

Mercy Hospital Tishomingo Community Health Needs Assessment Summary and Implementation Strategy



Oklahoma Office of Rural Health
OSU Center for Rural Health

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Introduction

New requirements for nonprofit, 501 (c)(3), hospitals were enacted under the Patient Protection and Affordable Care Act (ACA), passed on March 23, 2010. One of the most significant of the new requirements is the Community Health Needs Assessment (CHNA) that must be conducted during taxable years after March 23, 2012 and submitted with IRS form 990. A CHNA must then be completed every three years following.

While the requirements are fairly new, the IRS has made strides in defining hospitals that must complete the CHNA as well as details of what is expected in the CHNA report to be submitted. At this time the only entities that must complete the CHNA are hospital organizations defined as:

- An organization that operates a State-licensed hospital facility
- Any other organization that the Secretary determines has the provision of hospital care as its principal function or purpose constituting the basis for its exemption under section 501 (c)(3).

The general goal behind the requirement is to gather community input that leads to recommendations on how the local hospital can better meet and serve residents' needs. The community input is typically derived from a community survey and a series of open meetings. Local health data are presented. Community members then identify and prioritize their top health needs.

After listening to community input, the hospital defines an implementation strategy for their specific facility. The implementation strategy is a written plan that addresses each of the health needs identified in the community meetings. To meet Treasury and IRS guidelines an implementation strategy must:

- Describe how the hospital facility plans to meet the health need, or
- Identify the health need as one the hospital facility does not intend to meet and explain why the hospital facility does not intend to meet the health need¹

After the needs are identified that the hospital can address, the implementation strategy must take into account specific programs, resources, and priorities for that particular facility. This can include existing programs, new programs, or intended collaboration with governmental, nonprofit, or other health care entities within the community.²

¹ Internal Revenue Service. 2011. Notice and Requests for Comments Regarding the Community Health Needs Assessment Requirements for Tax-Exempt Hospitals. Internal Revenue Bulletin: 2011-30.

² Ibid

The facility must make the recommendations and implementation strategy widely available to community members. The facility must adopt the implementation strategy in that same taxable year.

Oklahoma Office of Rural Health Partnership

The Oklahoma Office of Rural Health makes this program available to all rural facilities in Oklahoma free of charge. The Oklahoma Office of Rural Health works closely with the hospital and community members to develop an economic impact of the local health sector, develop and analyze a local health services survey, and gather and analyze local health data. The community meetings are facilitated by a resource team that includes Corie Kaiser and Lara Brooks of the Oklahoma Office of Rural Health.

After the meetings conclude, the resource team assists the hospital in developing their implementation strategy. After implementation, the resource team will assist in evaluation of the strategies implemented and provide continued assistance with data and resources.

This document discusses the steps taken to conduct a CHNA for Mercy Hospital in Tishomingo in 2021. It begins with a description of the hospital's steps to addressing priorities identified during the 2018 CHNA along with the impacts, followed by a description of the medical service area, including a demographic analysis, and then summarizes each meeting that took place during the CHNA process. The report concludes by listing the recommendations that came out of the process and presenting the hospital's implementation strategy and marketing plan.

This report along with the implementation strategy was presented and approved by the governing board on May 24, 2022.

Previous Community Health Needs Assessment- Priorities, Implementation, and Evaluation

Mercy Hospital Tishomingo worked with the Oklahoma Office of Rural Health in 2018 to complete their third Community Health Needs Assessment. The previous assessments were completed in 2015 and 2012/13. During that time, health concerns were identified by community members and then prioritized by community members in focus group-style meetings. The following identifies each priority, implementation taken, and an evaluation or impact of the implementation.

Many of the proposed activities from the 2018 Community Health Needs Assessment were placed on hold or redirected to Covid-19 needs. Outreach and community education opportunities were not available during this time.

Area of concern: Child nutrition, food, hunger and senior hunger

Activity 1: Backpack program- Mercy Hospital Tishomingo has had a great and long-standing community relationship with the local backpack program. In 2019, 380 backpacks with school supplies were distributed to local students in need. In 2020, this number grew to 400 with masks and hand sanitizer included. In 2021, nearly 500 backpacks were delivered to the local school to distribute to students in need.

Activity 2- Food and supply drives distributed as Blessing Boxes to Johnston County residents- Mercy Hospital Tishomingo has hosted multiple food and supply drives to distribute through the community Blessing Boxes. The Blessing Boxes allow individuals and the families to access food and personal hygiene needs on a self-serve basis. Therefore, estimates of those who have benefited are not available. There are blessing boxes available in Tishomingo, Mill Creek, Mannsville, Ravia and Wapanucka.

Area of concern: Mental health and substance abuse-

Although there are outpatient-based providers to support community members with mental health and substance abuse concerns, people requiring hospitalization have to go out of the county. Often in a time of acute crisis, law enforcement or EMS will transport people to the hospital for medical evaluation and determination of criteria for hospitalization.

Transportation for these individuals has been an ongoing concern as, at times, the individual may need to be transported across the state or even out of state. Arrangements for transportation can take a long time and the hospital must board the patient for many hours.

To help support Mercy Hospital Tishomingo coworkers and the safety of the patients, they have invested in education supporting better understanding of use of restraints and alternatives to use of restraints. Additionally, education has been provided on the role of law enforcement for incarcerated individuals while seeking care in a hospital setting.

Activity 1: Training Emergency Room Coworkers on utilization and restraints when treating EOD patients. This training was to improve safety and awareness of treatment options for patients and coworkers. A total of 25 coworkers completed the training. Completion of this training will benefit numerous patients in the ED setting.

Area of concern: Specialists-

Activity 1: Through the pandemic, with all area and regional hospitals at capacity, Mercy Hospital Tishomingo was faced with challenges in both finding beds for patients requiring higher levels of care than we provide and timely transportation. As a result more patients with complex medical needs have been boarding in the Emergency Department. To help provide consultation for care, Mercy Hospital Tishomingo worked with Mercy's Virtual Care Center to provide specialty consultation for boarding patients at the request of the local provider to assist in their care.

