access to community programming such as classes & trainings	☐ Access to Flu vaccine events	☐ Access to jobs & healthy economy	☐ Access to parks and recreation sites
☐ Access to public libraries and community centers	☐ Access to safe walking and biking routes	☐ Access to substance abuse treatment services	☐ Access to low crime / safe neighborhoods
☐ Access to public transportation	☐ Access to services for seniors	☐ Access to support networks such as neighbors,	

		friends, and family	
☐ Access to religious or spiritual events	☐ Access to social services for residents in need or crisis	☐ Access to clean environments and streets	☐ Other: _____

22. **Since March of 2020, in addition to COVID-19, which health conditions have had the greatest impact on your community's overall health and wellness? (Check all that apply)**

☐ Alcohol/Substance abuse	☐ Cancers	☐ Dementia/Alzheimer's	☐ Diabetes
☐ Heart disease and stroke	☐ High blood pressure or cholesterol	☐ HIV/AIDS	☐ Lung disease (asthma, COPD, emphysema)
☐ Vaccine preventable disease such as flu, measles, and pertussis (whooping cough)	☐ Mental health issues (depression, anxiety, bipolar, etc)	☐ Overweight/ obesity	☐ Sexually transmitted disease
☐ Tobacco use including vaping	☐ Other: _____		

23. **Since March of 2020, which of the following issues have had the greatest impact on your community's health and wellness? (Check all that apply)**

☐ Child abuse/elder abuse & neglect	☐ Distracted driving (such as cell phone use, texting while driving)	☐ Domestic violence / sexual assault	☐ Gang-related violence
☐ Gun-related injuries	☐ Limited/lack of access to COVID19 testing	☐ Lack of affordable healthy food options	☐ Lack of people immunized to prevent disease
☐ Homelessness	☐ Limited access to healthcare	☐ Lack of affordable housing	☐ Lack of public transportation
☐ Drug/substance abuse (illegal & prescribed)	☐ Limited access to mental/behavioral health services	☐ Lack of jobs	☐ Lack of quality and affordable childcare
☐ Lack of COVID-19 vaccine access	☐ Limited access to educational and supportive	☐ Lack of alternative	☐ Lack of safe spaces to exercise and be physically active

	programing for children and adolescents	educational opportunities	
☐ Lack of support networks such as neighbors, friends, and family	☐ Motor vehicle & motorcycle crash injuries	☐ Racism/ discrimination	☐ Suicide
☐ Teen Pregnancy	☐ Other: _____		

24. **Overall, how easy was it to navigate this electronic survey?**

☐ Very easy to use	☐ Easy to use	☐ Neither easy nor difficult to use	☐ Difficult to use	☐ Very difficult to use

25. **Based on the given survey questions above, the information provided was easy to understand.**

☐ Strongly agree	☐ Agree	☐ Neutral	☐ Disagree	☐ Strongly disagree

26. **What else would you like to share with us regarding your experience with COVID-19 that we didn't ask?**

27. **Want to tell us more? We want to share community members' stories. Let us know you're interested by indicating your type of experience along with sharing your email address/phone so we can contact you.**

    ☐ I experienced COVID-19. _____
    ☐ A loved one experienced COVID-19. _____
    ☐ My work was impacted by COVID-19. _____
    ☐ Other: _____

Thank you for completing MCDPH's COVID-19 Impact Community Health Assessment Survey.

Appendix C – Survey Demographics
2019 & 2021 Community Survey Demographics

2019	
Total # of participants	11,893
Race/Ethnicity	
African American/Black	3.0%
American Indian/Native American	2.0%
Asian	25.0%
Caucasian/White	61.0%
Hispanic/Latinx	4.0%
Other	6.0%
Age	
12-24	8.0%
25-44	32.0%
45-64	39.0%
65+	21.0%
Gender	
Female	73.0%
Male	25.0%
Other	1.0%

2021	
Total # of participants	14,380
Race/Ethnicity	
African American/Black	4.1%
American Indian/Native American	1.4%
Asian	4.5%
Caucasian/White	64.5%
Hispanic/Latinx	18.3%
Native Hawaiian/Other Pacific Islander	1.2%
Two or more races	1.2%
Unknown/Not given	4.9%
Age	
12-24	6.4%
25-44	30.9%
45-64	43.0%
65+	20.0%
Gender	
Female	68.9%
Male	29.1%
Additional Genders	0.6%
Unknown/Not Given	1.4%

