Community Health Needs Assessment

Mercy Hospital Northwest Arkansas

Fiscal Year 2019

Mercy

Your life is our life's work.

Our Mission:

As the Sisters of Mercy before us, we bring to life the healing ministry of Jesus through our compassionate care and exceptional service.

Table of Contents

I. Executive Summary

Mercy Northwest Arkansas (Mercy NWA) is affiliated with Mercy, one of the largest Catholic health systems in the United States. Located in Rogers, Arkansas, Mercy NWA's primary service area spans six counties across Northwest Arkansas and Southwest Missouri. The acute-care hospital has 208 licensed beds, and includes a heart and vascular center, outpatient surgery center, neonatal intensive care unit (Level IIIA), and emergency department. Additional clinical services are available throughout Northwest Arkansas, including an ambulatory surgery center, outpatient rehabilitation and therapy services, multiple primary care and specialty clinics, a free-standing emergency department, and three convenient care clinics. Mercy NWA, the only non-profit hospital in Benton County, is one of the area's largest employers with over 2,400 co-workers.

Mercy NWA is in the process of significant expansion to better meet the health care needs of the region. Growth through renovation and construction of primary and specialty clinics, a multispecialty facility in Springdale and a patient tower on Mercy NWA's main campus will create 1,000 additional health care jobs and add over 100 patient beds. The $247 million investment will improve access to excellence in health care, increase economic development, and enhance quality of life throughout the primary service area.

Mercy NWA is committed to carrying out its mission to deliver compassionate care and exceptional service for all members of the communities it serves, with special attention to those who are marginalized, underserved and most vulnerable. As part of this community health needs assessment (CHNA), Mercy NWA convened a collaboration of area health care providers to conduct a comprehensive community health survey. Available health indicators within the hospital's primary service area were also obtained and compared to those of Arkansas, Missouri, and the United States. The findings from the CHNA informed prioritization of community health needs for Mercy NWA:

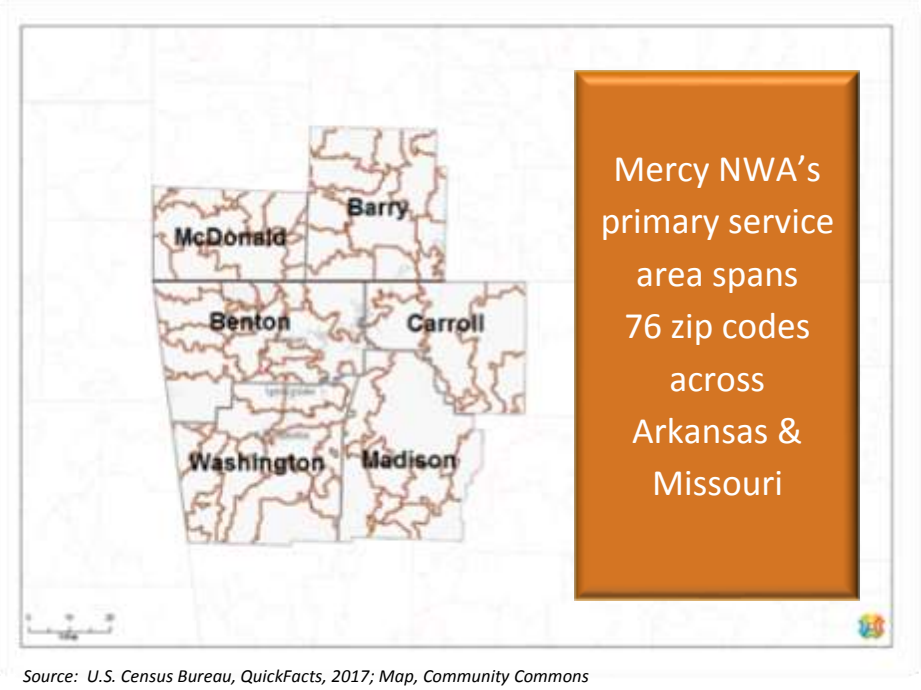
- Access to Care
- Behavioral Health
- Diabetes/Obesity
- Homelessness

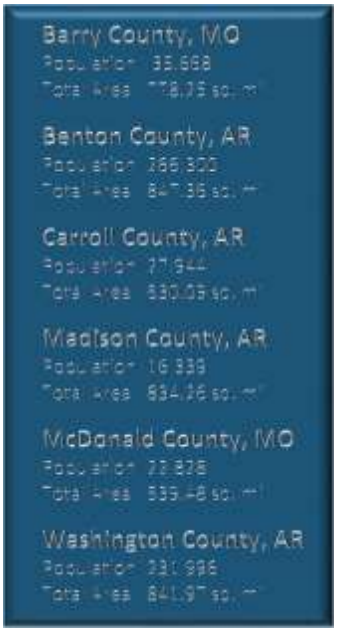
These prioritized needs will be the basis of Mercy NWA's three-year community health improvement plan (CHIP), which will guide the coordination and targeting of resources, and the planning, implementation and evaluation of both new and existing programs and interventions. This community health needs assessment, along with the resulting community health improvement plan, will provide the framework for Mercy NWA as it works in collaboration with community partners to advance the health and quality of life for the residents it serves.

To learn more about Mercy Hospital Northwest Arkansas and to access a copy of this report online, visit www.mercy.net.

II. Community Served by the Hospital

The primary service area (PSA) of Mercy NWA is comprised of six counties—Benton, Carroll, Madison, and Washington Counties in Arkansas and McDonald and Barry Counties in Missouri—with a population of over 600,000. This metropolitan statistical area has experienced significant growth and development over the past two decades, driven predominantly by Walmart Stores, J.B. Hunt Transport Services, and Tyson Foods, all of whose headquarters are in the region. Additional growth can be attributed to individuals being drawn from across the country to move to Northwest Arkansas to pursue education, seek employment, raise a family, or spend their retirement years. The nationally recognized art museum, Crystal Bridges Museum of American Art, was founded in Bentonville in 2011. Fayetteville is home to the Walton Arts Center and the University of Arkansas Razorbacks. The Northwest Arkansas Naturals, a minor league affiliate of the Kansas City Royals, play in nearby Springdale, while the Walmart Arkansas Music Pavilion, the premiere outdoor concert venue in the region, is located in Rogers. The region also boasts more than 200 miles of trails, multiple state parks, four well-established colleges and universities, and Beaver Lake—home of a national bass tournament and a popular vacation destination. The appeal and opportunity of northwest Arkansas has led to the influx of an increasingly diverse population, including a large Hispanic community, a burgeoning Marshallese population of more than 20,000, as well as several thousand Indians. Northwest Arkansas was recently named in the top five best places to live in the United States for the third year in a row and was named eighth overall as most affordable by U.S. News and World Report.[1]





Source: U.S. Census Bureau, QuickFacts, 2017; Map, Community Commons

Demographics

Population Demographics	Primary Service Area 2017		Primary Service Area 2022		5-Year Growth	AR 2017	US 2017
Total Population	616,032		653,474		6%	2,994,501	325,139,271
Age Groups	*Number*	*Percent*	*Number*	*Percent*	*Percent*	*Percent*	*Percent*
0-17	156,451	25%	162,652	25%	4%	23%	23%
18-44	229,723	37%	238,598	37%	4%	35%	36%
45-64	143,996	23%	152,160	23%	6%	25%	26%
65+	85,032	14%	100,064	15%	17%	17%	15%
Race & Ethnicity							
Asian & Pacific Is. Non-Hispanic	24,407	4%	30,363	5%	24%	2%	6%
Black Non-Hispanic	13,941	2%	17,923	3%	29%	15%	12%
Hispanic	95,629	16%	108,170	17%	13%	8%	18%
White Non-Hispanic	459,278	75%	471,069	72%	3%	73%	61%
All Others	22,777	4%	24,949	4%	14%	3%	3%

	Primary Service Area 2017	Primary Service Area 2022	AR 2017	US 2017
Language*	*Percent*	*Percent*	*Percent*	*Percent*
Only English at Home	86%	86%	93%	79%
Spanish at Home	11%	11%	5%	13%
All Others	3%	3%	2%	8%
Workforce**				
Armed Forces	<1%	<1%	<1%	<1%
Civilian, Employed	59%	59%	54%	58%
Civilian, Unemployed	4%	4%	4%	5%
Not in Labor Force	37%	37%	42%	36%
Household Income				
<$15K	12%	11%	15%	12%
$15-25K	11%	10%	13%	10%
$25-50K	27%	25%	27%	23%
$50-75K	18%	18%	17%	17%
$75-100K	11%	11%	10%	12%
$100K-200K	17%	19%	13%	19%
>$200K	5%	6%	3%	6%
Families living below poverty level	12%	12%	14%	12%
Education Level***				
Less than High School	7%	7%	6%	6%
Some High School	8%	8%	10%	8%
High School Degree	32%	32%	35%	28%
Some College/Assoc. Degree	28%	28%	30%	31%
Bachelor's Degree or Greater	24%	24%	20%	28%

= largest cohort in demographic category

**Excludes population age <5 **Excludes population age <16 ***Excludes population age <25 and based on highest level achieved*
Note: Northwest Arkansas Primary Service Area consists of four Arkansas and two Missouri counties
Source: Sg2 Market Demographics; Nielsen zip code data, 2017

Poverty and Insurance Status

Lack of income and health insurance are significant factors impacting health status, and create barriers to health care access, including primary care, specialty care, and other health services. Such factors disproportionately impact racially and ethnically diverse populations, which are more likely to struggle with poverty, lack of access to health care, and low socioeconomic status.[2] Residents with low income often forego preventive services and delay seeking medical attention until health problems become more severe. This situation produces a greater demand on a community's medical resources and may lead to overutilization of emergency department services for what would otherwise be routine primary care. Community residents of lower socioeconomic status are often uninsured or underinsured, which can lead to barriers accessing health care services. Lack of employment and/or underemployment contributes to the issue, as the inability to earn a livable wage or acquire employer-offered health coverage further restricts health care access.

The following table shows the percentage of the population under age 18, as well as, the percentage of the total population living in poverty within the PSA ("Report Location"). While the percentages of children under 18 years of age living in poverty within the region are lower than the state and national rates, the percentage of the overall PSA population living in poverty is above the Missouri and U.S. rates, but below the Arkansas rate.

Report Area	Population Under Age 18 in Poverty	Percent Population in Poverty
Report Location	20.54%	15.85%
Benton County, AR	16.12%	11.38%
Carroll County, AR	24.61%	17.48%
Madison County AR	22.50%	18.09%
Washington County, AR	22.27%	18.98%
Barry County, MO	34.57%	22.34%
McDonald County, MO	29.58%	20.71%
Arkansas	26.82%	18.83%
Missouri	21.05%	15.28%
United States	21.17%	15.11%

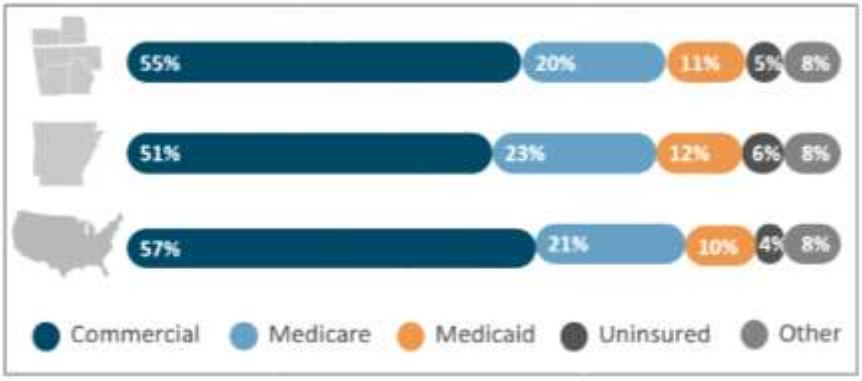
Note: Poverty based on population below 100% of FPL
Source: U.S. Census Bureau, American Community Survey, 2012-16.

The incidences of uninsured persons in the PSA, shown in the table below, are higher than both state and national rates for each of the designated age groups (under age 18, age 18-24, and age 65+), and thus, the percent of total population living the report location.