Moving forward, Mercy Hospital Tishomingo are continuing to evaluate a strategy to utilize telemedicine to provide ongoing consultation for both our ED and our Medical areas of care.

Area of concern: Attracting and keeping primary care physicians in this area

Activity 1: Partnership with Family Health Center of Southern Oklahoma- Mercy Hospital Tishomingo has a close partnership with Family Health Center of Southern Oklahoma, the local FQHC, to provide opportunity for physicians they are recruiting to have hospital privileges if so desired. Additionally, they are working with the clinic on health initiatives to meet the needs of the community and support the improved health to reduce the strain on existing healthcare providers.

Mercy Hospital Tishomingo Medical Services Area Demographics

Figure 1 displays the Mercy Hospital Tishomingo medical services area. Mercy Hospital Tishomingo and all area hospitals are delineated in the figure. The surrounding hospitals are identified in the table below by county along with their respective bed count.

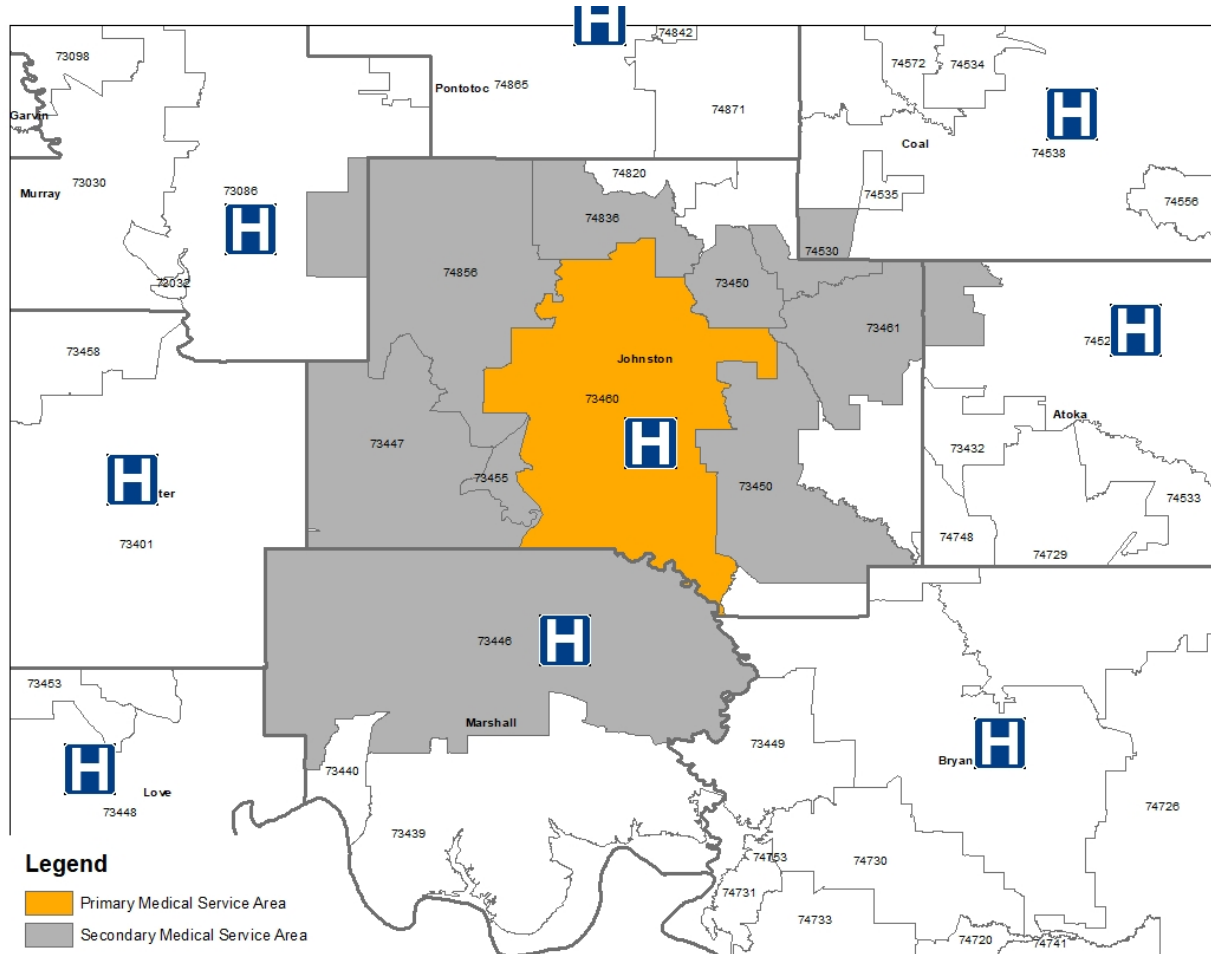


Figure 1. Mercy Hospital Tishomingo Medical Service Areas

City	County	Hospital	No. of Beds
<i>Tishomingo</i>	<i>Johnston</i>	<i>Mercy Hospital Tishomingo</i>	<i>25</i>
Atoka	Atoka	Atoka County Medical Center	25
Durant	Bryan	AllianceHealth Durant	148
Healdton	Carter	Mercy Hospital Healdton	22
Coalgate	Coal	Coal County General Hospital	20
Madill	Marshall	AllianceHealth Madill	25
Sulphur	Murray	Arbuckle Memorial Hospital	25
Ada	Pontotoc	Mercy Hospital Ada	156

As delineated in Figure 1, the primary medical service area of Mercy Hospital Tishomingo includes the zip code area of Tishomingo. The primary medical service area experienced a population increase of 3.0 percent from the 2000 Census to the 2010 Census (Table 1). This same service area experienced another population increase of 0.4 percent from the 2010 Census to the latest available, 2015-2019, American Community Survey.

The secondary medical services area is comprised of the zip code areas of Mill Creek, Connerville, Milburn, Bromide, Wapanucka, Ravia, Mannsville, and Madill. The secondary medical service area experienced an increase in population of 13.0 percent from 2000 to 2010 followed by another population increase of 5.4 percent from 2010 to the 2015-2019 American Community Survey.