Appendix D – Maricopa County Zip Codes

Maricopa County Zip Codes

85003	85085	85209	85305	85357	85552	85633	85745	86017	86325	86505
85004	85086	85210	85306	85360	85553	85634	85746	86018	86326	86506
85006	85087	85212	85307	85361	85554	85635	85747	86020	86327	86507
85007	85118	85213	85308	85362	85545	85637	85748	86021	86329	86508
85008	85119	85215	85309	85363	85546	85638	85749	86022	86331	86510
85009	85120	85224	85310	85364	85550	85640	85750	86023	86332	86511
85012	85121	85225	85320	85365	85551	85641	85755	86024	86333	86512
85013	85122	85226	85321	85367	85552	85643	85756	86025	86334	86514
85014	85123	85233	85322	85371	85553	85645	85757	86028	86335	86515
85015	85128	85234	85323	85373	85554	85646	85901	86029	86336	86520
85016	85050	85248	85324	85374	85601	85648	85911	86030	86337	86535
85017	85051	85249	85325	85375	85602	85650	85912	86031	86338	86538
85018	85053	85250	85326	85377	85602	85653	85920	86032	86343	86540
85019	85054	85251	85328	85379	85603	85654	85922	86033	86351	86544
85020	85083	85253	85331	85381	85605	85658	85923	86034	86401	86545
85021	85085	85254	85332	85382	85606	85701	85924	86035	86403	86547
85022	85086	85255	85333	85383	85607	85704	85925	86036	86404	86556
85023	85087	85256	85334	85387	85608	85705	85926	86038	86406	85711
85024	85118	85257	85335	85388	85609	85706	85927	86039	86409	
85027	85119	85258	85336	85390	85610	85707	85928	86040	86411	
85028	85120	85259	85337	85392	85611	85708	85929	86042	86413	
85029	85121	85260	85338	85395	85613	85710	85930	86043	86426	
85031	85122	85262	85339	85396	85614	85712	85931	86044	86429	
85032	85123	85263	85340	85501	85615	85713	85932	86045	86431	
85033	85128	85264	85341	85530	85616	85714	85933	86046	86432	
85034	85131	85266	85342	85531	85617	85715	85934	86047	86433	
85035	85132	85268	85343	85533	85618	85716	85935	86052	86434	
85037	85135	85281	85344	85534	85619	85718	85936	86053	86435	
85040	85137	85282	85345	85535	85620	85719	85937	86054	86436	
85041	85138	85283	85346	85536	85621	85723	85938	86301	86437	
85042	85139	85284	85347	85539	85622	85724	85939	86303	86438	
85043	85140	85286	85348	85540	85623	85726	85940	86305	86440	
85044	85141	85295	85349	85541	85624	85730	85941	86313	86441	
85045	85142	85296	85350	85542	85625	85735	85942	86314	86442	
85048	85143	85297	85351	85543	85626	85736	86001	86315	86443	
85050	85145	85298	85352	85544	85627	85737	86003	86320	86444	
85051	85147	85301	85353	85545	85629	85739	86004	86321	86445	
85053	85172	85302	85354	85546	85630	85741	86011	86322	86502	
85054	85173	85303	85355	85550	85631	85742	86015	86323	86503	
85083	85208	85304	85356	85551	85632	85743	86016	86324	86504	