Report Area	Under Age 18	Age 18-24	Age 65+	Percent Uninsured Population
Report Location	6.48%	18.97%	0.95%	13.45%
Benton County, AR	4.49%	16.82%	1.04%	11.48%
Carroll County, AR	9.10%	25.25%	0.83%	16.58%
Madison County AR	9.49%	21.33%	0.55%	14.93%
Washington County, AR	6.78%	18.21%	1.08%	13.53%
Barry County, MO	11.80%	26.53%	0.40%	18.09%
McDonald County, MO	14.06%	29.95%	0.98%	21.80%
Arkansas	4.91%	18.34%	0.43%	12.33%
Missouri	6.29%	15.89%	0.43%	11.32%
United States	5.9%	16.37%	0.91%	11.7%

Note: Poverty based on population below 100% of FPL
Source: U.S. Census Bureau, American Community Survey, 2012-16.

The following illustration shows a comparable payer mix for the PSA, the state of Arkansas, and the U.S. The payer mix estimates the percentage of health care payments originating from commercial, government, and self-paying sources, as well as, the percentage of uninsured households.



The 2017 payer mix for Mercy NWA's 12,817 total inpatient discharges was comprised of:

- Medicare 28%
- Medicaid 16%
- Other 56%*

**Other includes Commercial, Managed Care, Self-Pay, Workers Compensation, Charity Care, Indian Health, Hospice, Auto Liability, and DOC/Corrections Institutions*
Note: Sg2 Insurance Coverage Estimates profile how the households in the PSA pay for health care services. Data is based on occupied housing units (a house, apartment or group of rooms intended to serve as separate living quarters). Other includes Veterans and all other.
Source: Sg2 Insurance Coverage Estimates, 2017; Epic Hospital Billing Report, 2018.

Available Health Services

Access to appropriate health care, treatment and services is critical to improve and maintain quality of life while reducing the burden of disease. Those without care face obvious health challenges because they are not as able to acquire adequate treatment for acute issues or chronic diseases, resulting in further exacerbation in of the condition and reducing quality and years of life.[3]

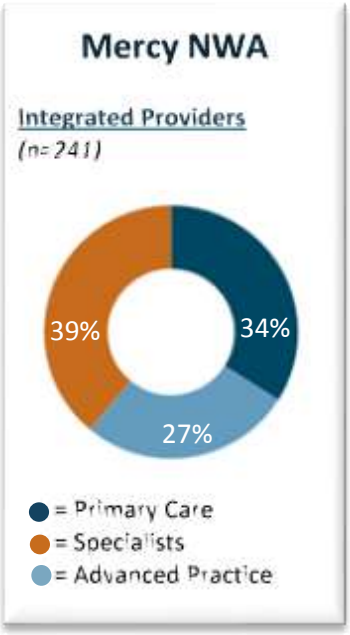
Mercy Northwest Arkansas Locations

Mercy NWA's main campus, located in Rogers, Arkansas, offers the highest standards of care through all stages of life. Mercy NWA, its outpatient surgery centers, urgent care/convenient care centers and other clinic facilities are shown on the map below. Mercy NWA is currently undergoing significant expansion of its facilities and services throughout Northwest Arkansas to improve access to care and enhance quality of life for the residents it serves.

Source: Map, Mercy Annual Community Update 2018, Mercy Locations Directory, January 2018.

Community Health Care Providers

There are three hospital systems within the Mercy NWA PSA that provide a wide range of services to meet the health-related needs of area residents. Each facility provides inpatient, outpatient and emergency care services. A map of the health care organizations within Northwest Arkansas is provided below. The hospitals located within the PSA are represented with a small numbered dot. Corresponding operational statistics for the providers are outlined in the table. The list is not all-inclusive. In addition to the listed providers, there are a variety of primary care physician offices, specialty care physician offices, urgent care and convenient care centers, dentists' offices, behavioral health facilities, and a federally qualified health center distributed throughout the PSA.



Note: Primary Care includes FM, IM, and Pediatrics; Specialists includes all other physicians; AP includes all other providers including NPs, PAs, Audiologists, Optometrists, Podiatrists, and Psychologists.
Source: Map, Mercy Annual Community Update, 2018; Chart, Mercy Cactus Database, February 2018

System Affiliation	ID	Hospital	Type	Total Staffed Beds	Total Inpatient Discharges	Total Births
Mercy	1	Mercy Hospital Northwest Arkansas	Acute	208	11,235	1,635
	2	Mercy Hospital Berryville	Critical Access	25	417	0
	3	Mercy Hospital Cassville	Critical Access	8	292	0
Cox Health	4	Cox Monett Hospital	Critical Access	18	1,042	269
Community Health Systems/ Northwest Health	5	Northwest Medical Center—Bentonville	Acute	121	*	*
	6	Northwest Medical Center—Springdale	Acute	298	16,341	3,669
	7	Willow Creek Women's Hospital	Acute	30	*	*
	8	Siloam Springs Memorial Hospital	Acute	44	1,799	582
	9	Northwest Health Physician's Specialty Hospital	Acute	20	1,134	0
Other System or Independent	10	Eureka Springs Hospital	Critical Access	15	313	0
	11	HealthSouth Rehabilitation Hospital of Fayetteville	Rehabilitation	80	1,457	0
	12	Ozarks Community Hospital of Gravette	Critical Access	25	662	0
	13	Washington Regional Medical Center	Acute	321	14,179	1,240

**Included with Northwest Medical Center—Springdale*
Note: #11 partnership with Washington Regional Medical Center
Source: Mercy data-Mercy Finance, FY2017; Cox Monett inpatient discharges and births-HIDI Analytics, FY2017; all other inpatient discharges and births-AHA Guide, 2017 (2015 data); beds (all bed types/total complex)-AHD (reporting year may vary by provider)

Health Professional Shortage Areas

The U.S. Health Resources and Services Administration (HRSA) designate particular geographic areas (a county or service area), demographic populations (low income or Medicaid-eligible), or institutions (Federally Qualified Health Centers or state/federal prisons) as being health professional shortage areas (HPSAs). HPSAs identify areas as having shortages of primary care,

mental health, and dental providers; designations may be made based on overutilized, inaccessible medical providers or population-to-clinician ratios.[4] Provider rates per 100,000 population within the PSA are shown in the following table. While the PSA has a primary care provider rate less than that of Arkansas, Missouri, and the U.S., the mental health provider rate is greater than both the state and national rates. The dental health provider rate within the PSA is slightly higher than the Arkansas rate, but less than Missouri and the U.S.

Report Area	Primary Care Provider Rate	Mental Health Provider Rate	Dental Health Provider Rate
Report Location	71	235.7	46.3
Benton County, AR	59.43	204	43.66
Carroll County, AR	57.67	79.6	28.88
Madison County AR	25.41	136.9	19.03
Washington County, AR	95.11	348.2	58.1
Barry County, MO	67.3	53.2	27.91
McDonald County, MO	13.16	13.3	26.5
Arkansas	75.1	201.1	44.3
Missouri	83.6	171	54.2
United States	87.8	202.8	65.6

Note: Rates per 100,000 population. Primary care providers include FM, IM, General Practice and General Pediatrics. Mental health providers include psychiatrists, psychologists, clinical social workers, and counsellors specializing in mental health care. Dental care providers include all dentists qualified as D.D.S. or D.M.D.
Source: Community Commons—data from U.S. Dept. of Health & Human Services, HRSA, 2014; University of Wisconsin Population Health Institute, County Health Rankings, 2018; U.S. Dept. of Health & Human Services, HRSA, 2015.

The table below shows the number and location of HPSA facilities within the PSA.

Report Area	Primary Care Facilities	Mental Health Care Facilities	Dental Health Care Facilities	Total HPSA Facility Designations
Report Location	10	11	11	32
Benton County, AR	1	2	1	4
Carroll County, AR	0	0	0	0
Madison County AR	0	0	0	0
Washington County, AR	3	1	2	6
Barry County, MO	1	0	0	1
McDonald County, MO	5	8	8	21
Arkansas	35	32	26	93
Missouri	101	87	78	266
United States	3,599	3,171	3,071	9,836

Source: Community Commons—data from US Department of Health & Human Services, HRSA, February 2019.

III. Community Health Needs Assessment Process

Mercy understands the importance of fostering and working in collaboration with strong partners to positively impact the health and quality of life for all populations within the community served. Therefore, Mercy NWA convened a committee of partners to assist in the Community Health Needs Assessment (CHNA) process. The committee was comprised of representatives from various health and social service agencies and organizations that are located in and/or provide services in the Mercy NWA community.

The committee assisted Mercy NWA in the development and distribution of a community health survey. The purpose of the survey was to glean perceived health-related needs from those within the PSA. Special efforts were made to reach those individuals in minority and marginalized populations.

A list of community partners involved in the CHNA process is provided below:

Arkansas Coalition of Marshallese, Arkansas Department of Health, Benton County Health Unit, Carroll County Health Unit, Community Clinic Northwest Arkansas, Hark at the Center for Collaborative Care, Madison County Health Coalition, Madison County Health Unit, Mercy Berryville, Mercy Northwest Arkansas, Ozark Guidance Center, Washington County Health Unit, Washington Regional Medical Center, and University of Arkansas for Medical Sciences Northwest

The Community Health Subcommittee of Mercy NWA Board of Directors guided the CHNA process. The Community Health Subcommittee is accountable for ensuring that community benefit activities meet mission, compliance and IRS guidelines. The subcommittee meets quarterly and includes ten members representing non-profit, government, public health and business sectors within the community.

Mercy NWA Community Health co-workers also serve on one or both of the community health committees and were primary leads for the 2019 CHNA. Supported by a University of Arkansas Community Health PhD student and Public Health interns, these co-workers collected and reviewed data from a variety of sources, including the community health survey, published data, and hospital-specific data.

The survey committee and community health subcommittee evaluated the data, which in addition to input gathered from community members, advisory panels, coalitions, and stakeholder meetings, was utilized to:

- Prioritize the community's identified health-related needs
- Assess the community resources available to address those needs and identify existing gaps
- Create a collaborative health improvement plan with community partners and other resources possessing the potential to alleviate the prioritized needs

The following external sources of published data are examples of those utilized in the data collection process.

- Centers for Disease Control and Prevention, National Center for Health Statistics
  U.S. Department of Health and Human Services
  https://www.cdc.gov/nchs/

- Community Commons
  Institute for People, Place and Possibility; The Center for Applied Research and Environmental Systems; and Community Initiatives
  https://www.communitycommons.org/

- County Health Rankings and Roadmaps—2018
  The Robert Wood Johnson Foundation and The University of Wisconsin-Public Health Institute
  http://www.countyhealthrankings.org/

- HealthyPeople 2020, Leading Health Indicators
  U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion
  www.healthypeople.gov/2020/

- Northwest Arkansas Community Update—2018
  Annual Community Update Mercy
  https://baggotstreet.mercy.net/sites/default/files/hubs/Central%20Region%20-%20Northwest%20Arkansas.pdf

- Mercy Northwest Arkansas Counties Data
  United States Census Bureau
  https://www.census.gov/

IV. Community Input

The voices of the people within Mercy NWA's primary service area were central to the health needs assessment process. Community input was obtained through a comprehensive community health survey and from community coalitions and stakeholders.

Community Health Survey

The NWA Community Health Survey was developed and distributed by the aforementioned committee of 14 community partners established for that purpose. From January to April 2018, the committee worked together to create the survey, which focused on community members' perceptions regarding the greatest community and personal health needs, risky behaviors and health risk factors, and social determinants of health. The survey, which was revised multiple times and pilot tested, was translated into three languages—English, Spanish, and Marshallese—and made available online and in printed versions. The online version was hosted by Hark at the Center for Collaborative Care, a non-profit organization working to coordinate human and social services within Northwest Arkansas. Printed versions were made available to gather feedback from those without computer access. These paper copies were distributed in strategically selected locations, including summer nutrition programs, food pantries, influenza vaccination clinics, free community clinics, health departments, hospital waiting rooms and universities, to increase opportunities for input from low-income, marginalized and medically-underserved members of the community. Over a 4 ½ month time frame (June 1 through October 15, 2018), the committee received 1,108 completed surveys. Twenty-nine percent of respondents identified as a race/ethnicity other than White (5% indicated two or more races/ethnicities), 28% reported an educational level of high school diploma/GED or less, and 11% were uninsured. A copy of the NWA Community Health Survey is included in Appendix A, and a full report of the survey results is included in Appendix B.