Table 1. Population of Mercy Hospital Tishomingo Medical Service Area

Population by Zip Code		2000 Population	2010 Population	2015-2019 Population	% Change 2000- 2010	% Change 2010-15- 19
<i>Primary Medical Service Area</i>						
73460	Tishomingo	4,609	4,747	4,766	3.0%	0.4%
Total		4,609	4,747	4,766	3.0%	0.4%
<i>Secondary Medical Service Area</i>						
74856	Mill Creek	771	782	842	1.4%	7.7%
74836	Connerville	208	171	175	-17.8%	2.3%
73450	Milburn	1,108	1,248	1,304	12.6%	4.5%
74530	Bromide	210	214	137	1.9%	-36.0%
73461	Wapanucka	762	795	755	4.3%	-5.0%
73455	Ravia	626	673	611	7.5%	-9.2%
73447	Mannsville	1,184	1,205	1,378	1.8%	14.4%
73446	Madill	6,750	8,042	8,642	19.1%	7.5%
Total		11,619	13,130	13,844	13.0%	5.4%

SOURCE: Population data from the U.S. Bureau of Census, Decennial Census 2000, 2010 and American Community Survey 2015-2019 (August 2021)

Table 2 displays the current existing medical services in the primary service area of the Mercy Hospital Tishomingo medical services area. Most of these services would be expected in a service area of Tishomingo’s size: four physician offices and clinics, two dental offices, two chiropractic offices. Mercy Hospital Tishomingo is a 25 bed critical access hospital located in Johnston County. The hospital provides acute and swing bed inpatient services, 24-hour emergency department, MRI, CT, Ultrasound, outpatient services including infusion and laboratory. A complete list of hospital services and community involvement activities can be found in Appendix A.

Table 2. Existing Medical Services in the Mercy Hospital Tishomingo Medical Services Area

Count	Service
1	Hospital: Mercy Hospital Tishomingo
4	Physician offices and clinics
2	Dental offices
2	Chiropractic offices
1	Nursing home
1	Home health provider
1	Hospice provider
1	EMS provider
1	County Health Department: Johnston County
3	Mental health/Behavioral health providers
1	DME provider
4	Pharmacies

In addition to examining the total population trends of the medical service areas, it is important to understand the demographics of those populations. Table 3 displays trends in age groups for the primary and secondary medical service areas as well as Johnston County in comparison to the state of Oklahoma. Overall, the over 65 age group has experienced an increase in population across all geographies from the 2010 Census to the latest, 2015-2019 American Community Survey. This cohort accounted for 16.1 percent of the total population at the state level. This is compared to 19.3 percent of the population of the primary medical service area, 17.3 percent of the secondary medical service area, and 19.1 percent of Johnston County. The 45-64 age group accounts for the largest share of the population in the primary (26.4%) and secondary (25.6%) service areas and Johnston County (26.2%). This is compared to the state share of 23.9 percent of the total population.

Table 3. Percent of Total Population by Age Group for Mercy Hospital Tishomingo Medical Service Areas, Johnston County and Oklahoma

Age Groups	Primary Medical Service Area	Secondary Medical Service Area	Johnston County	Oklahoma
2010 Census				
0-14	20.6%	21.8%	20.2%	20.7%
15-19	7.9%	7.2%	7.5%	7.1%
20-24	7.8%	5.5%	6.3%	7.2%
25-44	22.1%	23.3%	22.6%	25.8%
45-64	24.9%	26.6%	26.9%	25.7%
65+	<u>16.7%</u>	<u>15.7%</u>	<u>16.6%</u>	<u>13.5%</u>
Totals	100.0%	100.0%	100.0%	100.0%
Total Population	4,747	13,130	10,957	3,751,351
15-19 ACS				
0-14	17.5%	21.0%	19.8%	20.1%
15-19	9.6%	6.7%	6.8%	6.9%
20-24	7.2%	6.7%	6.0%	6.8%
25-44	20.0%	22.8%	22.1%	26.2%
45-64	26.4%	25.6%	26.2%	23.9%
65+	<u>19.3%</u>	<u>17.3%</u>	<u>19.1%</u>	<u>16.1%</u>
Totals	100.0%	100.0%	100.0%	100.0%
Total Population	4,766	13,844	11,064	3,956,971

SOURCE: U.S. Census Bureau, Decennial Census data for 2010 and American Community Survey data for 2015-2019 (www.census.gov [August 2021]).

Changes in racial and ethnic groups can impact the delivery of healthcare services, largely due to language barriers and dramatically different prevalence rates for specific diseases, such as diabetes. A noticeable trend in Oklahoma is the growth in the Hispanic origin population. In 2010, those of Hispanic origin accounted for 8.9 percent of the total state population. The latest American Community Survey data of 2015-2019 suggest that this

population group has experienced an increase to 11.1 percent of the total population. This trend is somewhat evident in Johnston County and both medical service areas. The share of the population identified as of Hispanic Origin accounted for 7.8 percent of the primary medical service area's population in 2015-2019 and 19.8 percent of the secondary medical service area during the same time period. A more notable trend is the share of the Native American population in Johnston County and both service areas. In 2010, this cohort accounted for 13.8 percent of the primary medical service area, 11.5 percent of the secondary medical service area, and 15.5 percent of Johnston County's population. According to the 2015-2019 American Community Survey, this cohort accounted for 5.7 percent of the primary medical service area, 8.3 percent of the secondary, and 7.1 percent of the Johnston County population. The two or more races population group has experienced a growth during the same time period, and it is possible that some of the Native American population is reflected in this cohort.