Appendix E – Top Health Indicators Disparities in Maricopa County

Top Health Indicators Disparities in Maricopa County *rates per 100,000 population*			
Indicator	Gender Disparity	Age Disparity	Racial Disparity
 **Cardiovascular Disease (CVD)**	Males had a higher IP rate (1435.7) and death rate (226.7) while females had a higher ED rate (1092.3).	Patients aged 75+ had the highest IP (7601.7), ED (4560.3) and death rate (2177.0).	Black/African American patients had the highest IP rate (1822.7) and ED rate (2205.1) while Caucasian/White patients had the highest death rate (316.8).
 **Mental and Behavioral Health**	Males had a higher IP rate (1338.1), ED rate (1193.1), and death rate (39.8) than females.	Patients aged 15-19 had the highest IP rate (2022.4), patients aged 25-34 had the highest ED rate (1864.4), patients aged 75+ had the highest death rate (3.6).	Black/African American patients had the highest IP rate (2242.5), American Indian patients had the highest ED rate (3055.8) and death rate (56.4).
 **Falls**	Females had a higher IP rate (566.0) and ED rate (2516.5) and death rate (21.3) than males.	Patients aged 75+ had the highest IP rate (4013.6) and ED rate (7627.0), and death rate (247.7).	White/Caucasian patients had the highest IP rate (758.2) and death rate (32.3) while Black/African American patients had the highest ED rate (2944.7).
 **Arthritis**	Females had a higher IP rate (352.0) and death rate (1.2), while males had a higher ED rate (108.6).	Patients aged 65-74 years old had the highest IP rate (1442.5) and death rate (0.1) while patients aged 75+ had the highest ED rate (281.2).	White/Caucasian patients had the highest IP rate (492.7), Black/African American patients had the highest ED rate (332.2), and Hispanic patients had the highest death rate (1.84).
 **Stroke**	Males had a higher IP rate (282.0), and ED rate (55.7) while females had a higher death rate (40.8).	Patients aged 75+ had the highest IP rate (1684.1), ED rate (298.6), and death rate (388.8).	White/Caucasian patients had the highest IP rate (362.6) and death rate (52.2) while Black/African American patients had the highest ED rate (78.4).
 **Diabetes**	Males had a higher IP rate (192.3), ED rate (257.8), and death rate (32.9).	Patients aged 75+ had the highest IP rate (302.9) and death rate (167.1) while patients aged 55-64 had the highest ED rate (453.2).	Black/African American patients had the highest IP rate (328.0), ED rate (652.8), while American Indians had the highest death rate (58.6).
 **Motor vehicle**	Males had a higher IP rate (136.0) and death rate (16.3) while females had a higher ED rate (957.3).	Patients aged 75+ had the highest IP rate (155.7) and death rate (21.7) while patients aged 20-24 had the highest ED rate (1749.1).	American Indian patients had the highest IP rate (172.0) and death rate (17.1) while Black/African American patients had the highest ED rate (2354.2).
 **COPD**	Females had a higher IP rate (109.4) and ED rate (170.1), while males had a higher death rate (73.3).	Patients aged 75+ had the highest IP rate (469.3), ED rate (569.5), and death rate (695.6).	White/Caucasian patients had the highest IP rate (144.0) and death rate (114.6) while Black/African American patients had the highest ED rate (238.0).

 **Asthma**	Females had a higher IP rate (49.4), ED rate (325.4), and death rate (1.2) than males.	Patients aged 5-9 had the highest IP rate (97.9) and ED rate (737.7) while patients aged 75+ had the highest death rate (3.6).	Black/African American patients had the highest IP rate (140.7), ED rate (1420.9), and death rate (3.7).
 **Lung Cancer**	Females had a higher IP rate (33.4) while males had a higher ED rate (7.6) and death rate (30.9).	Patients aged 75+ had the highest IP rate (158.9), ED rate (36.0), and death rate (223.4).	White/Caucasian patients had the highest IP rate (45.1) and death rate (46.7) while Black/African American patients had the highest ED rate (13.4).
 **Breast Cancer**		Patients aged 65-74 had the highest IP rate (24.7), patients aged 55-64 had the highest ED rate (22.6), patients aged 75+ had the highest death rate (117.1).	White/Caucasian patients had the highest IP rate (11.8), Black/African American patients had the highest ED rate (28.1) and death rate (35.1).
 **Alzheimer's**	Males had a higher IP rate (7.0) while females had a higher ED rate (6.5) and death rate (55.6).	Patients aged 75+ had the highest IP rate (78.8), ED rate (71.6), and death rate (599.0).	White/Caucasian patients had the highest IP rate (11.0), ED rate (8.2), and death rate (67.2).
Source: Maricopa County's 2019 Hospital Discharge and Death Database			

Appendix F – Participating Organizations in the Community Benefit and Health Equity Committee (CBHEC) & Health Equity Alliance (HEA) Meetings

Organizations that participated in the CBHEC Meetings

- Arizona Department of Housing
- Arizona Partnership for Healthy Communities
- Catholic Charities
- Chicanos Por La Causa
- CommonSpirit Health
- Creighton University School of Medicine
- Foundation for Senior Living
- Gonzalez Consulting, LLC
- Maricopa County Department of Public Health
- Mercy Care
- Mountain Park Health Center
- Oasis Hospital
- PV Health Solutions
- St. Joseph's Foundation
- St. Joseph's Hospital Community Board
- St. Joseph's Hospital and Medical Center