Community Coalitions and Stakeholders

Frequent collaboration and networking with health and social service agencies and organizations within Northwest Arkansas assists Mercy NWA in staying informed about the needs of those within the PSA and involved in the development of innovative, cooperative solutions to assist the underserved. Dedicated to improving the health, wellness, and access to care for its residents, with special focus on those within marginalized and underserved populations, Mercy NWA's Community Health and Community Outreach Departments have designated personnel dedicated to this cause. Personnel within the department engage with community coalitions and stakeholders to assist in identifying unmet needs and gaps in services, increasing community knowledge of available resources, developing partnerships with health and social service agencies, making connections and referrals to benefit the community and advocating for Northwest Arkansas's most vulnerable community members. Examples of agencies/organizations with which the department partners or routinely engages include:

- American Heart Association
- American Diabetes Association Community Leadership Board

- Arkansas Chronic Disease Coordinating Council
- Arkansas Diabetes Advisory Council
- Benton County Community Coalition
- Drug-Free Benton County
- Hark at the Center for Collaborative Care
- Marshallese Gaps in Services Coalition
- Northwest Arkansas Council

V. Conducting the Needs Assessment

Mercy NWA collected both primary and secondary data during its CHNA process. Primary data was collected through the community health survey and by obtaining internal Mercy data. Secondary data was obtained from publicly available data sources; some examples of these sources are listed in Section III.

Primary Data

Community Health Survey

A summary of results of the NWA Community Health Survey is as follows:

The top five most important health-related needs within the NWA community:

- Obesity and Overweight
- Mental Health
- Diabetes
- Drug Use--Illegal
- Drug Use--Prescription

The top five most important personal health-related needs:

- Obesity and Overweight
- Mental Health
- Lack of Physical Activity
- Aging Problems
- High Blood Pressure

The top five most important risky behaviors within the NWA community:

- Being Overweight
- Drug Use--Illegal
- Alcohol Abuse
- Unsafe Driving/Texting
- Drug Use--Prescription

The top five most important health-related needs, that if met, would most improve personal health:

- Exercise/Recreation Opportunities
- Better Sleep
- Reduced Stress/Stress Management
- Affordable Prescriptions/Medications
- Affordable Housing

Internal Mercy NWA Data

To determine the degree to which Mercy NWA's internal measures and data align with the community's health needs, data specific to Mercy NWA was considered in the CHNA process. The following tables show 2017 hospital data for which diabetes, behavioral health, cardiovascular disease, and lung disease were principal or secondary diagnoses.

Primary reasons for the 61,775 emergency department (ED) visits made in 2017 are summarized in the table below.

MERCY NWA	Emergency Department Visits by Principal or Secondary Diagnosis	
Emergency Department Visits with Diabetes, Behavioral Health, Cardiovascular Disease, and Lung Disease Principal or Secondary Diagnoses Calendar Year 2017		
Principal or Secondary Diagnoses	**Emergency Department Visits**	
DIABETES	14.1%	8,726
BEHAVIORAL HEALTH	27.2%	16,777
CARDIOVASCULAR DISEASE	16.8%	10,397
LUNG DISEASE	14.3%	8,839

Source: EPIC Hospital Billing Report, FY18

Primary reasons for the 12,817 inpatient admissions occurring in 2017 are summarized in the table below.

MERCY NWA	Inpatient Admits by Principal or Secondary Diagnosis	
Inpatient Admits with Diabetes, Behavioral Health, Cardiovascular Disease, and Lung Disease Principal or Secondary Diagnoses Calendar Year 2017		
Principal or Secondary Diagnoses	**Inpatient Admits**	
DIABETES	22.5%	2,886
BEHAVIORAL HEALTH	36.8%	4,714
CARDIOVASCULAR DISEASE	36.5%	4,682
LUNG DISEASE	28.9%	3,707

Source: EPIC Hospital Billing Report, FY18

Secondary Data

Leading Causes of Death

The tables below show the ten leading causes of death for residents of Arkansas (first table) and Missouri (second table). Leading causes of death are similar for Arkansas and Missouri; only accidents and strokes hold opposing positions. Arkansas ranks in the top five states for deaths due to heart disease, cancer, chronic lower respiratory disease, stroke and kidney disease, while Missouri ranks is in the top five states for kidney disease deaths.

AR Leading Causes of Death, 2016	Deaths	Death Rate*	State Rank**	U.S. Rate***
1. Heart Disease	6,612	223.7	3rd	165.5
2. Cancer	6,727	178.8	5th	155.8
3. Chronic Lower Respiratory Diseases	2,169	59.1	5th	40.6
4. Stroke	1,643	45,6	4th	37.3
5. Accidents	1,604	51.4	27th	47.4
6. Alzheimer's Disease	1,475	41.3	7th	30.3
7. Diabetes	920	25.4	8th	21.0
8. Kidney Disease	722	20.0	4th	13.1
9. Influenza/Pneumonia	623	17.1	8th (tie)	15.2
10. Suicide	555	18.2	14th	13.5

** Age-adjusted, per 100,000 population **Rankings from highest to lowest ***Includes District of Columbia and U.S. territories*
Source: Centers for Disease Control and Prevention—National Center for Health Statistics, Stats of the State of Arkansas, 2016.

MO Leading Causes of Death, 2016	Deaths	Death Rate*	State Rank**	U.S. Rate***
1. Heart Disease	14,579	192.1	10th	165.5
2. Cancer	12.696	167.0	14th	155.8
3. Chronic Lower Respiratory Diseases	3,961	52.1	10th	40.6
4. Accidents	3,625	57.0	15th	47.4
5. Stroke	3,069	40.4	14th (tie)	37.3
6. Alzheimer's Disease	2,302	30.0	28th	30.3
7. Diabetes	1,508	20.1	30th (tie)	21.0
8. Kidney Disease	1,483	19.6	5th	13.1
9. Influenza/Pneumonia	1,150	15.1	13th (tie)	13.5
10. Suicide	1,133	18,4	13th	13.5

Source: Centers for Disease Control and Prevention—National Center for Health Statistics, Stats of the State of Missouri, 2016.

Health Factors and Behaviors Impacting Health Outcomes

Out of 75 counties in Arkansas, Benton County ranks first in positive overall health outcomes, including length and quality of life, and overall health factors related to health behaviors, clinical care, social and economic factors and the physical environment. Washington County and Carroll County also rank in the top quartile of counties in Arkansas, while Madison County ranks 34th in overall health outcomes and 41st in overall health factors. In Missouri, McDonald County ranks in the bottom quartile for both measures. Barry County ranks 87th in overall health outcomes and 75th in overall health factors out of 115 Missouri counties.

The table below shows the measures and current associated data used to rank each county by the 2018 County Health Rankings & Roadmaps:

	Benton (BE), AR ✕	Carroll (CR), AR ✕	Madison (MA), AR ✕	Washington (WA), AR ✕	Barry (BY), MO ✕	McDonald (MN), MO ✕
Health Outcomes						
Length of Life						
Premature death	6,200	9,000	9,900	6,800	9,400	11,400
Quality of Life						
Poor or fair health	20%	22%	23%	20%	22%	24%
Poor physical health days	4.4	4.8	5.0	4.1	5.0	5.3
Poor mental health days	4.4	4.8	5.1	4.3	4.7	4.9
Low birthweight	7%	7%	7%	8%	8%	9%
Health Factors						
Health Behaviors						
Adult smoking	18%	19%	22%	21%	23%	26%
Adult obesity ⓘ	31%	34%	35%	30%	33%	28%
Food environment index ⓘ	8.1	8.0	6.9	7.4	7.8	7.9
Physical inactivity ⓘ	26%	33%	35%	26%	29%	32%
Access to exercise opportunities	76%	50%	48%	86%	50%	46%
Excessive drinking	17%	13%	15%	18%	16%	16%
Alcohol-impaired driving deaths	28%	21%	28%	31%	41%	32%
Sexually transmitted infections ⓘ	296.3	155.0	260.5	562.5	227.1	324.6
Teen births	32	53	52	32	44	50
Clinical Care						
Uninsured	11%	17%	15%	13%	18%	21%
Primary care physicians	1,660:1	1,540:1	7,880:1	1,220:1	1,630:1	7,550:1
Dentists	2,310:1	3,460:1	5,360:1	1,640:1	3,250:1	4,520:1
Mental health providers	490:1	1,260:1	730:1	290:1	1,880:1	7,540:1
Preventable hospital stays	46	44	46	42	46	76
Diabetes monitoring	86%	87%	75%	85%	87%	82%
Mammography screening	64%	58%	40%	55%	60%	43%

Social & Economic Factors						
High school graduation	90%	81%	88%	86%	91%	93%
Some college	60%	45%	35%	60%	45%	43%
Unemployment	2.9%	3.6%	3.2%	2.7%	4.5%	4.3%
Children in poverty	12%	28%	26%	18%	31%	32%
Income inequality	4.1	4.1	4.7	4.8	4.1	3.8
Children in single-parent households	24%	28%	19%	27%	29%	33%
Social associations	8.9	14.1	7.6	8.8	14.0	9.3
Violent crime	244	243	278	433	265	685
Injury deaths	59	96	90	53	85	96
Physical Environment						
Air pollution - particulate matter	10.0	9.2	9.1	9.7	9.5	9.6
Drinking water violations	Yes	Yes	No	Yes	Yes	Yes
Severe housing problems	12%	17%	13%	19%	14%	19%
Driving alone to work	84%	81%	79%	79%	79%	79%
Long commute - driving alone	21%	23%	53%	26%	28%	45%

Source: County Health Rankings & Roadmaps—The Robert Wood Johnson Foundation and The University of Wisconsin-Public Health Institute; Benton, Carroll, Madison, and Washington Counties, Arkansas & Barry and McDonald Counties, Missouri, 2018 data.

The following table shows Preventable Hospital Events as indicated by the discharge rate (per 1,000 Medicare enrollees) for conditions, such as asthma, diabetes, pneumonia, or other conditions which could have been prevented if patients accessed primary care resources. Such conditions are referred to as being "ambulatory care sensitive."

Report Area	Total Medicare Part A Enrollees	Ambulatory Care Sensitive Condition Hospital Discharges	Ambulatory Care Sensitive Condition Discharge Rate
Report Location	38,265	1,754	45
Arkansas	271,555	16,793	61.8
Missouri	469,109	26,541	56.6
United States	22,488,201	1,112,019	49.4

Note: This indicator is compared to the lowest state average.
Source: Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas of Health Care, 2015

Social Determinants of Health

Healthy People 2020 (HP 2020) highlights the importance of addressing Social Determinants of Health (SDOH) by including an overarching goal to create social and physical environments that promote good health for all. HP 2020 uses a place-based organizing framework to identify five key areas of SDOH: economic stability, education, social and community context, health and health care, and neighborhood and built environment. Many indicators from these areas are included elsewhere in this CHNA. The table below summarizes additional SDOH indicators available for our geographic area.[5]

Key Area/ Issue (HP 2020)	Indicator	Measure	Data Source
Economic Stability			
Food Insecurity	Population receiving SNAP benefits	9.7%	US Census Bureau, SAIPE, 2015
Housing Instability	Renter-occupied housing units	37%	US Census Bureau, American Community Survey, 2013-17
	Housing cost burden (30)% - percentage of households where housing costs exceed 30% of total household income	24%	US Census Bureau, ACS, 2013-17
Poverty	Children eligible for free/reduced price lunch	55%	National Center for Education Statistics. 2015-16
Education			
Early Childhood	Total Head Start programs per 10,000 children under age 5	4.54	US Dept of Health & Human Services, 2018
	Student reading proficiency – percentage of 4th grade students scoring Not Proficient or worse	60%	US Dept of Education, EDFacts, 2014-15
Language & Literacy	Population in limited English households	4.1%	US Census Bureau, ACS, 2013-17
Neighborhood & Built Environment			
Access to Foods that Support Healthy Eating	Percent of population living in food desert census tracts	44%	USDA, Food Research Atlas, 2015
Environmental	High heat index days	10%	NOAA, North American Land Assimilation System, 2014
Quality of Housing	Substandard housing – occupied housing with one or more conditions	26%	US Census Bureau, ACS, 2013-17

Source: Community Commons—data for NWA Counties, retrieved 2018.

VI. Prioritized Significant Community Health Needs

Identifying Assessed Health Issues

As primary and secondary data was analyzed for the CHNA, ten assessed health issues (AHI) emerged from the process. The AHI are broadly defined and relevant indicators are presented in this section. Indicators presented do not represent all indicators available for a particular AHI, but instead were selected based on being deemed germane to the prioritization process. A synopsis report of primary and secondary data utilized in the prioritization process is provided in Appendix D.