Table 4. Percent of Total Population by Race and Ethnicity for Mercy Hospital Tishomingo Medical Service Areas, Johnston County and Oklahoma

Race/Ethnic Groups	Primary Medical Service Area	Secondary Medical Service Area	Johnston County	Oklahoma
2010 Census				
White	72.0%	68.8%	73.1%	72.2%
Black	3.6%	2.0%	1.9%	7.4%
Native American ¹	13.8%	11.5%	15.5%	8.6%
Other ²	1.4%	10.8%	1.4%	5.9%
Two or more Races ³	9.2%	6.8%	7.9%	5.9%
Hispanic Origin ⁴	3.8%	16.3%	3.9%	<u>8.9%</u>
Total Population	4,747	13,130	10,957	3,751,351
15-19 ACS				
White	75.2%	64.1%	71.8%	72.4%
Black	2.8%	1.8%	1.9%	7.3%
Native American ¹	5.7%	8.3%	7.1%	8.0%
Other ²	1.3%	13.4%	1.4%	4.7%
Two or more Races ³	14.9%	12.4%	17.9%	7.6%
Hispanic Origin ⁴	<u>7.8%</u>	<u>19.8%</u>	<u>5.4%</u>	<u>11.1%</u>
Total Population	4,766	13,844	11,064	3,956,971

SOURCE: U.S. Census Bureau, Decennial Census data for 2010 and American Community Survey data for 2015-2019 (www.census.gov [August 2021]).

Summary of Community Input for CHNA

Due to the unprecedented Covid-19 pandemic, Mercy Hospital Tishomingo was not able to host three community meetings to seek feedback from key stakeholders. In an effort to

promote social distancing and following recommendations outlined the CDC's website, the hospital hosted one community listening session via Zoom. Key stakeholders that were unable to attend this session on October 19, 2021, received individual follow up calls that were completed similar to key informant interviews. All stakeholders received all of the typical primary and secondary data prior to their respective meetings. The meeting presentations and handouts can be found in Appendices C-E. The Oklahoma Office of Rural Health facilitated the gathering of the secondary data, the completion of the survey, and the Zoom meeting and follow up interviews. Data summaries are provided in the following sections.

Community members who were included to provide input:

- Mercy Hospital Tishomingo representatives
- OSU Cooperative Extension Service
- Retired individuals
- Individuals volunteering at local food pantry
- Murray State College

Key stakeholders were identified due to their expertise of health conditions and concerns in the Tishomingo area along with the respective populations they represent. In particular, Johnston County Health Department was included for their expertise of public health in Johnston County. Significant efforts were made to include those who represented low-income and racially diverse populations.

Economic Conditions of Johnston County and Economic Impact of Health Sector

Economic indicators for Johnston County in comparison to Oklahoma and the United States are outlined in Table 5. Johnston County tends to lag Oklahoma and the United States in terms of per capita income, or the total income divided by the population. Oklahoma as a state tends to lag the national average. In terms of employment and unemployment, there have been many changes during 2020. The 2020 annual unemployment rate for Johnston County was 7.7 percent. This rate is higher than the state (6.1%) and lower than the national (8.1%). All of these rates are non-seasonally adjusted. The most recent monthly estimates show Johnston County to be lower than 2020 with a 3.4 percent rate. This is higher than the state (2.8%) and lower than the national (5.3%) rates.

The share of individual captured below the poverty threshold for income and household size is calculated by the U.S. Census Bureau. In 2019, the poverty rate for all ages in Johnston County was 21.0 percent. This is higher than the state and national rates. The share of children, or those under the age of 18, followed the same trend of being higher than the state rate but higher than the national rate. All economic indicators can be found in Table 5.

Table 5. Economic Indicators for Johnston County, the State of Oklahoma and the Nation

Indicator	County	State	U.S.
Total Personal Income (2019)	\$387,214,000	\$187,327,489,000	\$18,542,262,000,000
Per Capita Income (2019)	\$34,931	\$47,341	\$56,490
Employment (2020)	3,465	1,734,924	147,785,000
Unemployment (2020)	288	113,561	12,947,000
Unemployment Rate (2020)	7.7%	6.1%	8.1%
Employment (August 2021)*	3,664	1,800,273	153,232,000
Unemployment (August 2021)*	129	51,570	8,556,000
Unemployment Rate (August 2021)*	3.4%	2.8%	5.3%
Percentage of People in Poverty (2019)	21.0%	15.1%	12.3%
Percentage of Under 18 in Poverty (2019)	31.1%	19.7%	16.8%
Transfer Dollars (2019)	\$127,520,000	\$36,444,712,000	\$3,125,174,000,000
Transfer Dollars as Percentage of Total Personal Income (2019)	32.9%	19.5%	16.9%
Medical Benefits as a share of Transfer Payments (2019)	44.3%	35.1%	39.8%

*County and state estimates are considered preliminary

SOURCES: 2021 Bureau of Labor Statistics; 2021 Bureau of Economic Analysis; 2021 U.S. Census Bureau.

Table 6 displays various education variables for Johnston County. The first three lines are education attainment percentages for the population aged 25 years and greater. In Johnston County, 86.0 percent of the population has at least their high school diploma, 51.1 percent has at least some college, and 20.1 percent of the population has at least a bachelor’s degree. The far-right handed column provides a ranking within the state based on the highest, or most favorable percentages. The free and reduced lunch rate is the share of children in Johnston County who are enrolled in public school and eligible for free and reduced lunches. Johnston County’s rate is 76.9 percent. This is higher than the state average of 60.2 percent. This is the 70th lowest rate in the state.

Table 6. Education Data for Johnston County and the State of Oklahoma

Indicator	County	State	Johnston County Ranking
At Least High School Diploma	86.0%	88.0%	43rd Highest
Some College	51.1%	56.7%	51st Highest
At Least Bachelor's Degree	20.1%	25.5%	31st Highest
Free and Reduced Lunch Rate	76.9%	60.2%	70th Lowest

Sources: U.S. Census Bureau, American Community Survey, 2015-2019, National Center for Education Statistics 2018-2019.

Table 7 includes payer source data for Johnston County residents in comparison to the state. A ranking is also provided with the lowest percentages as the more favorable ranking. In 2019, 17.9 percent of individuals under the age of 65 were categorized as uninsured. This is higher than the state rate of 16.6 percent. In terms of children, or those under the age of 19, this rate was 10.3 percent. This was also higher than the state rate of 8.3 percent. In 2019, 22.6 percent of the population had Medicare as a payer for healthcare. This includes Medicare parts A, B and Advantage. In terms of Medicaid, 33 percent of the population in Johnston County had Medicaid as a payer source. The Medicare and Medicaid data were gathered from different sources, and duplicates have not been removed.