Organizations that participated in the HEA Meetings

- Ability360
- Adelante Healthcare
- Arizona Department of Economic Security
- Arizona Healthy Communities
- Arizona Housing
- Arizona State University
- Bloom365
- Blue Cross Blue Shield of Arizona
- Brain Injury Alliance Arizona
- Cancer Support Community Arizona
- Catholic Charities Arizona
- Center for the Future of Arizona
- Circle the City
- City of Phoenix
- CommonSpirit Health
- Community Medical Services
- Copa Health
- Dignity Health

- Epilepsy Foundation
- Equality Health
- Family Involvement Center
- Flinn Foundation
- Foundation for Senior Living
- Geller Health
- Hennepin Healthcare
- HonorHealth
- Keough Health
- Kinseed
- Lumedic
- Maggie's Place
- Maricopa County Department of Public Health
- Mercy Care Arizona
- Mission of Mercy
- Moses Behavioral Health Care
- Mountain Park Health Center
- Native American Connections
- Phoenix Indian Center
- Policy Link
- Raising Special Kids
- Social Security Administration
- Sonoran Prevention Works
- Southwest Human Development
- Special Olympics Arizona
- St. Louis-MO Missouri Department of Health
- St. Vincent de Paul
- Streetlight USA
- Tanner Community Development Corporation
- The Be Kind People Project
- 35Projects
- United Healthcare
- Unlimited Potential Arizona
- Valle del Sol
- Washington State Health Care Authority
- Women's Health Innovations of Arizona
- Zion Medical Group

Appendix G – Resources Potentially Available

Health Need	Resources Potentially Available
Access to Care • **Financial Security** • **Maternal and Child Health**	• Adelante Healthcare - Access to healthcare • AHCCCS - Health insurance coverage • Chicanos Por La Causa / Keogh Health Connection - Enrollment specialists, social services, economic development • Community Health Workers (CHWs) Navigators - Various organizations • Foundation for Senior Living - Hospital discharge transition • Hushabye Nursery - Access to care • Mission of Mercy - Mobile clinic • Mountain Park Health Center - Access to healthcare • Mercy Care - Health insurance coverage • Native American Connection - Medical and health services, oral health • Phoenix Indian Center - Job preparedness, workforce development. • St. Vincent de Paul - Rent and utility assistance, medical and dental clinic. • Tempe Community Action Agency - Utility and rental assistance. • Valley of the Sun United Way - Workforce Development and education • Wesley Community & Health Centers - Preventative screening, primary care, prenatal care, lab testing, vaccination, insurance eligibility • Women's Health Innovations - Maternal child health services
Affordable Housing / Homelessness	• Andre House - Transitional housing, showers, laundry, clothing, blankets • A New Leaf - Housing and shelter • Central Arizona Shelter Services (CASS) - Homeless shelter • Chicanos Por La Causa - Housing • Circle the City - Respite Care, homelessness • Elaine - Transportation for homeless and underserved • East Valley Men's Shelter - Housing for men facing homelessness • House of Refuge - Transitional housing for families • Human Services Campus - Housing, meals, shelter • Maggie's Place - Housing • Native American Connection - Housing • Peoria Unified School District - Homelessness services • Phoenix Indian Center - Housing assistance • Phoenix Rescue Mission - Homelessness • Salvation Army - Homelessness • Save the Family - Homelessness • St. Vincent de Paul - Homelessness prevention