Access to Care

A lack of access to care results in barriers to positive health behaviors and outcomes. These barriers disproportionately impact those who are low-income, racial or ethnic minorities, or immigrants. Access to care is determined by availability and accessibility of resources and services and includes such factors as lack of access to preventive care, limited health knowledge, insufficient provider outreach, and social health determinants interfering with utilization of services.[3]

Access to Care Indicators	• Of the PSA population, 13.45% is uninsured, which is higher than the state (AR, 12.33%; MO 11.32%) and U.S. (11.7%) rates[6] • There are 71 primary care physicians per 100,000 population within the PSA, a rate lower than the state (AR, 75.1; MO, 83.6) and U.S. (87.8) rates[6] • While only 19.35% of the population within the PSA is considered to be living within a geographic area designated as a "Health Professional Shortage Area" (below AR at 45.47%, MO at 54.55%, and the U.S. at 33.13%), 100% of the populations with Carroll and Madison Counties in AR and Barry and McDonald Counties in MO are considered as such[6]

Behavioral Health

Mental or behavioral health (for the purpose of this report, the terms will be used interchangeably) can be defined as a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to his or her community.[7]

Behavioral Health Indicators	• Of the Medicare population within the PSA, 17.2% has depression, which is higher than both AR (16.3%) and the U. S. (16.7%), but lower than MO (20.0%)[6]
	• While each of the AR counties within the PSA are below the state average number of poor mental health days reported in the last 30 days for adults aged 18 and older (AR, 5.2 days), both Barry (4.7 days) and McDonald (4.9 days) Counties in MO are above the state average (MO, 4.4 days)[8,9]
	• Responses to the NWA Community Health survey revealed[10]:
	  ○ 29% of NWA residents indicated mental health problems were one of the three biggest health problems within the community, and 26%, one of the three most important health problems for them, personally
	  ○ Reduced stress/stress management was indicated by 26% of respondents (3rd most common response) as being the health need that, if met, would have the most positive impact on their own personal health

Cancer

Cancer is a disease in which individuals suffer from an uncontrolled growth of cells derived from normal tissues. Risk of cancer is increased by certain genetic, environmental and behavioral factors.[11]

Cancer Indicators

- Cancers are listed as the 2nd leading cause of death (2016) in both AR and MO; AR is 5th in the nation, while MO is 14th[12,13]
- The breast cancer incidence rate for the PSA is 111.89/100,000, which is lower than the state (AR 112.7; MO 125.9) and U.S. (123.5) rates[6]
- The incidence rate of colon and rectal cancer in the PSA (40.43) is lower than the state (AR 43.0; MO 42.5) and US (39.8) rates[6]
- The lung cancer incidence rate in the PSA is 69.95/100,000, lower than the state rates (AR 77.6; MO 74.9), but above the US (61.2) rates[6]
- Responses to the NWA Community Health survey revealed 18% of NWA residents indicated cancers were one of the three biggest health problems within the community; 19% indicated it was one of the three biggest issues in their own health.[10]

Chronic Lower Respiratory Disease/COPD

Chronic Lower Respiratory Disease, mainly COPD (Chronic Obstructive Pulmonary Disorder), refers to a group of diseases that cause airflow blockage and breathing-related problems. COPD may be caused by tobacco smoke, air pollutants, and/or genetics.[14]

Chronic Lower Respiratory Disease/ COPD Indicators

- Chronic Lower Respiratory Disease is the 3rd leading cause of death (2016) in both AR and MO; AR is 5th in the nation, while MO is 10th[12,13]
- The age-adjusted death rate for Lung Disease within the PSA is 52.8/100,000. This is below the AR rate (59.29), but above MO (52.17) and U.S. (41.3) rates[6]
- In 2017, Mercy NWA had 8,839 emergency department visits with lung disease being a principal or secondary diagnosis and 3,707 of those were admitted as inpatients[15]

Diabetes

Diabetes is a common chronic illness in which the body is unable to adequately process blood glucose, resulting in blood sugar levels being too high. Addressing diabetes and its causes is important in improving the overall health of the community.[16]

Diabetes Indicators

- Diabetes is the 7th leading cause of death (2016) in both AR and MO; AR ranks 8th in the nation, while MO is tied for 30th[12,13]
- Of adults aged 20 and older within the PSA. 9.8% have been diagnosed with diabetes, which is lower than state rates (AR 11.28%; MO 9.71%), but above the U.S. (9.19%) rate[6]
- Of the Medicare population within the PSA, 21.8% has diabetes, which is lower than the state (AR 24.4%; MO 25.84%) and U.S. (26.55%) rates[6]
- In 2017, Mercy NWA had 8,726 emergency department visits with diabetes being a principal or secondary diagnosis and 2,886 of those were admitted as inpatients[15]
- Of respondents to the NWA Community Health survey, 25% indicated diabetes was one of the three biggest health problems within the community, and 21%, for them, personally[10]

Heart Disease

The term "heart disease" refers to several types of heart conditions. In the U.S., the most common such condition is coronary artery disease, which affects the blood flow to the heart and can lead to a heart attack.[17]

Heart Disease Indicators

- Heart disease is the leading cause of death (2016) in both AR and MO; AR is 3rd in the nation, while MO is 10th[12,13]
- The age-adjusted death rate for Coronary Heart Disease within the PSA is 132.7/100,000. This is above the state rates (AR 132.41; MO 115.23), as well as the U.S. (99.6) rate[6]
- Of adults aged 18 and older within the PSA, 5.2% have ever been told by a doctor that they have heart disease or angina. This is lower than AR (5.8%), but higher than MO (4.8%) and the U.S. (4.4%)[6]
- 27.1% of the Medicare population within the PSA has heart disease, which is lower than AR (29.17%), but higher than MO (26.62%) and the U.S. (26.46%)[6]
- In 2017, Mercy NWA had 10,397 emergency department visits with cardiovascular disease being a principal or secondary diagnosis and 4,682 of those were admitted as inpatients[15]

Homelessness

An individual who is homeless is one without a stable living situation, which may include living in a temporary shelter, transitional housing with extended family or friends, or on the street or in a car. Homelessness is often caused by income disparities, poverty and high housing costs.[18]

Homelessness Indicators

- The homeless population within NWA has grown by 152% in the last decade, compared to a 12% growth in the general population[19]
- There are currently an estimated 2,951 homeless persons in Northwest Arkansas, of which 49% report a mental health condition and 40% report substance abuse[19]
- Of the total homeless population, 1,547 are under the age of 18, an increase of 216% in the last decade[19]
- While 15% of the total NWA homeless population is unsheltered, that number rises to 20% among homeless veterans[19]

Obesity and Overweight

A weight that is higher than what is considered as a healthy weight for a given height is described as overweight or obese. Overweight and obesity contribute to many issues that negatively impact health and contribute to chronic diseases.[20]

Obesity/ Overweight Indicators

- AR ranks 7th in the nation in adult obesity rates, and MO ranks 17th[12,13]
- Of adults aged 20 and older living in the PSA, 31.6% self-reported a BMI > 30.0 (obese). This is lower than state rates (AR 35.4%; MO 32.0%), however, higher than the U.S. (28.3%) rate[6]
- Of adults aged 18 and older living in the PSA, 37.1% self-reported a BMI between 25.0 to 30.0 (overweight), which is higher than both state (AR 34.0%; MO 35.3%) and U.S. (35.8%) rates[6]
- Responses to the NWA Community Health survey revealed[10]:
    - 33% of NWA residents indicated obesity and overweight were one of the three biggest health problems within the community, and 36% one of the three most important health problems for them personally
    - 40% reported being overweight (top issue), 18% lack of physical activity and 17% poor nutrition as being within the top three most risky behaviors impacting the community's health

Stroke

A stroke occurs when blood flow to part of the brain become blocked or when a blood vessel in the brain bursts. Because parts of the brain become damaged or die, a stroke can cause lasting brain damage, long-term disability, or even death.[21]

Stroke Indicators

- Stroke is the 4th leading cause of death (2016) in Arkansas and 5th in Missouri; Arkansas is 5th in the nation, while MO is tied for 14th[12,13]
- The age-adjusted death rate for stroke within the PSA is 38.3/100,000. This is below the state rates (AR 46.9; MO 41.0), but above the US (36.9) rate[6]

Substance Abuse

Substance abuse refers to the harmful or dangerous use of psychoactive substances, which can include alcohol and illicit drugs. Psychoactive substance use can lead to dependence and addiction, so that there is difficulties in controlling the substance use, even despite harmful consequences.[22]

Substance Abuse Indicators

- There were 3,983 total arrests for selling, manufacturing, and/or possession of drugs/narcotics within the four-county NWA area in 2017, up from 3,575 total arrests in 2016[23]
- According to 2017 Arkansas Prevention Needs Assessment data, NWA (Region 1) youth in 6th-12th grades report similar rates of prescription drug use (2.8%), over-the-counter drug use (1.3%) and any drug use (10.2%) within 30 days of survey as compared to state rates (3.0%, 1.2%, 10.1%, respectively)[24]
- Responses to the NWA Community Health survey revealed[10]:
    - 22% of NWA residents indicated illegal drug use was one of the three biggest health problems within the community, and 19% included prescription drug use within their top three concerns
    - 33% of respondents said that illegal drug use is one of the most important risky behavior in NWA, while 22% included prescription drug use within their top three

Prioritizing Assessed Health Issues

A meeting of the Community Health Subcommittee of the Mercy NWA Hospital Board of Directors was convened in December 2018 in order to prioritize the ten assessed health issues (AHI). The subcommittee was charged with evaluating the quantitative and qualitative findings from the CHNA process, the strengths and resources of the community and the hospital's strategic plan. The unanimous decision was made to retain the four priority needs from Mercy NWA's 2016 CHNA, which includes Access to Care, Behavioral Health, Diabetes and Homelessness. A Nominal Group Technique was employed to assist in prioritizing the remaining six assessed health issues. The subcommittee first agreed to the location of each AHI on a strategy grid based on the degree of need (low or high) and the Mercy NWA resources available to address the need (low, medium, or high). Those AHI that were categorized as "high need" were then ranked by the committee members using five criteria: 1) Magnitude of Need, 2) Feasibility to Change, 3) Alignment with Mission/Strategic Goals, 4) Resources Available, and 5) Importance to Community. Scores were totaled for all participants. Tables showing the resulting strategy grid and AHI rankings are below.

Strategy Grid Results

		Magnitude of Need	
		High	**Low**
Resources Available	**High**		
	Medium	Heart Disease Obesity	
	Low	Cancer Substance Abuse	Chronic Respiratory Disease Stroke

Assessed Health Issues Ranking Results

Identified Health Need	Total Score	Chosen as CHNA Priority Need (yes/no)
Obesity	142	Yes – combined with Diabetes
Heart Disease	135	No
Cancer	101	No
Substance Abuse	99	No

Based on results of the 2019 CHNA, Mercy NWA has prioritized the following health-related needs:

While working to address access to care, behavioral health, diabetes, and homelessness as part of the 2016 CHIP, resources have been secured, partnerships established, and programs implemented that have shown to be making positive impacts in these priority areas for residents within the Mercy NWA communities. Therefore, these needs will again serve as the foundation of the next 3-year cycle of the Mercy NWA CHIP beginning in 2019. Mercy NWA will maintain current strategies, while continuing to seek out evidence-based programs/interventions and promising practices that will strengthen these efforts.

In response to the community input received through the CHNA, obesity will be added to diabetes to become a joint focus area. Community survey responses indicated that obesity is perceived to be the most important issue impacting both personal and community health. In addition, being overweight was reported by respondents as being the most risky behavior engaged in by Northwest Arkansas residents. As obesity is a primary risk factor for type 2 diabetes and the conditions are comorbidities, efforts to address either condition are anticipated to have reciprocal positive impacts.[20]

VII. Significant Community Health Needs Not Being Addressed and Why

Three assessed health issues identified in the 2019 CHNA process—heart disease, cancer, and substance abuse—were not chosen as priority focus areas for development of implementation strategies due to Mercy's current lack of resources available to address these needs. These issues will be addressed indirectly in implementation strategies developed to meet the prioritized needs in areas that may overlap. For example, efforts to reduce the incidence of type 2 diabetes in the community may also reduce the incidence of heart disease. Additionally, related community partnerships, evidence-based programming, and sources of financial and other resources will be explored during the next three-year CHIP cycle. Mercy NWA will consider focusing on these issues should resources become available. Until then, Mercy NWA

will support, as able, the efforts of partner agencies and organizations currently working to address these needs within the community.