Table 7. Payer Source Data for Johnston County and the State of Oklahoma

Indicator	County	State	Johnston County Ranking
2019 Uninsured rate (under 65)	17.9%	16.6%	32nd Lowest
2019 Uninsured rate (under 19)	10.3%	8.3%	49th Lowest
2019 Medicare share of total population	22.6%	18.7%	44th Lowest
2019 Medicaid share of total population	33.0%	26.8%	60th Lowest

Sources: U.S. Census Bureau Small Area Health Insurance Estimates, 2019; Centers for Medicare and Medicaid Services, Medicare Parts A, B and Advantage Recipients by State and County, 2019; Oklahoma Health Care Authority, Total Enrollment by County, 2019

Table 8 below summarizes the overall economic impact of the health sector on the Johnston County, Oklahoma economy. A form requesting information was sent to all health care providers in the medical service area. Local providers were asked to share their employment levels and of those employees how many were physicians/optometrists/dentists/pharmacists/etc. When available, payroll information was also collected from the establishments. When payroll information was not available, payroll was estimated using state level averages from the Bureau of Labor Statistics.

The health sector in the Mercy Hospital Tishomingo medical service area employs 466 FTE individuals. After applying a county-specific employment multiplier to each respective sector, there is a total employment impact of 559 FTE employees. The same methodology is applied to income. The local health sector has a direct income impact of over \$28.9 million. When the appropriate income multiplier is applied, the total income impact is over \$33.0 million. The last two columns examine the impact this has on the retail sector of the local community. Recent data suggest that just 20.2% of personal income in Johnston County will be spent on taxable goods and services locally. Therefore, if we just examine the impact made on retail from those employed in the health sector, this would account for over \$6.6 million spent locally, generating \$66,791 on a 1% tax. A copy of the meeting materials that were distributed can be found in Appendix C.

Table 8. Mercy Hospital Tishomingo Medical Service Area Health Sector Impact on Employment and Income, and Retail Sales and Sales Tax

Health Sectors	Employment			Income			Retail	1 Cent
	Direct	Multiplier	Impact	Direct	Multiplier	Impact	Sales	Sales Tax
Hospitals	69	1.39	96	\$7,186,949	1.18	\$8,482,972	\$1,713,560	\$17,136
Physicians, Dentists & Other Medical Professionals	196	1.21	236	\$12,000,290	1.13	\$13,523,715	\$2,731,790	\$27,318
Nursing Homes & Home Health	116	1.12	130	\$5,777,463	1.10	\$6,355,328	\$1,283,776	\$12,838
Other Medical & Health Services & Pharmacies	<u>85</u>	1.14	<u>97</u>	<u>\$4,025,852</u>	1.17	<u>\$4,702,932</u>	<u>\$949,992</u>	<u>\$9,500</u>
Total	466		559	\$28,990,554		\$33,064,946	\$6,679,119	\$66,791

SOURCE: 2019 IMPLAN database, Minnesota IMPLAN Group, Inc.; Local data for employment, employee compensation and proprietor's income; income estimated based on state average incomes if local data not available; employment data from local survey.

* Based on the ratio between Johnston County taxable sales and income (20.2%) – from 2021 Sales Tax Data and 2019 Personal Income Estimates from the Bureau of Economic Analysis.

Health Data

Various sources of health data were examined including data from the County Health Rankings and Roadmaps Program through the University of Wisconsin Population Health Institute, and the Robert Wood Johnson Foundation. The County Health Rankings program evaluates and ranks counties based on two distinct areas: Health Factors and Health Outcomes. Along with these two areas counties receive an overall rank within their state; therefore 1=best and 77=worst.

Health factors, considered tomorrow's health, are comprised of health behaviors (rank: 60), clinical care (rank: 40), social and economic factors (rank: 61), and physical environment (rank: 19). Johnston County's overall health factors rank is 58. This suggests, in general, the health status of Johnston County residents is somewhat comparable to that of neighboring counties. Areas of concern include Johnston County's smoking rate, obesity rate, and food environment index are all less desirable than the top U.S. performers. Also, the rate of uninsured, population ratio to primary care physicians, and mammography rates of Medicare beneficiaries are all areas of concern in Johnston County. All health factors variables are presented in Table 9 along with Johnston County specific data, the top U.S. performers, and the state average. The yellow highlighted categories are the areas identified by the County Health Rankings and Roadmaps as areas to explore (generally where Johnston County ranks very poorly compared to the national benchmark). The green highlighted areas are identified by County Health Rankings and Roadmaps as areas of strength for Johnston County.

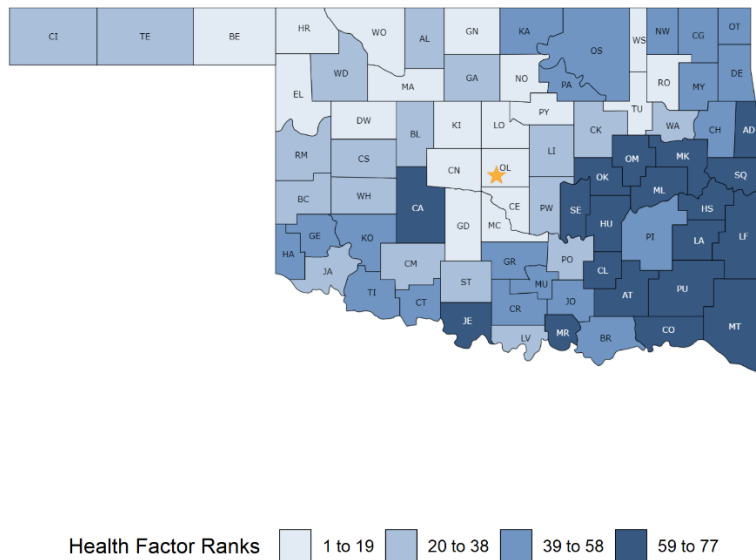
Table 9. Health Factors (Overall Rank 58)