	• Tempe Community Action Agency - I-Help program, housing and shelter support. • The Faithful City - Homelessness • UMOM - Emergency shelter, housing program • Valley of the Sun United Way - Housing and homelessness
Food Insecurity	• Andre House - Nightly dinner • Creighton Community Foundation - Food boxes, community gardens, food and nutrition projects • Diana Gregory Outreach Services Foundation - Mobile produce market • Fighter Country Foundation - Healthy food box initiative • Matthew's Crossing - Food bank • Phoenix Rescue Mission - Food bank • St. Mary's Food Bank - Food boxes • St. Vincent de Paul - Dining rooms, food boxes, food pantry • Tempe Community Action Agency - Food pantry, congregate meals, food boxes • Wesley Center - Emergency food assistance, community kitchen, community gardening
Safety & Violence • **Unintentional Injuries**	• A New Leaf - Domestic violence • Bloom365 - Dating violence • Control Alt Delete - Domestic violence • International Rescue Committee - Human trafficking • Jewish Family & Children's Service - Domestic violence • Phoenix Dream Center - Human trafficking • Streetlight USA - Human trafficking • The Faithful City - Domestic Violence, trafficking
Mental Health	• Community 43 - Behavioral health outpatient clinic • Hope Network - Behavioral and mental health • Human Services Campus - Mental health • MIKID (Mentally Ill Kids in Distress) - Behavioral health • Native American Connection - Behavioral health • Peoria Unified School District partnership with Southwest Behavioral Health Services - Behavioral health • Phoenix Indian Center - Mental health services

Chronic Health Conditions: • **Obesity** • **Diabetes** • **Cardiovascular Disease**	• American Diabetes Association - Diabetes education and support • Arizona Diabetes Foundation - Education programs • Healthier Living Program - Chronic disease education program, cooking class • Valley of the Sun YMCA - Viva! Program, Reduce type 2 diabetes in children • Wesley Community & Health Centers - Acute and chronic disease management
Addiction / Substance Abuse	• Hushabye Nursery - Substance exposed babies • Jewish Family & Children's Service - Substance abuse counseling • Phoenix Indian Center - Substance abuse • Tempe Community Action Agency - Substance abuse treatment
Cancer	• Cancer Support Community of Arizona - Cancer resource navigator, access to care

Appendix H – Data Indicator Matrix

Resource Responsibility

HDD - Hospital Discharge Data
BRFSS - Behavioral Risk Factor Surveillance Survey
ACS - American Community Survey (Census)
YRBS - Youth Risk Behavior Survey
AYS - Arizona Youth Survey
H-CUP - The Healthcare Coast & Utilization Project
IP - linpatient hospitalization
ED - Emergency Department Visits

	Source	HDD	BRFSS	ACS;Census	YRBS	Death	Birth	ADHS	AYS	PolicyMap	H-CUP	Level	Maricopa County	Regions	Zipcode	National	State
Population Demographics																	
Gender				■							■		■	■	■	■	■
Age Groups				■							■		■	■	■	■	■
Race/Ethnicity				■							■		■	■	■	■	■
Education				■							■		■	■	■	■	■
Income				■							■		■	■	■	■	■
Employment Status				■							■		■	■	■	■	■
Access to Health Care																	
Health Insurance Coverage				■									■	■	■		
Poverty				■									■	■	■		
Health Care Coverage (18-64)			■										■			■	■
Usual Source of Care			■										■			■	■
Routine Checkup (last year)			■										■			■	■
Primary Payer Type for ED/IP		■									■		■	■	■	■	■
Birth Related																	
IMR						■	■						■	■	■		
Low Birth Weight							■						■	■	■		
PreTerm Births							■						■	■	■		
Teen Birth							■						■	■	■		
Prenatal Care Began							■						■	■	■		
Top 5 leading casuse of death						■							■	■	■		
Youth top 5 leading casuse of death						■							■	■	■		
Top 5 leading emergency department and hospitalization reasons		■									■		■	■	■	■	■
Cancer Incidence & Prevention																	
Cancer (by type) Incidence								■					■				
Cancer (by type) Screening			■										■			■	■
Cancer (by type) Deaths						■							■	■	■		
Chronic Disease																	
Stroke		■									■		■	■	■	■	■
Stroke Deaths						■							■	■	■		
% Been told they have high blood pressure			■										■			■	■
Cardiovascular Disease		■									■		■	■	■	■	■
Cardiovascular Disease Deaths						■							■	■	■		
% Told they have high cholesterol			■										■			■	■
Diabetes		■									■		■	■	■	■	■
Diabetes Deaths						■							■	■	■		
Been told they have diabetes			■										■			■	■
Alzheimer's ED/IP		■									■		■	■	■	■	■
Alzheimer's Deaths						■							■	■	■		
% told they have Confusion/Memory Loss			■										■			■	■
COPD ED/IP		■									■		■	■	■	■	■
COPD Deaths						■							■	■	■		
Been told they have asthma			■										■			■	■
Asthma ED/IP		■									■		■	■	■	■	■
Asthma Deaths						■							■	■	■		
Been told they have asthma			■										■			■	■