VIII. Potentially Available Resources

Mercy NWA collaborates with many local community agencies and organizations that have similar missions and personnel dedicated to improving the health and quality of life for individuals within the Mercy NWA region. Some of these partners include:

- American Diabetes Association Local Community Leadership Board
- American Heart Association
- Arkansas Chronic Disease Coordinating Council
- Arkansas Department of Health
- Arkansas Diabetes Advisory Council
- Benton, Carroll, Madison, and Washington County Health Units
- Community Clinic Northwest Arkansas
- Drug-Free Benton County
- Hark at the Center for Collaborative Care
- Madison County Health Coalition
- Ozark Guidance Center
- Samaritan Community Center
- Washington Regional Medical Center
- University of Arkansas
- University of Arkansas for Medical Sciences Northwest

IX. Evaluation of Impact

The 2016 community health needs assessment identified four priority health areas: Access to Care, Behavioral Health, Diabetes, and Homelessness. A community health improvement plan was developed and implemented to address these significant needs. Mercy NWA developed and implemented a variety of programs and initiatives to address the needs identified in the 2016 CHNA.

Access to Care for At-Risk Persons

Mercy NWA began a program in collaboration with a local federally qualified health center (FQHC) to provide access to specialty care for uninsured patients of the FQHC in need of such care. Ten Mercy NWA specialty clinics are currently participating in the program; 311 patients have been seen since the program began in 2016. Services included office visits, testing, and surgery. McAuley Clinic Without Walls is a program to provide access to health care services, particularly primary care and preventive services, to uninsured adults living in Northwest Arkansas who would otherwise not have access to health care. Fifteen primary care physicians are currently participating in this program and a total of 196 patients have been enrolled since

the program began in 2016. The Mercy Mobile Mammography program continued to serve rural and underserved populations in Benton and Washington counties. Last year, 530 patients were screened at 26 off-site screening events. Free influenza vaccines were provided to 352 medically underserved and rural community residents in 2016 and 310 in 2017 using the Mercy Mobile Health Unit and hospital volunteers. A new chronic disease screening program was begun in partnership with a local nonprofit service organization. Screened for high blood pressure, diabetes, and lipid disorders were provided to 658 residents during the last two years. Mercy is in its third year of offering an internal medicine residency program in partnership with University of Arkansas for Medical Sciences to increase the number of practicing primary care physicians in the area.

Behavioral Health

Mercy NWA, in partnership with the Endeavor Foundation, completed the Join the Solution project, a one-year study assessing mental health services, physical health services, and distribution of basic needs to students in five major area school districts. Based on results obtained from this study, Hark at the Center for Collaborative Care, of which Mercy NWA is a founding sponsor, has been developed. This nonprofit organization is working to coordinate human services by serving as a backbone organization and technology platform to connect health and social services in Northwest Arkansas. Behavioral health services were expanded significantly to a total of 4 psychiatrists, 4 psychologists, 5 therapists, and 3 interns, expanding access and the department's ability to provide care to low-income patients. Nearly 530 hours of therapy services were provided to low income clients last year by five therapy interns in collaboration with supervising therapists.

Diabetes

Several programs were developed during the last three years to address diabetes and obesity among community members. The Mercy Diabetes Prevention Program began in 2016 and is growing quickly. About 100 participants have enrolled since the program began and 15% have attended free or at reduced cost. Average weight loss of participants completing the program was 6.7%. Sixty percent of participants reduced their fasting glucose or HbA1C to normal. The Healthy for Life Weight Management program for families operated for about 2 years, reaching 25 participants last year. Mercy NWA dieticians conducted an eight-week nutrition class in 2017 at an elementary school with a large proportion of low-income children during a summer meal program offered by the Rogers School District. Twenty-four children and their parents attended the program.

Homelessness

Goals of Mercy programs aimed at the health priority area of homelessness are to decrease food insecurity among homeless person in Northwest Arkansas and to facilitate partnerships to assist homeless individuals and families. The Mercy NWA motel ministry outreach program provided over 16,000 meals during the last two years in collaboration with 65 community partners to homeless residents of a local motel. Mercy NWA also provided grant-funded direct assistance to 96 people in 20 families last year and has assisted 40 families to move into permanent housing.

X. References

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XI. Appendices

Appendix A

NWA Community Health Survey Questionnaire

1). What **three** health problems are currently most important in our NWA COMMUNITY? (Those problems which have the greatest impact on overall community health)

- ○ Aging problems
- ○ Alcohol abuse
- ○ Asthma/lung or breathing issues
- ○ Cancers
- ○ Child abuse/neglect
- ○ Chronic pain
- ○ Dental problems
- ○ Diabetes
- ○ Domestic violence
- ○ Drug use – illegal drugs
- ○ Drug use – prescription drug abuse
- ○ Gun related injuries
- ○ Heart disease and stroke
- ○ High blood pressure
- ○ Infant death
- ○ Infectious disease (TB, hepatitis, etc.)
- ○ Injuries due to crime
- ○ Lack of physical activity
- ○ Mental health problems
- ○ Motor vehicle crash injuries
- ○ Obesity and overweight
- ○ Poor nutrition
- ○ Rape/sexual assault
- ○ School violence
- ○ Secondhand smoke exposure
- ○ Sex/human trafficking
- ○ Sexually transmitted disease/HIV/AIDS
- ○ Sleep difficulties
- ○ Suicide
- ○ Teen pregnancy
- ○ Tobacco use/e-cigarette use/vaping
- ○ Other _____

2). What health problems are currently most important to YOU? **Choose all that apply.** (Those problems which have the greatest impact on your personal health)

- ○ Aging problems
- ○ Alcohol abuse
- ○ Asthma/lung or breathing issues
- ○ Cancers
- ○ Child abuse/neglect
- ○ Chronic pain
- ○ Dental problems
- ○ Diabetes
- ○ Domestic violence
- ○ Drug use – illegal drugs
- ○ Drug use – prescription drug abuse
- ○ Gun related injuries
- ○ Heart disease and stroke
- ○ High blood pressure
- ○ Infant death
- ○ Infectious disease (TB, hepatitis, etc.)
- ○ Injuries due to crime
- ○ Lack of physical activity
- ○ Mental health problems
- ○ Motor vehicle crash injuries
- ○ Obesity and overweight
- ○ Poor nutrition
- ○ Rape/sexual assault
- ○ School violence
- ○ Secondhand smoke exposure
- ○ Sex/human trafficking
- ○ Sexually transmitted disease/HIV/AIDS
- ○ Sleep difficulties
- ○ Suicide
- ○ Teen pregnancy
- ○ Tobacco use/e-cigarette use/vaping
- ○ Other _____

3). What **three** risky behaviors are currently most important in our NWA COMMUNITY? (Those behaviors that most contribute to poor individual and/or community health)

- ○ Alcohol abuse
- ○ Being overweight
- ○ Bullying
- ○ Child abuse/neglect
- ○ Domestic violence
- ○ Dropping out of school
- ○ Drug use—illegal drugs
- ○ Drug use—prescription drugs
- ○ Lack of physical activity
- ○ Lack of maternity care
- ○ Not getting shots/vaccines to prevent disease
- ○ Not using birth control or having unprotected sex
- ○ Not using seat belts or child safety seats
- ○ Poor nutrition
- ○ Social media/internet use
- ○ Tobacco use/e-cigarette use/vaping
- ○ Unsafe driving/texting and driving
- ○ Unsecured guns and ammunition
- ○ Other _____

4). What **three** health-related needs, if met, would have the most positive impact on your personal health?

- ○ Access to adequate food
- ○ Affordable housing
- ○ Affordable child care
- ○ Affordable prescriptions/medications
- ○ Alcohol, tobacco, or drug use treatment and prevention
- ○ Better sleep
- ○ Dental care
- ○ Disability services
- ○ Exercise and recreation opportunities
- ○ Health education and information
- ○ Job opportunities/training
- ○ Language barriers/interpretation
- ○ Medical care
- ○ Mental health care
- ○ Nutrition and meal planning education
- ○ Older adult/senior care
- ○ Reduced crime and violence, including domestic violence
- ○ Reduced social isolation/loneliness
- ○ Reduced stress/stress management
- ○ Transportation
- ○ Weight management programs
- ○ Other _____

5). Within the past 12 months, how difficult has it been for you to get the following if/when needed:

	Very Difficult	Difficult	Somewhat Difficult	Not Difficult	N/A
Medical care (for any reason)	○	○	○	○	○
After hours medical services (not through the emergency room)	○	○	○	○	○
Health-related services due to cost or lack of health insurance	○	○	○	○	○
Prescriptions/medications due to cost or lack of health insurance	○	○	○	○	○
Mental or behavioral health services	○	○	○	○	○
Developmental disability services	○	○	○	○	○
Substance abuse services (alcohol, tobacco, drugs, etc.)	○	○	○	○	○
Dental care	○	○	○	○	○
Chronic pain management services	○	○	○	○	○
Nutrition/weight loss management programs	○	○	○	○	○
Long term care (nursing home, assisted living, rehabilitation, home health, etc.) services	○	○	○	○	○

6). Within the past 12 months, if you missed an appointment for health services, it was because: (Select all that apply)

- ○ Forgot
- ○ Didn't have transportation
- ○ Weather
- ○ Child care
- ○ Felt better/no longer required services
- ○ Work
- ○ Cost
- ○ Didn't want to go/changed mind
- ○ Not applicable – I did not miss an appointment for health services

7). Do you AND/OR members of your household currently have any of the following forms of health care coverage? (Select all that apply)

- ○ Health insurance from your job
- ○ Affordable Care Act/Marketplace Plan
- ○ Medicare
- ○ Medicaid
- ○ ARKids First
- ○ Veteran's (VA) Benefits
- ○ Indian Health Services
- ○ Uninsured/no coverage
- ○ Don't know

8). Where do you AND/OR members of your family typically go to receive health care? (Select all that apply)

- ○ Community Clinic Northwest Arkansas (St. Francis House)
- ○ Boston Mountain Rural Health Center
- ○ Free clinic
- ○ Primary care doctor's office (family doctor, internal medicine doctor, or pediatrician)
- ○ Urgent care/Convenient care/Walk-in clinic
- ○ Hospital emergency room
- ○ Health Department
- ○ Veteran's Clinic (VA)
- ○ Indian Health Clinic
- ○ Healer/Alternative Medicine
- ○ Do not seek healthcare services

9). Have you EVER been told by a health care provider that you have or have you EVER been treated for:

	Yes	No	Do Not Know
Prediabetes, "borderline" diabetes, or diabetes while pregnant	○	○	○
Diabetes	○	○	○
High blood pressure	○	○	○
Heart disease	○	○	○
Cancer (not including skin cancer)	○	○	○
Overweight or Obesity	○	○	○
Asthma or other lung problems	○	○	○
Dental emergency, such as a broken tooth/pain, that required immediate attention	○	○	○
Dental infection/abscess that required treatment or pulling a tooth	○	○	○
Depression or anxiety	○	○	○
Another serious mental illness, such as bipolar, schizophrenia, or psychosis	○	○	○
A substance abuse disorder	○	○	○

10). Within the past 12 months, have you:

	Yes	No	Do Not Know
Had episodes of sadness, depression, or hopelessness lasting two weeks or longer that interfered with your ability to do daily tasks	○	○	○
Seriously considered attempting suicide or taking your own life	○	○	○
Actually attempted suicide or to take your own life	○	○	○

11). Within the past 12 months, how many times have you:

	0	1-2	3-5	6+	Do Not Know
Had your utilities shut off	○	○	○	○	○
Moved	○	○	○	○	○
Been unable to get childcare when needed	○	○	○	○	○
Been unable to get reliable transportation when needed	○	○	○	○	○
Run out of food and did not have money to get more	○	○	○	○	○
Used WIC or SNAP benefits to purchase food for myself or my family	○	○	○	○	○
Gotten emergency food from a food bank, pantry or church	○	○	○	○	○
Experienced homelessness by having to sleep outside, in a tent, shelter, car, or motel	○	○	○	○	○
Stayed/lived with a family or friend because of lack of own housing	○	○	○	○	○
Been in danger of losing your own housing	○	○	○	○	○
Been unable to get needed vocational training or education resources	○	○	○	○	○

12). In what zip code do you live? _____

13). In what town do you live? _____

14). What is your age? _____

15). What is your gender?

- ○ Male
- ○ Female
- ○ Transgender
- ○ Intersex

16). Do you think of yourself as:

- ○ Heterosexual or straight
- ○ Homosexual, gay, or lesbian
- ○ Bisexual
- ○ Something else; If you think of yourself as something else, what do you mean? _____

17). What is your race/ethnicity (select all that apply)?