Category (Rank)	Johnston County	Error Margin	Top U.S. Performers	Oklahoma
Health Behaviors (60)				
Adult Smoking	26%	23-29%	16%	20%
Adult Obesity	39%	29-49%	26%	35%
Food Environment Index	6.1		8.7	5.8
Physical Inactivity	26%	1-35%	19%	28%
Access to Exercise Opportunities	42%		91%	71%
Excessive Drinking	14%	14-15%	15%	15%
Alcohol-Impaired Driving Deaths	36%	25-47%	11%	27%
Sexually Transmitted Infections	524		161	559
Teen Births	34	44-52	12	33
Clinical Care (40)				
Uninsured	19%	17-21%	6%	17%
Primary Care Physicians	3,650:1		1,030:1	1,640:1
Dentists	1,230:1		1,210:1	1,610:1
Mental Health Providers	120:1		270:1	240:1
Preventable Hospital Stays	5,070		2,565	4,781
Mammography Screening	31%		51%	38%
Flu Vaccinations	47%		55%	49%
Social & Economic Factors (61)				
High School Graduation	86%	84-88%	94%	88%
Some College	51%	44-58%	73%	60%
Unemployment	4.3%		2.6%	3.3%
Children in Poverty	31%	23-39%	10%	20%
Income Inequality	4.2	3.6-4.8	3.7	4.6
Children in Single-Parent Household	22%	16-28%	14%	27%
Social Associations	12.8		18.2	11.5
Violent Crime Rate	132		63	428
Injury Deaths	170	138-209	59	94
Physical Environment (29)				
Air-Pollution- Particulate Matter	8.1		5.2	8.2
Drinking Water Violations	Yes			
Severe Housing Problems	10%	8-13%	9%	14%
Driving Alone to Work	78%	75-82%	72%	82%
Long Commute- Driving Alone	35%	30-40%	16%	27%

Source: County Health Rankings & Roadmaps; University of Wisconsin Population Health Institute; Robert Wood Johnson Foundation

The following figure depicts each county's rank by shade. Johnston County's overall health factors ranking is less favorable than Pontotoc County, comparable to Murray, Carter, and Bryan Counties, and is more favorable than Coal, Atoka, and Marshall Counties.

2021 Health Factors - Oklahoma



County Health
Rankings & Roadmaps
Building a Culture of Health, County by County

In terms of health outcomes, considered, today's health, Johnston County's ranking is 74th in the state. Health outcomes are comprised of two areas: length of life and quality of life. The variables for each of these sections are presented in Table 10.

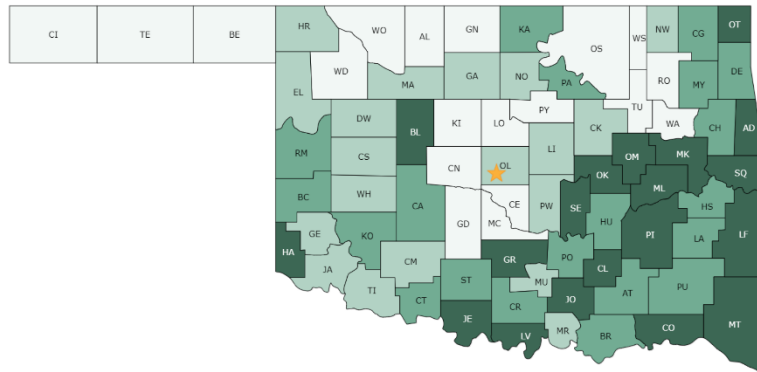
Table 10. Health Outcomes (Overall Rank 74)

Category (Rank)	Johnston County	Error Margin	Top U.S. Performers	Oklahoma
Length of Life (73)				
Premature Death	14,600	11,800-17,400	5,400	9,100
Quality of Life (71)				
Poor or Fair Health	24%	22-27%	14%	21%
Poor Physical Health Days	5.4	5.0-5.8	3.4	4.5
Poor Mental Health Days	5.5	5.1-5.8	3.8	4.8
Low Birth Weight	9%	7-11%	6%	8%

Source: County Health Rankings & Roadmaps; University of Wisconsin Population Health Institute; Robert Wood Johnson Foundation

The following figure shows county health outcomes rankings by shades. Johnston County’s rank is less favorable than all of the surrounding counties. All meeting materials related to the health indicators and outcomes can be found in Appendix D.

2021 Health Outcomes - Oklahoma



Health Outcome Ranks 1 to 19 20 to 38 39 to 58 59 to 77



Community Survey Methodology and Results

A survey was designed to gauge hospital usage, satisfaction, and community health needs. The survey was available in both paper and web format. The survey link was emailed out to business and community leaders in the community. Also, the link was posted on social media. Hard copy surveys were available at the hospital. A copy of the survey form and results can be found in Appendix E. Community members were asked to return their completed surveys to Mercy Hospital Tishomingo.

The survey ran from August 25 through September 30, 2021. A total of 43 surveys from the Mercy Hospital Tishomingo medical service area were completed. Of the surveys returned, 40 were electronic surveys completed via Survey Monkey.

Table 11 below shows the survey respondent representation by zip code. The largest share of respondents was from the Tishomingo (73460) zip code with 24 responses or 55.8 percent of the total. Milburn followed with 6 responses.