Resource Responsibility

HDD - Hospital Discharge Data
BRFSS - Behavioral Risk Factor Surveillance Survey
ACS - American Community Survey (Census)
YRBS - Youth Risk Behavior Survey
AYS - Arizona Youth Survey
H-CUP - The Healthcare Coast & Utilization Project
IP - linpatient hospitalization
ED - Emergency Department Visits

	Source	HDD	BRFSS	ACS;Census	YRBS	Death	Birth	ADHS	AYS	PolicyMap	H-CUP	Level	Maricopa County	Regions	Zipcode	National	State
Mental/Behavioral Illness																	
Mood and Depressive Disorders		■									■		■	■	■	■	■
Schizophrenic Disorders		■									■		■	■	■	■	■
Drug-Induced Mental and Behavioral Disorders		■									■		■	■	■	■	■
All Mental/Behavioral disorders		■									■		■	■	■	■	■
Behavioral Health Risk Factors																	
Alcohol Related ED/IP		■									■		■	■	■	■	■
Alcohol Related Deaths						■							■	■	■		
Intentional Self-Harm/Suicide ED/IP		■									■		■	■	■	■	■
Intentional Self-Harm/Suicide Death						■							■	■	■		
Opioids - Unintentional overdose ED/IP		■									■		■	■	■	■	■
Opioids - Unintentional overdose Deaths						■							■	■	■		
Alcohol/Drug use			■										■			■	■
Youth Alcohol/drug use									■				■				
Smoking			■										■			■	■
Youth Smoking									■				■				
Nutrition/Diet			■										■			■	■
Youth Nutrition/Diet					■												■
Physical Activity			■										■			■	■
Youth Physical Activity					■												■
Obesity			■										■			■	■
Youth Obesity					■												■
Injury																	
Motor Vehicle Crash related ED/IP		■									■		■	■	■	■	■
Motor Vehicle Crash related Deaths						■							■	■	■		
Fall Related ED/IP		■									■		■	■	■	■	■
Fall Related Deaths						■							■	■	■		
Violence-related ED/IP		■									■		■	■	■	■	■
Violence-related Deaths						■							■	■	■		
Social Determinants of Health																	
Transportation; no vehicle households										■			■	■	■	■	■
Access to Food; Low Income Low Access										■			■	■	■	■	■
Housing; cost burdened										■			■	■	■	■	■

Appendix I - References

[i] U.S Census Bureau (2015-2019). ACS. Retrieved from https://data.census.gov/cedsci/table?q=demographic&g=0500000US04013&tid=ACSDP5Y2019.DP05

[ii] U.S Census Bureau (2015-2019). ACS. Retrieved from https://data.census.gov/cedsci/table?q=education&g=0500000US04013&tid=ACSST5Y2019.S1501

[iii] U.S Census Bureau (2015-2019). ACS. Retrieved from https://data.census.gov/cedsci/table?q=poverty&g=0500000US04013&tid=ACSST5Y2019.S1701

[iv] U.S Census Bureau (2015-2019). ACS. Retrieved from https://data.census.gov/cedsci/table?q=S2701%3A%20SELECTED%20CHARACTERISTICS%20OF%20HEALTH%20INSURANCE%20COVERAGE%20IN%20THE%20UNITED%20STATES&g=0500000US04013&tid=ACSST5Y2019.S2701

[v] Dignity Health (2022). Community Need Index. Retrieved from http://cni.dignityhealth.org/

[vi] Dignity Health (2021). St. Joseph's Hospital and Medical Center St. Joseph's Westgate Medical Center Community Benefit 2021 Report and 2022 Plan. Retrieved from https://www.dignityhealth.org/content/dam/dignity-health/documents/cb-reports-2021/St-Josephs-Hospitals-Arizona-CBreport2021-Final.pdf

[vii] Centers for Disease Control and Prevention (2021). Mental Health. Retrieved from https://www.cdc.gov/mentalhealth/index.htm

[viii] Centers for Disease Control and Prevention (2021). Adult Obesity Causes & Consequences. Retrieved from https://www.cdc.gov/obesity/adult/causes.html

[ix] World Health Organization. Diabetes. Retrieved from https://www.who.int/health-topics/diabetes#tab=tab_1