- ○ American Indian or Alaskan Native
- ○ Asian
- ○ Black or African-American
- ○ Hispanic or Latino
- ○ Native Hawaiian, Marshallese, or Other Pacific Islander
- ○ White
- ○ Other (Please specify) _____

18). What is the primary language you use in most daily situations:

- ○ English
- ○ Spanish
- ○ Marshallese
- ○ Other _____

19). What is the highest level of school you have completed or the highest degree you have received?

- ○ Less than high school diploma
- ○ High school diploma or GED
- ○ Vocational/technical training
- ○ Some college but no degree
- ○ Associate's degree
- ○ Bachelor's degree
- ○ Graduate or Professional degree

20). How many adults live in your household? _____

21). How many children live in your household? _____

22). What was the total combined income of all members of your household last year?

- ○ $0 to $9,999
- ○ $10,000 to $24,999
- ○ $25,000 to $49,999
- ○ $50,000 to $74,999
- ○ $75,000 to $99,999
- ○ $100,000 to $149,999
- ○ $150,000 to $199,999
- ○ $200,000 and up

23). Which of the following categories best describes your employment status?

- ○ Work full-time
- ○ Work part-time
- ○ Self-employed
- ○ Work more than one job
- ○ Homemaker
- ○ Student
- ○ Retired
- ○ Disabled and unable to work
- ○ Out of work for less than one year
- ○ Out of work for more than one year

24). What else would you like us to know about health in Northwest Arkansas?

_____

_____

_____

_____

Appendix B

NWA Community Health Survey Report

Community Health Survey

Northwest Arkansas 2018 Summary Report

Introduction

Mercy Hospital convened a group of health care and public health agencies from across the four-county Northwest Arkansas (NWA) region to conduct a comprehensive community health survey as part of their 2019 Community Health Needs Assessment (CHNA) process. The Northwest Arkansas region is made up of Benton, Washington, Carroll, and Madison Counties. The collaboration was made up of thirteen organizations representing two hospitals, a federally qualified health center, a mental health service provider, a university, four county health departments, and several other nonprofit organizations. The survey was hosted online by Hark at the Center for Collaborative Care, a nonprofit organization working to coordinate human services and provide a backbone organization for social services in Northwest Arkansas. Representatives from the partner organizations worked together to create the 24-question anonymous survey, which was available in English, Spanish, and Marshallese.

The last NWA community-wide health assessment was conducted in 2004 by the Northwest Arkansas Hometown Health Improvement Project, in collaboration with the Benton County Community Coalition, the Carroll County Resource Council, and the Madison County Health Coalition. The 2004 NWA Four-County CHNA used primary data obtained from the survey, secondary data obtained from outside sources (CDC, Healthy Arkansas), and comparisons to existing data to identify the greatest health concerns in NWA. The results concluded that the top issues affecting all four counties surveyed were: (1) cost and availability of health care insurance, (2) medical care costs, (3) money needed for prescriptions, (4) substance abuse, and (5) access to health care services.

Methodology

In January 2018, the survey coalition began meeting to discuss writing the health survey. The coalition consisted of the Arkansas Coalition of Marshallese; Arkansas Department of Health; the Benton, Washington, Carroll, and Madison County Health Units; Community Clinic Northwest Arkansas, Hark at the Center for Collaborative Care, Madison County Health Coalition, Mercy Hospital Berryville and Mercy Hospital Northwest Arkansas, Ozark Guidance Center, Washington Regional Medical Center, and University of Arkansas for Medical Sciences.

From January to April 2018, the coalition developed the survey which would focus on community members' perception of the greatest community health needs, personal health needs, perceptions of risky behaviors and health risk factors, and social determinants of health. Community health survey projects from other cities and counties across the United States were studied to identify commonly asked questions. These questions were tailored to the NWA region, and additional questions were developed by members of the collaborative, working together in committees. The larger group discussed and evaluated each committee's contributions and drafted an initial survey which went through a total of ten revisions before being pilot tested.

The survey was translated into Spanish by two certified medical interpreters. Pilot surveys were distributed to 25 English-speaking individuals and 15 Spanish-speaking individuals who completed the survey and returned feedback, which was then used to further revise and refine the survey. The Marshallese version was translated by a certified Marshallese interpreter but was completed later than the other two and was not pilot tested.

Hark at the Center for Collaborative Care hosted the survey online in English, Spanish, and Marshallese. The survey went live online June 1, 2018 and remained open until October 15, 2018. The English and Spanish versions of the survey were available for the entire span of 4 ½ months. The Marshallese version of the survey was available for the last four weeks of the survey period.

Distribution involved both online and in-person components. Each partner organization distributed the survey electronically to their employees, patients, clients, and other community members through email distribution. A survey-specific Facebook page was also created, and the survey was publicized in local newspapers. Two organizations, the Rogers Chamber of Commerce and Arvest Bank, included a link to it in their electronic newsletter. Intentional efforts were made to over-sample Hispanic and Marshallese groups in order to adequately understand the needs of these groups.

Volunteers and coworkers at Mercy Hospital and Clinics and Community Clinic asked patients to complete the survey while they were waiting, either on paper or on an iPad. A similar distribution occurred in Berryville through the Carroll County parole offices. The survey was also distributed in multiple forms at a number of community events. These events included flu clinics, back-to-school immunization events, county fairs, and summer lunch programs. Results of each completed paper survey were entered into the online survey database by Mercy employees and volunteers.

Results

Demographics and Descriptive Statistics

The NWA Community Health Survey received a grand total of 1,229 responses. Of the total responses, 121 respondents either did not provide sufficient location information to infer county, were otherwise deemed inappropriate for study inclusion (e.g., non-responsive answers, respondents under age 18, etc.), or provided location information indicating that they were outside of the four-county region for the survey, leaving a total of 1,108 valid respondents. The majority of respondents were from Benton and Washington County, 44% and 42% respectively. As shown in Table 1, the response rate for survey representation from each county was roughly equivalent to that county's proportion of the total population of Northwest Arkansas.

Table 1

Survey respondents by county

County	*n* of participants	% of participants	2010 Census County Total	County Population % of Total NWA Survey Area
Benton	489	44%	221,339	47%
Washington	469	42%	203,065	43%
Carroll	122	11%	27,446	6%
Madison	28	3%	15,717	3%
Total	**1,108**		**467,567**	

Racial and ethnic breakdown of survey respondents is shown in Table 2. Of the 1,108 valid responses, 1,098 respondents reported race/ethnicity. Seventy-one percent were white, 19% were Hispanic/Latino, and 6% were Native Hawaiian, Marshallese, or other Pacific Islander. This racial and ethnic breakdown was representative of the NWA population and demonstrated successful oversampling of racial and ethnic minorities. Totals in this table do not match Table 1 because 48 respondents chose more than one race or ethnicity.

Table 2

Survey respondents by race/ethnicity

Race/ethnicity	*n* of respondents	% of respondents	% of NWA population by race/ethnicity
White	784	71%	75%
Hispanic/Latino	211	19%	16%
Native Hawaiian, Marshallese, or Other Pacific Islander	71	6%	2%
American Indian or Alaska Native	39	4%	1%
Asian	22	2%	2%
Black or African-American	15	1%	2%
Other	6	1%	4%

The survey was available in English, Spanish, and Marshallese; the English version received the vast majority responses, (1,007), the Spanish version received 60 responses, and the Marshallese version received 41 responses. Eighty-seven percent of the respondents reported speaking English in most daily situations, 14% reported Spanish, and 5% reported Marshallese. The majority of survey respondents were female at 76%. About 76% percent of respondents were under 55 years of age and 24% were over 55.

With regard to education, about 28% of individuals had a high school diploma/GED or less, and 50% had obtained an associate degree or higher. Sixty-three percent of participants reported working full-time. Three percent of those surveyed reported being unemployed, and four percent reported being unable to work due to a disability.

The majority of those surveyed obtain insurance through their employer (67%), and 11% of respondents reported being uninsured (see Table 3). The participants could choose more than one type of insurance, so the number and percentage of responses does not equal the number of participants.

Table 3

Health insurance coverage of respondents

Type of health insurance	*n* of responses	% of responses
Health insurance from your job	732	67%
ARKids First	182	17%
Medicare	164	15%
Medicaid	139	13%
Affordable Care Act/Marketplace Plan	80	7%
Veteran (VA) benefits	42	4%
Indian Health Services	10	1%
Uninsured/no coverage	122	11%
Don't know	34	3%

As shown in Table 4, the vast majority (73%) of respondents indicated that they or a member of their family typically went to a primary care doctor or office to receive care. Urgent care/convenient care/walk-in clinic and the Community Clinic Northwest Arkansas were each chosen by 23% of respondents. Eleven percent of respondents reported typically going to a hospital emergency room for health care.

Table 4

Locations where respondents receive healthcare

Location	*n* of responses	% of responses
Primary care doctor or office (family doctor, internal medicine doctor, or pediatrician)	795	73%
Urgent care/convenient care/walk-in clinic	249	23%
Community Clinic Northwest Arkansas (St. Francis House)	235	21%
Hospital emergency room	120	11%
Free clinic	70	6%
Health Department	65	6%
Veterans Clinic (VA)	30	3%
Boston Mountain Rural Health Center	23	2%
Healer/alternative medicine	19	2%
Indian Health Clinic	4	0.4%
Do not seek healthcare services	38	4%

Health Needs, Health Problems and Risky Behavior

In order to determine community members' overall perceptions of health needs in Northwest Arkansas, the following four questions were developed and asked of survey respondents.

1.) What three health problems are currently most important in our NWA COMMUNITY? (Those problems which have the greatest impact on overall community health)
2.) What health problems are currently most important to YOU? Select all that apply. (Those problems which have the greatest impact on your personal health)
3.) What three risky behaviors are currently most important in our NWA COMMUNITY? (Those behaviors that most contribute to poor individual and/or community health)
4.) What three health-related needs, if met, would have the most positive impact on your personal health?

The following tables display the top eight responses in descending order for each question. Tables 5-8 display the results for all survey respondents, Tables 9-12 display the results for only Hispanic respondents, and Tables 13-16 display the results for only Pacific Islander respondents.

All Respondents in Four-County Area

Table 5

Health problems most important in NWA – All Respondents

Priority Rank	Health Problem	*n* of responses	% of responses
1	Obesity and overweight	359	33%
2	Mental health problems	315	29%
3	Diabetes	279	25%
4	Drug use—illegal drugs	242	22%
5	Drug use—prescription drug abuse	206	19%
6	Cancers	197	18%
7	Aging problems	169	15%
8	Child abuse/neglect	149	13%

Table 6

Personal health problems most important to respondents – All Respondents

Priority Rank	Health Problem	*n* of responses	% of responses
1	Obesity and overweight	387	36%
2	Mental health problems	281	26%
3	Lack of physical activity	278	26%
4	Aging problems	268	25%
5	High blood pressure	238	22%
6	Diabetes	232	21%
7	Sleep difficulties	216	20%
8	Cancers	205	19%
8	Poor nutrition	205	19%

Table 7

Risky behaviors most important in NWA – All Respondents

Priority Rank	Risky Behavior	*n* of responses	% of responses
1	Being overweight	434	40%
2	Drug use—illegal drugs	355	33%
3	Alcohol abuse	321	29%
4	Unsafe driving/texting and driving	283	26%
5	Drug use—prescription drugs	240	22%
6	Lack of physical activity	197	18%
7	Child abuse/neglect	189	17%
8	Poor nutrition	180	16%

Table 8

Health needs (if met) that would have most positive impact on respondents' personal health – All Respondents

Priority Rank	Health Problem	*n* of responses	% of responses
1	Exercise and recreation opportunities	319	30%
2	Better sleep	309	29%
3	Reduced stress/stress management	273	26%
4	Affordable prescriptions/medications	208	19%
5	Affordable housing	202	19%
6	Weight management programs	199	19%
7	Mental health care	182	17%
8	Medical care	159	15%

Hispanic Respondents

Table 9

Health problems most important in NWA – Hispanic Respondents

Priority Rank	Health Problem	*n* of responses	% of responses
1	Diabetes	76	36%
2	Cancers	59	28%
3	Obesity and overweight	50	24%
4	High blood pressure	47	22%
5	Mental health problems	36	17%
6	Drug use—illegal drugs	34	16%
7	Drug use—prescription drug abuse	31	15%
8	Alcohol abuse	28	13%
8	Dental problems	28	13%