Table 11. Zip Code of Residence

Response Category	No.	%
73460- Tishomingo	24	55.8%
73450- Milburn	6	14.0%
73455- Ravia	3	7.0%
73447- Mannsville	2	4.7%
73446- Madill	2	4.7%
74825- Allen	1	2.3%
73440- Lebanon	1	2.3%
73432- Coleman	1	2.3%
73401- Ardmore	1	2.3%
74030- Drumright	1	2.3%
74820- Ada	1	2.3%
Total	43	100.0%

The survey focused on several health topics of interest to the community. Highlights of the results include:

Primary Care Physician Visits

- 60.5% of respondents had used a primary care physician in the Tishomingo service area during the past 24 months
- 100% of those responded being satisfied
- Only 7 respondents or 16.3% of the survey respondents believe there are enough primary care physicians practicing in the Tishomingo area
- 51.2% responded they were able to get an appointment with their primary care physician when they needed one
- 51.2% of respondents indicated that they have used the services of an urgent care in the past 12 months
- 65.1% responded that they would utilize urgent care or after hours services offered in Tishomingo

Specialist Visits

Summary highlights include:

- 69.8% of all respondents report some specialist visit in past 24 months
- Most common specialty visited are displayed in Table 12
- 1 specialist visit occurred in Tishomingo

Table 12. Type of Specialist Visits

Type of Specialist	No.	Percent
<i>Top 5 Responses</i>		
Orthopedist/Orthopedic Surg. <i>(0 visits in Tishomingo)</i>	5	13.5%
Dermatologist <i>(0 visits in Tishomingo)</i>	5	13.5%
Cardiologist <i>(0 visits in Tishomingo)</i>	4	10.8%
Rheumatologist <i>(0 visits in Tishomingo)</i>	3	8.1%
Surgeon <i>(0 visits in Tishomingo)</i>	2	5.4%
All others <i>(1 visit in Tishomingo)</i>	<u>18</u>	<u>48.6</u>
Total	<u>37</u>	<u>100.0%</u>

Some respondents answered more than once.

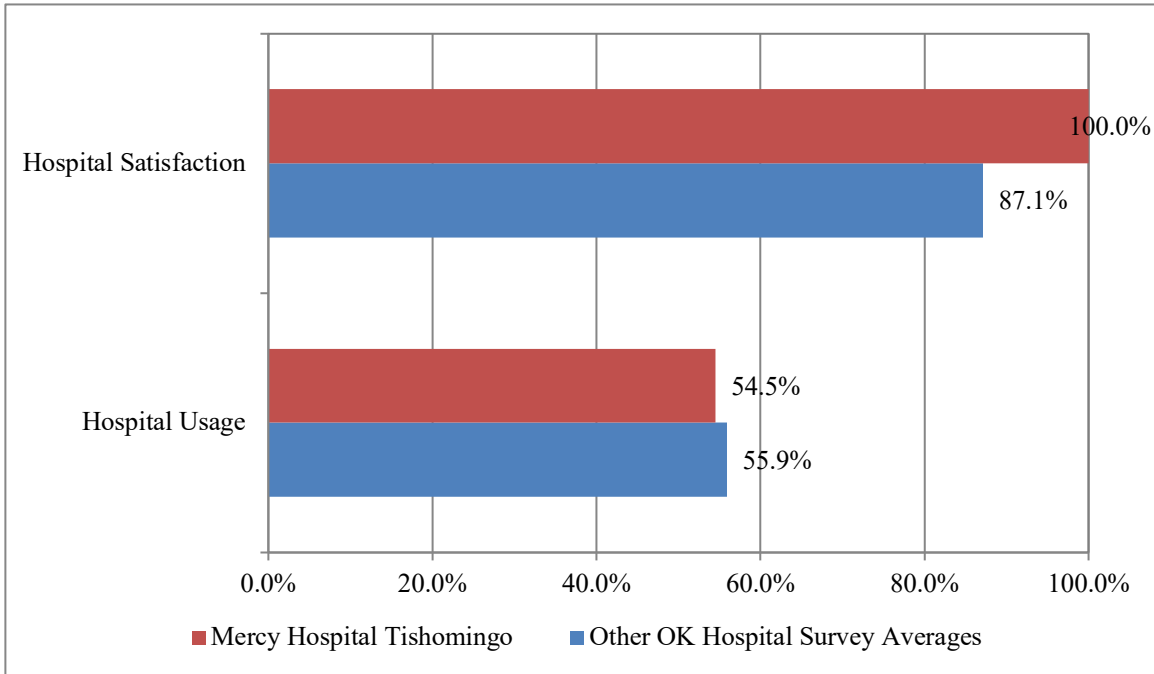
Hospital Usage and Satisfaction

Survey highlights include:

- 54.5% of survey respondents that have used hospital services in the past 24 months used services at Mercy Hospital Tishomingo
 - o Mercy Hospital Ardmore (15.9%) and AllianceHealth Durant (9.1%) followed
 - o The most common response for using a hospital other than Mercy Hospital Tishomingo was availability of specialty care (including surgery and labor and delivery) (50%) and physician referral/transfer (22.7%)
 - o The usage rate of 54.5% was lower than the state average of 55.9% for usage of other rural Oklahoma hospitals surveyed
- 100% of survey respondents were satisfied with the services received at Mercy Hospital Tishomingo

- This is above the state average for other hospitals (87.1%)
- Most common services used at Mercy Hospital Tishomingo:
 - Emergency Room (39.6%)
 - Diagnostic Imaging (X-ray, CT, Ultrasound) (20.8%)
 - Laboratory (20.8%)

Figure 2. Summary of Hospital Usage and Satisfaction Rates



Local Healthcare Concerns and Additional Services

Survey respondents were asked what concerns them most about health in their community. The most common response was substance abuse (15.5%) followed by mental health (13.3%). Table 13 displays all responses and the frequencies.

Table 13. Top Health Concerns in the Tishomingo Area

	No.	%
Substance abuse	28	15.5%
Mental health	24	13.3%
Obesity	19	10.5%
Diabetes	19	10.5%
Accessing primary care	17	9.4%
Accessing specialty services	16	8.8%
Heart disease	13	7.2%
Cancers	12	6.6%
Suicide	10	5.5%
Dental	7	3.9%
Teen pregnancy	6	3.3%
Motor vehicle crashes	6	3.3%
All of the above	1	0.6%
Don't know/No response	3	1.7%
Total	181	100.0%

Survey respondents also had the opportunity to identify what additional health and wellness services they would like to see offered in their community. The most common response was specialists with a collective response of 16.4 percent. Health education including diabetic, prenatal, heart health and fitness followed with 9.1 percent of the total. Table 14 displays the full listing of responses.