[x] World Health Organization. Cardiovascular Diseases. Retrieved from https://www.who.int/health-topics/cardiovascular-diseases#tab=tab_1

[xi] World Health Organization. Cancer. Retrieved from https://www.who.int/health-topics/cancer#tab=tab_1

[xii] County Health Rankings. Access to Care. Retrieved from https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model/health-factors/clinical-care/access-to-care

[xiii] World Health Organization. Maternal Health. https://www.who.int/health-topics/maternal-health#tab=tab_1

[xiv] Jackson, F.M., Rashied-Henry, K., Braveman, P. *et al.* A Prematurity Collaborative Birth Equity Consensus Statement for Mothers and Babies. *Matern Child Health J* **24,** 1231–1237 (2020).

[xv] Feeding America. What is Food Insecurity. Retrieved from https://www.feedingamerica.org/hunger-in-america/food-insecurity

[xvi] Centers for Disease Control and Prevention. (2014-2018). United States Cancer Statistics: Data Visualizations. Retrieved from https://gis.cdc.gov/Cancer/USCS/#/StateCounty/.

[xvii] City of Phoenix Community and Economic Development (2019). Retrieved from https://www.phoenix.gov/econdevsite/Documents/Population%20Demographics%20Insert.pdf

[xviii] U.S Census Bureau (2015-2019). QuickFacts. Retrieved from https://data.census.gov/cedsci/table?q=phoenix%20demographics&tid=ACSDP5Y2019.DP05

[xix] U.S Census Bureau (2015-2019). QuickFacts. Retrieved from https://www.census.gov/quickfacts/phoenixcityarizona

[xx] U.S Census Bureau (2015-2019). ACS. Retrieved from https://data.census.gov/cedsci/table?q=phoenix%20education&tid=ACSST5Y2019.S1501

[xxi] Arizona Department of Health Services (2020). Arizona Medically Underserved Areas Biennial Report. Retrieved from https://www.azdhs.gov/documents/prevention/health-systems-development/data-reports-maps/reports/azmua-biennial-report.pdf

[xxii] U.S Census Bureau (2015-2019). ACS. Retrieved from https://data.census.gov/cedsci/table?q=demographic&g=0500000US04013&tid=ACSDP5Y2019.DP05

[xxiii] Kindig, D., & Stoddart G. (2003). What is population health? American Journal of Public Health. 93, 380-383.

[xxiv] Evans, R. G., & Stoddart, G. L. (1990). Producing health, consuming health care. Social Science and Medicine, 31, 1347-1363.