Table 10

Personal health problems most important to respondents- Hispanic Respondents

Priority Rank	Health Problem	*n* of responses	% of responses
1	Obesity and overweight	72	35%
2	Diabetes	64	31%
3	High blood pressure	61	30%
4	Lack of physical activity	49	24%
4	Mental health problems	49	24%
6	Poor nutrition	46	22%
7	Cancers	43	21%
8	Dental problems	42	20%

Table 11

Risky behaviors most important in NWA – Hispanic Respondents

Priority Rank	Risky Behavior	*n* of responses	% of responses
1	Being overweight	78	38%
2	Bullying	69	33%
3	Alcohol abuse	61	29%
4	Drug Use—illegal drugs	52	25%
5	Unsafe driving/texting and driving	48	23%
6	Lack of physical activity	33	16%
7	Drug use—prescription drugs	31	15%
8	Not using birth control or having unprotected sex	28	14%

Table 12

Health needs (if met) that would have the most positive impact on respondents' personal health – Hispanic Respondents

Priority Rank	Health Problem	*n* of responses	% of responses
1	Medical care	47	23%
2	Affordable housing	44	22%
2	Affordable child care	44	22%
4	Dental care	43	21%
4	Better sleep	43	21%
6	Exercise and recreation opportunities	41	20%
7	Reduced stress/stress management	39	19%
8	Affordable prescriptions/medications	33	16%

Pacific Islander Respondents

Table 13

Health problems most important in NWA – Pacific Islander Respondents

Priority Rank	Health Problem	*n* of responses	% of responses
1	Diabetes	51	72%
2	Aging problems	32	45%
3	High blood pressure	27	38%
4	Cancers	19	27%
5	Dental problems	9	13%
6	Alcohol abuse	8	11%
7	Chronic pain	7	10%
8	Lack of physical activity	6	8%

Table 14

Personal health problems most important to respondents – Pacific Islander Respondents

Priority Rank	Health Problem	*n* of responses	% of responses
1	Diabetes	40	57%
2	Cancers	31	44%
3	Aging problems	29	41%
4	High blood pressure	19	27%
5	Dental problems	14	20%
6	Obesity and overweight	11	16%
7	Heart disease and stroke	10	14%
8	Poor nutrition	8	11%

Table 15

Risky behaviors most important in NWA – Pacific Islander Respondents

Priority Rank	Risky Behavior	*n* of responses	% of responses
1	Alcohol abuse	47	67%
2	Dropping out of school	21	30%
3	Bullying	19	27%
4	Drug use—illegal drugs	15	21%
5	Being overweight	13	19%
6	Lack of physical activity	12	17%
7	Child abuse/neglect	10	14%
8	Unsafe driving/texting and driving	9	13%

Table 16

Health needs (if met) that would have the most positive impact on respondents' personal health – Pacific Islander Respondents

Priority Rank	Health Problem	*n* of responses	% of responses
1	Affordable housing	34	50%
2	Exercise and recreation opportunities	24	35%
3	Disability services	20	29%
4	Medical care	17	25%
5	Alcohol, tobacco, or drug use treatment and prevention	14	21%
6	Language barriers/interpretation	12	18%
7	Dental care	10	15%
8	Access to adequate food	9	13%
8	Job opportunities/training	9	13%
8	Health education and information	9	13%

Discussion

All Respondents

Residents of Northwest Arkansas are concerned with a wide range of health-related needs and topics. Survey participants selected topics related to obesity, mental health problems, and illegal and prescription drug abuse as the most important health problems in the Northwest Arkansas community. Many of the other responses from participants included factors that are strongly associated with the issue of obesity and overweight, including diabetes, high blood pressure, lack of physical activity, and poor nutrition. Respondents indicated that increased exercise and recreation opportunities, better sleep, and reduced stress and stress management would have the most positive impact on their health.

One interesting observation from the data emerged around the issue of illegal drug use. Twenty-two percent of respondents said illegal drug use was an issue for the community, yet only 8% said this was an important issue for them personally. By comparison, for the issue of obesity and overweight, 33% of respondents said it was an issue for the community, and 36% said it was an issue for them personally.

Hispanic Respondents

Only 26% of respondents identifying as Hispanic responded in the Spanish survey; the rest responded using the English language version. Among Hispanic respondents, diabetes was the highest ranked area of concern for the community of Northwest Arkansas. Hispanic respondents believed that cancer was the second most important health concern in the community, and ranked obesity and overweight third. However, Hispanic respondents ranked obesity and overweight first among important personal health problems, followed by diabetes and high blood pressure. Hispanic respondents also believed that medical care, affordable housing, and affordable child care would have the most positive impact on their health. In regard to important risky behaviors in NWA, Hispanic respondents ranked being overweight, bullying and alcohol abuse as significant. A formatting error in the online Spanish survey combined the responses of bullying and texting while driving, therefore the ranking of bullying on this list may not be accurate.

Pacific Islander Respondents

The Marshallese community is a unique subpopulation of Pacific Islanders in NWA. The status of the Marshallese is considered to be "lawfully present migrants" because of a Compact of Free Association Agreement (COFA) dating back to 1983; Marshallese are free to enter, work, live and travel in the United States, but they do not have as many rights as official refugees or permanent residents. The Islanders have limited options to obtain health care coverage once they enter the United States. Health insurance may be purchased by those who are employed, and Marshallese families are eligible for tax credit subsidies to purchase insurance in the Affordable Care Act Marketplace. However, Marshallese persons are not eligible for Medicaid, CHIP, Medicare, or Arkansas' Private Option Insurance program (although Marshallese children are now eligible for ARKids). This situation leaves many Marshallese residents of Northwest Arkansas uninsured or underinsured, contributing to significant health disparities.

Fifty-eight percent of those identifying as Pacific Islanders responded to the survey in Marshallese. Marshallese and Other Pacific Islander respondents ranked diabetes as the most important

health problem in NWA (72%) and the most important health problem to them personally (57%). It is not surprising that diabetes is of particular concern to Pacific Islander respondents, as the incidence of type II diabetes in the Marshallese is 400% higher than the general US population. The Pacific Islanders' responses for the most important risky behaviors in NWA stood out compared to the data from all respondents; 67% of respondents indicated that alcohol abuse was an important risky behavior in NWA, followed by dropping out of school at 30% and bullying at 27%. Dropping out of school did not emerge as a priority risky behavior for all respondents or for Hispanic respondents. According to a survey conducted by the Winthrop Rockefeller Foundation in 2013, 35% of Marshallese respondents indicated that they did not have a high school education or equivalent, and 51% reported having only a high school education.

Affordable housing was chosen by 50% of Pacific Islander respondents as having the most potential for positive impact on health, followed by exercise and recreation opportunities (35%) and disability services (29%).

Conclusion

The Northwest Arkansas Community Health Survey obtained 1,108 valid responses from community members in the four-county area. Responses from the counties generally reflected the population of the area except for a relatively smaller number of participants from Carroll County. Responses also reflected the overall racial and ethnic diversity of the area, with participation from members of the Hispanic and Marshallese communities.

For the most part, respondents indicated that they were concerned with issues related to obesity, mental health, and diabetes. While Hispanic and Pacific Islander respondents indicated concern for diabetes and obesity, there were also issues important to these subpopulations that did not emerge in the results for all respondents. The results from this survey will be used in developing health interventions for NWA, focusing on the top priority areas related to obesity, diabetes, and mental health in addition to the unique health needs of Hispanic and Pacific Islander populations. Mercy Northwest Arkansas will use the results of this comprehensive survey to develop their 2019 Community Health Needs Assessment, prioritizing identified health needs and implementing appropriate interventions accordingly.

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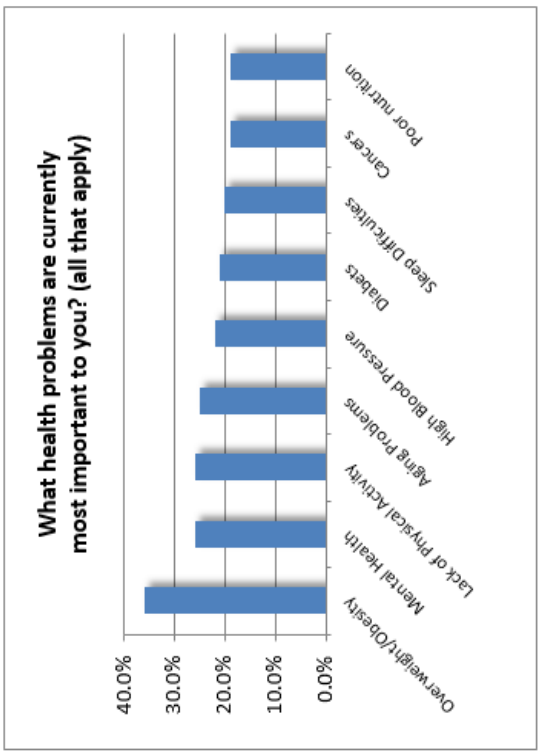
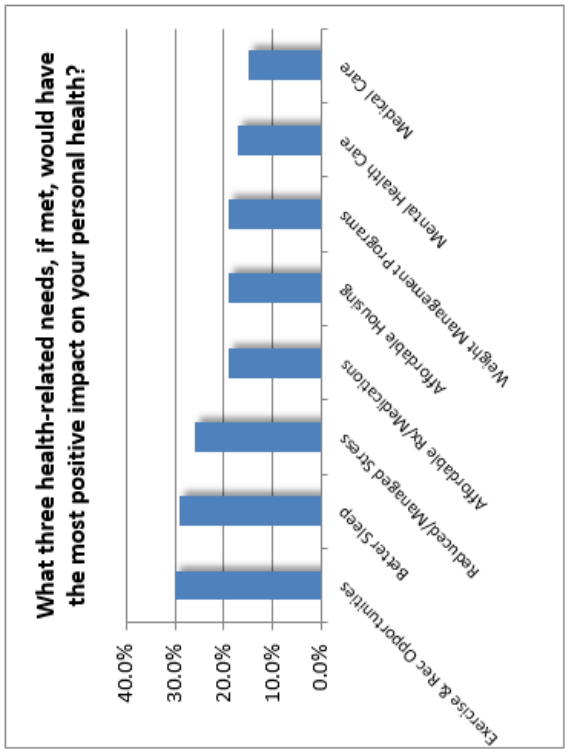
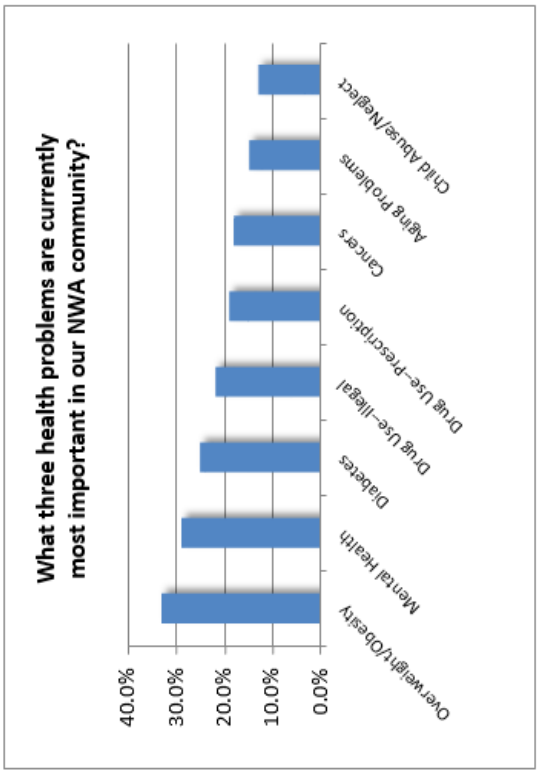
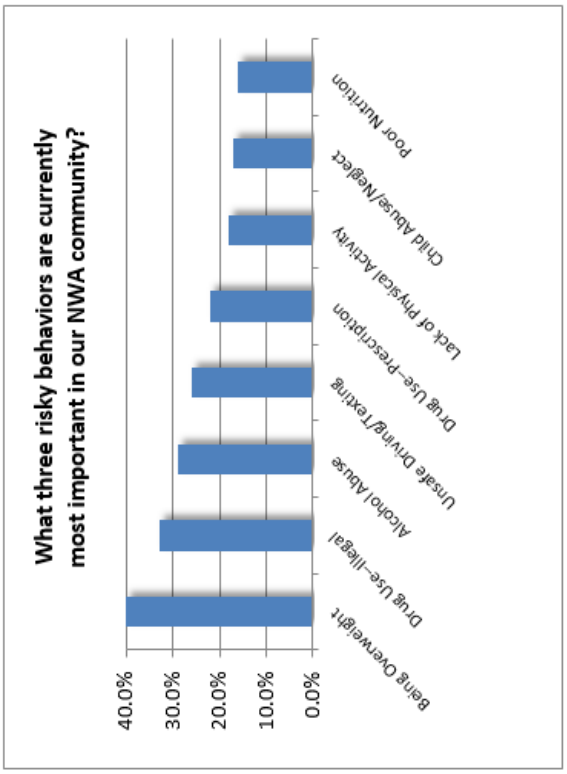
Appendix C