[xxv] Boothe, Sinha, Bohm, & Yoon (2013). Community health assessment for population health improvement; resource of most frequently recommended health outcomes and determinants. Centers for Disease Control and Prevention (U.S.), Office of Surveillance, Epidemiology, and Laboratory Services.
[xxvi] Healthy People 2030. Social Determinants of Health. Retrieved from https://health.gov/healthypeople/objectives-and-data/social-determinants-health
[xxvii] National Equity Atlas (2019). Racial Equity Index. Retrieved from https://nationalequityatlas.org/research/racial_equity_index/index#/?geoSectionName=State
[xxviii] Robert Wood Johnson Foundation. What is health equity? Retrieved from https://www.rwjf.org/en/library/research/2017/05/what-is-health-equity-.html
[xxix] Institute for Healthcare Improvement. Health Equity. Retrieved from http://www.ihi.org/Topics/Health-Equity/Pages/default.aspx
[xxx] Centers for Disease Control and Prevention. Racism and Health. Retrieved from https://www.cdc.gov/healthequity/racism-disparities/index.html
[xxxi] Arizona Department of Health Services (2021). Arizona Health Improvement Plan Summary Document 2021-2025. Retrieved from https://www.azdhs.gov/documents/operations/managing-excellence/azhip-2021-2025.pdf
[xxxii] World Health Organization. Mental Health & COVID-19. Retrieved from https://www.who.int/teams/mental-health-and-substance-use/mental-health-and-covid-19
[xxxiii] Centers for Disease Control and Prevention (2021). Adult Obesity Causes & Consequences. Retrieved from https://www.cdc.gov/obesity/adult/causes.html
[xxxiv] Centers for Disease Control and Prevention. BRFSS Prevalence & Trends Data (2019). Retrieved from https://www.cdc.gov/brfss/brfssprevalence/index.html
[xxxv] Behavioral Risk Factor Surveillance System (BRFSS) 2019, obtained from Arizona Department of Health Services, analyzed by MCDPH.
[xxxvi] US National Library of Medicine National Institues of Health (2020). The mutual effects of COVID-19 and Obesity. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7202807/
[xxxvii] Healthy People 2020 (2021). Diabetes. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/diabetes
[xxxviii] Healthy People 2020 (2021). Heart Disease and Stroke. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/heart-disease-and-stroke
[xxxix] American Heart Association (2020). What COVID-19 is doing to the Heart, Even After Recovery. Retrieved from https://www.heart.org/en/news/2020/09/03/what-covid-19-is-doing-to-the-heart-even-after-recovery
[xl] Overdose Death Data, obtained by Maricopa County Office of the Medical Examiner, cleaned and analyzed by Maricopa County Department of Public Health.
[xli] National Institute on Drug Abuse (2021). COVID-19 & Substance Use. Retrieved from https://www.drugabuse.gov/drug-topics/comorbidity/covid-19-substance-use
[xlii] Deaths to Maricopa County Residents, obtained by Arizona Department Health Services, cleaned and analyzed by Maricopa County Department of Public Health.
[xliii] JCO Clinical Cancer Informatics (2020). Impact of COVID-19 on Cancer Care: How the Pandemic is Delaying Cancer Diagnosis and Treatment for American Seniors. Retrieved from https://ascopubs.org/doi/10.1200/CCI.20.00134
[xliv] National Coalition for the Homeless (2020). Housing. Retrieved from https://nationalhomeless.org/issues/housing/
[xlv] PolicyMap (2019). Retrieved from https://www.policymap.com/maps
[xlvi] County Health Rankings & Roadmaps. Access to Care. Retrieved from https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model/health-factors/clinical-care/access-to-care
[xlvii] Healthy People 2020 (2021). Access to Health Services. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/access-to-health

[xlviii] National Academy of Social Insurance (2020). The impact of the COVID-19 Pandemic on Access to Health Care. Retrieved from https://www.nasi.org/research/medicare-health-policy/the-impact-of-the-covid-19-pandemic-on-access-to-health-care/
[xlix] National Center for Health Statistics (2021). Reduced Access to Care. Retrieved from https://www.cdc.gov/nchs/covid19/rands/reduced-access-to-care.htm#limitations
[l] Healthy People 2020 (2021). Access to Health Services. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/access-to-health
[li] Health Poverty Action (2018). Maternal & Child Health. Retrieved from https://www.healthpovertyaction.org/how-poverty-is-created/women-girls/maternal-child-health/
[lii] March of Dimes. Inadequate Prental Care by Race. Retrieved from https://www.marchofdimes.org/peristats/ViewSubtopic.aspx?reg=04&top=5&stop=36&lev=1&obj=8&cmp=04013&slev=4&sty=9999&eny=-1&chy=
[liii] Centers for Disease Control and Prevention (2021). Pregnant and Recently Pregnant People at Increased Risk for Severe Illness from COVID-19. Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/pregnant-people.html
[liv] Arizona State University (2020). Research shows Pandemic-Induced Food Insecurity on the Rise in Arizona. Retrieved from https://news.asu.edu/20201201-arizona-impact-research-shows-pandemic-induced-food-insecurity-rise-arizona
[lv] Feeding America (2019). Food Insecurity in Maricopa County. Retrieved from https://map.feedingamerica.org/county/2019/overall/arizona/county/maricopa
[lvi] Healthy People 2020. Injury and Violence Prevention. Retrieved from https://www.healthypeople.gov/2020/topics-objectives/topic/injury-and-violence-prevention
[lvii] National Conference of State Legislatures (2017). Injury and Violence Prevention. Retrieved from https://www.ncsl.org/research/health/injury-and-violence-prevention.aspx
[lviii] Hospital Discharge Data, obtained by Arizona Department of Health Services, cleaned and analyzed by MCDPH
[lix] Emory University Injury Prevention Research Center at Emory. COVID-19 and Injury Prevention. Retrieved from https://iprce.emory.edu/covid/index.html
[lxi] Centers for Disease Control and Prevention (2001). Age Adjustment Using the 2000 Projected U.S. Population. Retrieved from https://www.cdc.gov/nchs/data/statnt/statnt20.pdf