NWA Community Health Survey Response Charts


What health problems are currently most important to you? (all that apply)
Overweight/Obesity
Mental Health
Lack of Physical Activity
Aging Problems
High Blood Pressure
Diabetes
Sleep Difficulties
Cancers
Poor nutrition
40.0%
30.0%
20.0%
10.0%
0.0%


What three health-related needs, if met, would have the most positive impact on your personal health?
Exercise & Rec Opportunities
Better Sleep
Reduced/Managed Stress
Affordable Rx/Medications
Affordable Housing
Weight Management Programs
Mental Health Care
Medical Care
40.0%
30.0%
20.0%
10.0%
0.0%


What three health problems are currently most important in our NWA community?
Overweight/Obesity
Mental Health
Diabetes
Drug Use–Illegal
Drug Use–Prescription
Cancers
Aging Problems
Child Abuse/Neglect
40.0%
30.0%
20.0%
10.0%
0.0%


What three risky behaviors are currently most important in our NWA community?
Being Overweight
Drug Use–Illegal
Alcohol Abuse
Unsafe Driving/Texting
Drug Use–Prescription
Lack of Physical Activity
Child Abuse/Neglect
Poor Nutrition
40.0%
30.0%
20.0%
10.0%
0.0%

Appendix D

Mercy NWA Primary and Secondary Data Synopsis

Mercy Northwest Arkansas (NWA) 2018 Identified Health Needs
Synopsis of Supporting Data

Access to Care

- 13.45% of the PSA population is uninsured, which is higher than the state (AR, 12.33%; MO 11.32%) and US (11.7%) rates[4]
- 14.83% of adults and 5.29% of children within the PSA are uninsured, which is higher than state (AR, 11.62% and 4.03%; MO, 12.84% and 4.84%) and US (12.08% and 4.67%) rates[4]
- There are 71 primary care physicians per 100,000 population within the PSA, a rate lower than the state (AR, 75.1; MO, 83.6) and US (87.8) rates[4]
- The PSA has 46.3 dentists per 100,000 population, which is higher than the AR rate (44.3), but lower than MO (54.2) and the US (65.6) rates[4]
- The PSA has 212.8 mental health providers per 100,000 population, which is higher than the state (AR, 194.0; MO 168.6) and US (202.8) rates[4]
- While only 19.35% of the population within the PSA is considered to be living within a geographic area designated as a "Health Professional Shortage Area" (below AR at 45.47%, MO at 54.55%, and the US at 33.13%), 100% of the populations with Carroll and Madison Counties in AR and Barry and McDonald Counties in MO are considered as such[4]

Cancer

- Cancers are listed as the 2nd leading cause of death (2016) in both AR and MO; AR is 5th in the nation, while MO is 14th[2,3]
- The breast cancer incidence rate for the PSA is 111.89/100,000, which is lower than the state (AR 112.7; MO 125.9) and US (123.5) rates; Benton (113.7), Carroll (114.8) and Washington (121.0) Counties in AR are all above the state rate[4]
- The cervical cancer incidence rate in Washington County (10.7) is above the AR state (9.9) and US (7.6) rates[4]
- The incidence rate of colon and rectal cancer in the PSA (40.43) is lower than the state (AR 43.0; MO 42.5) and US (39.8) rates; McDonald County (51.0) is above the MO state rate[4]
- The lung cancer incidence rate in the PSA is 69.95/100,000, lower than the state rates (AR 77.6; MO 74.9), but above the US (61.2) rate; Madison County (80.1) in AR and Barry (75.8) and McDonald (79.7) Counties in MO are above the respective state rates[4]

- Responses to the NWA Community Health survey revealed 18% of NWA residents indicated cancers were one of the three biggest health problems within the community[9]

Chronic Lower Respiratory Disease/COPD

- Chronic Lower Respiratory Disease is the 3rd leading cause of death (2016) in both AR and MO; AR is 5th in the nation, while MO is 10th[2,3]
- The age-adjusted death rate for Lung Disease within the PSA is 52.8/100,000. This is below the AR rate (59.29), but above MO (52.17) and US (41.3) rates[4]
- In 2017, Mercy NWA had 8,839 emergency department visits with lung disease being a principal or secondary diagnosis and 3,707 of those were admitted as inpatients[8]

Diabetes

- Diabetes is the 7th leading cause of death (2016) in both AR and MO; AR ranks 8th in the nation, while MO is tied for 30th[2,3]
- 9.8% of adults aged 20 and older within the PSA have been diagnosed with diabetes. This is lower than state rates (AR 11.28%; MO 9.71%), but above the US (9.19%) rate[4]
- 21.8% of the Medicare population within the PSA has diabetes, which is lower than the state (AR 24.4%; MO 25.84%) and US (26.55%) rates[4]
- The diabetes diagnosis trend within the PSA continues to rise, from 8.66% in 2010, 9.05% in 2011, and 9.4% in 2012, with similar trends reported at the state and national levels[4]
- In 2017, Mercy NWA had 8,726 emergency department visits with diabetes being a principal or secondary diagnosis and 2,886 of those were admitted as inpatients[8]
- 25% of respondents to the NWA Community Health survey indicated diabetes was one of the three biggest health problems within the community[9]

Heart Disease

- Heart disease is the leading cause of death (2016) in both AR and MO; AR is 3rd in the nation, while MO is 10th[2,3]
- The age-adjusted death rate for heart disease within the PSA is 202.2, which is lower than the AR (219.48) rate, but above MO (194.58) and US (168.2) rates; Madison (256.5) and Washington (233.4) Counties in AR and Barry (265.5) and McDonald (253.0) Counties in MO are above their respective state rates and the US rate[4]
- The age-adjusted death rate for Coronary Heart Disease within the PSA is 132.7/100,000. This is above the state rates (AR 132.41; MO 115.23), as well as the US (99.6) rate[4]

- 5.2% of adults aged 18 and older within the PSA have ever been told by a doctor that they have heart disease or angina. This is lower than AR (5.8%), but higher than MO (4.8%) and the US (4.4%)[4]
- 27.1% of the Medicare population within the PSA has heart disease, which is lower than AR (29.17%), but higher than MO (26.62%) and the US (26.46%)[4]
- In 2017, Mercy NWA had 10,397 emergency department visits with cardiovascular disease being a principal or secondary diagnosis and 4,682 of those were admitted as inpatients[8]

Homelessness

- The homeless population within NWA has grown by 152% in the last decade, compared to a 12% growth in the general population[10]
- There are currently an estimated 2,951 homeless persons in Northwest Arkansas, of which 49% report a mental health condition and 40% report substance abuse[10]
- Of those reporting substance abuse, 63% report a mental health condition and 33%, not receiving substance abuse services[10]
- Regarding veteran homelessness in NWA, 37% experience chronic homelessness, 60% report a mental health condition and 50%, substance abuse[10]
- Of the total homeless population, 1,547 are under the age of 18, an increase of 216% in the last decade[10]
- While 15% of the total NWA homeless population is unsheltered, that number rises to 20% among homeless veterans[10]
- Households considered as "extremely low income" (ELI) earn no more than 30% of the median income in NWA; within Benton and Washington Counties in NWA, there are 11,837 ELI households with no available rental units[11]

Mental Health

- 17.2% of the Medicare population within the PSA has depression, which is higher than both AR (16.3%) and the US (16.7%), but lower than MO (20.0%)[4]
- While each of the AR counties within the PSA are below the state average number of poor mental health days reported in the last 30 days for adults aged 18 and older (AR, 5.2 days), both Barry (4.7 days) and McDonald (4.9 days) Counties in MO are above the state average (MO, 4.4 days)[6,7]
- The age-adjusted suicide death rate within the PSA is 15.7, which is below state rates (AR 17.67; MO 16.45), but above the US (13.0) rate; the rate within Carroll County, AR is 21.0[4]

- In 2017, Mercy NWA had 16,777 emergency department visits with behavioral health being a principal or secondary diagnosis and 4,714 of those were admitted as inpatients[8]
- Responses to the NWA Community Health survey revealed[9]:
    - 29% of NWA residents indicated mental health problems were one of the three biggest health problems within the community, and 26.0%, one of the three most important health problems for them personally
    - Reduced stress/stress management was indicated by 26.0% of respondents (3rd most common response) as being the health need that, if met, would have the most positive impact on their own personal health

Obesity and Overweight

- AR ranks 7th in the nation in adult obesity rates, and MO ranks 17th[2,3]
- 31.6% of adults aged 20 and older self-reported a BMI > 30.0 (obese), lower than state rates (AR 35.4%; MO 32.0%), however, higher than the US (28.3%) rate[4]
- At the individual county level, Madison County, AR (35.7%) and Barry County, MO (32.2) both reported adult obesity levels over the state rates[4]
- The obesity trend within the PSA continues to rise, from 29.5% in 2012, 30.8% in 2013 & 2014, and 31.6% in 2015, with similar trends reported at the state and national levels[4]
- 37.1% of adults aged 18 and older self-reported a BMI between 25.0 to 30.0 (overweight), which is higher than both state (AR 34.0%; MO 35.3%) and US (35.8%) rates[4]
- Responses to the NWA Community Health survey revealed[9]:
    - 33% of NWA residents indicated obesity and overweight were one of the three biggest health problems within the community, and 36%, one of the three most important health problems for them personally
    - 18% reported lack of physical activity and 17% poor nutrition as being within the top three most important personal health problems
    - Being overweight (40%) was the issue identified as being the most important risky behavior within NWA

Stroke

- Stroke is the 4th leading cause of death (2016) in Arkansas and 5th in Missouri; Arkansas is 5th in the nation, while MO is tied for 14th[2,3]
- The age-adjusted death rate for stroke within the PSA is 38.3/100,000. This is below the state rates (AR 46.9; MO 41.0), but above the US (36.9) rate; Carroll County (47.2) is above the AR state rate[4]

Substance Abuse

- There were 3,983 total arrests for selling, manufacturing, and/or possession of drugs/narcotics within the four-county NWA area in 2017, up from 3,575 total arrests in 2016[1]
- According to 2017 Arkansas Prevention Needs Assessment data, NWA (Region 1) youth in 6th-12th grades report similar rates of prescription drug use (2.8%), over-the-counter drug use (1.3%) and any drug use (10.2%) within 30 days of survey as compared to state rates (3.0%, 1.2%, 10.1%, respectively)[5]
- Responses to the NWA Community Health survey revealed[9]:
    - 22% of NWA residents indicated illegal drug use was one of the three biggest health problems within the community, and 19% included prescription drug use within their top three concerns
    - 33% of respondents said that illegal drug use is one of the most important risky behavior in NWA, while 22% included prescription drug use within their top three

Appendix D References

[1]Arkansas Crime Information Center. Drugs/Narcotics Assessment by Contributor, 2016-2017 data. https://www.acic.org/crime-statistics

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[4]Community Commons. (2018). NWA Counties. *https://assessment.communitycommons.org/CHNA/report?reporttype=libraryCHNA*

[5]County Health Rankings and Roadmaps. Arkansas Prevention Needs Assessment Survey, 2017 data. Region 1 (Benton, Carroll, Madison, and Washington Counties). https://arkansas.pridesurveys.com/dl.php?pdf=Region1_2017.pdf&type=region

[6]County Health Rankings and Roadmaps, Compare Counties, Arkansas, 2018 data. http://www.countyhealthrankings.org/app/arkansas/2018/compare/snapshot

[7]County Health Rankings and Roadmaps, Compare Counties, Missouri, 2018 data. http://www.countyhealthrankings.org/app/missouri/2018/compare/snapshot

[8]Mercy NWA Hospital. ED and Inpatient Reports, 2017 data.

[9]NWA Community Health Survey. (2018).

[10]University of Arkansas, Community and Family Institute. NWA Homeless Point-In-Time Census, 2017 data. http://www.cfi.uark.edu

[11]Urban Institute, 2011-2013 data. http://apps.urban.org/features/rental-housing-crisis-map/

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