Table 14. Additional Health and Wellness Services Survey Respondents Would Like to See Offered in the Tishomingo Area

Response Category	No.	%
Specialists: Cardiologist (2); Dermatologist (2); Endocrinologist (2); Specialists in general (1); Pulmonologist (1); Pediatrician (1)	9	16.4%
Health education: Diabetic, prenatal, heart health, fitness	5	9.1%
Urgent care/24 hour urgent care/Convenient care	4	7.3%
Don't know/No additional services	3	5.5%
Wellness center/Workout facilities/24 hour gym	3	5.5%
Outpatient therapy/Physical therapy	3	5.5%
Imaging: Mammography (2); Bone Density (1)	3	5.5%
Mental health/More providers/Greater access	3	5.5%
Optometry	3	5.5%
Primary care physicians	2	3.6%
Dieticians	1	1.8%
EOD facility for youth	1	1.8%
Greater variety in testing	1	1.8%
Health screenings	1	1.8%
Surgery services	1	1.8%
Good providers	1	1.8%
Services without vaccine requirement	1	1.8%
More availability of EMS for transfers	1	1.8%
Smoking cessation	1	1.8%
Swimming pool	1	1.8%
No response	7	12.7%
Total	55	100.0%

Primary Care Physician Demand Analysis

A demand analysis of primary care physicians was completed for the zip codes that comprise the Tishomingo primary and secondary medical services areas. This analysis examined average primary care physician visit rates by gender and by age groups. Once age- and gender-specific coefficients were applied, total primary care physician visit numbers were calculated by service area. Table 15 displays potential primary care physician rates by shares of service area. For example, if 90% of residents in the primary medical services area and 10% of residents in the secondary medical services area utilize services of primary care physicians in the Tishomingo medical services area, a total of 9,437 annual visits would occur. This would suggest that the Tishomingo medical services area would need 2.3 FTE primary care physicians to meet the needs of their existing population. Table 15 displays the estimated number of visits by share of medical services area.

Table 15. Primary Care Physician Office Visits Given Usage by Local Residents in the Tishomingo, Oklahoma Medical Service Area

		Usage by Residents of Primary Service Area						
		70%	75%	80%	85%	90%	95%	100%
Usage by Residents of Secondary Service Area	5%	6,600	6,976	7,353	7,729	8,105	8,481	8,858
	10%	7,932	8,309	8,685	9,061	9,437	9,814	10,190
	15%	9,265	9,641	10,017	10,393	10,770	11,146	11,522
	20%	10,597	10,973	11,349	11,726	12,102	12,478	12,854
	25%	11,929	12,305	12,682	13,058	13,434	13,810	14,187
	30%	13,261	13,638	14,014	14,390	14,766	15,143	15,519
	35%	14,594	14,970	15,346	15,722	16,099	16,475	16,851
	40%	15,926	16,302	16,678	17,055	17,431	17,807	18,184
	45%	17,258	17,634	18,011	18,387	18,763	19,140	19,516
	50%	18,590	18,967	19,343	19,719	20,096	20,472	20,848

If 90% primary medical service area and 10 to 15% secondary medical service area, then the usage would be: 9,437 to 10,770 total primary care physician office visits in the Tishomingo area for an estimated 2.3 to 2.6 Total Primary Care Physicians.
 (Based on 83.7 average weekly primary care physician visits with a 50 week year)

Community Health Needs- Identification of Priorities

As mentioned previously, due to COVID-19, community meetings were not able to be held to present data and gather data in a town-hall style meeting. Instead Zoom meetings and individual interviews were held. A meeting of community stakeholders was held on October 19. The OK Office of Rural Health did follow up with those unable to attend the meeting with an additional interview completed with a representative from the Johnston County Health Department. A complete listing of individuals who participated is included in Appendix B.

During the community meeting process, participants were asked the following three questions:

- What are the top health needs of the patients/clients I serve?
- What are the top health needs of the greater community (outside of the hospital or clinic setting)?
- What am I most proud of in the Tishomingo community?

The concerns listed were:

- Suicide Rate- Providers are available, but the rates are still high
- Mental health- increased cases during pandemic, more patients held in ED trying to find resources
 - Availability of beds
 - Transportation law could cause patients to be held at hospital longer while trying to find beds
 - Currently use telemedicine services for referrals, but do not have the volume for greater services to provide higher level of care
- Homeless population in Johnston County- living couch to couch and family member to family member has impact on health- food, physical activity, etc.
- Obesity rates- increasing
 - Access to healthy foods- shopping for healthy foods and options for healthy foods
 - Really great farmers' market available
 - Chickasaw nation does provide vouchers
 - Physical inactivity and access to exercise opportunities
- Lost position at health dept. that focused solely on health and wellness in Johnston County (TSET Funded position)- That position transitioned to health equity
- Substance abuse/Drug abuse- Medical marijuana- regulations of prescriptions, methamphetamine/Alcohol abuse
- STI/STDs
- Immunizations- Covid vaccine hesitancy
- COPD- Mercy Hospital Tishomingo is working to implement outpatient pulmonary rehab
- Birth control needs
- Education of overall available services- Community health worker available in 8 county region

Tishomingo does have many strengths. Some of the sources of pride noted by community members include:

- Great health and wellness committee- Great American Smoke Out, Diabetic Conference, 5K firefly for youth obesity, great promotion of physical activity- Currently building a new park in Tish- benefit those with physical and mental disabilities
- Many committed people, and access to good quality health care
- Appreciate being a Mercy community
- Food bank available- grown in the past year- almost out of space- open 3 days/week- Reaching over 3,500 individuals and 1,100 households/for the first 9 months of 2021

Mercy Hospital Tishomingo Administration utilized these responses to generate the list of priorities based on the frequencies of responses, potential impact the hospital can have on these items, and the opportunity to collaborate with existing organizations and providers in the community. The following items were identified as priorities:

- COPD- Mercy Hospital Tishomingo is currently in the process of developing an outpatient pulmonary rehabilitation program. Currently, patients have to travel to Ardmore for these services. This will alleviate travel burdens and allow patients to receive timely care closer to home.
 - Smoking cessation will also be included as part of the pulmonary rehabilitation program.
- Obesity- Health education and partnership with Johnston County Health Department to collaborate to provide greater services and a broader reach to improve overall health awareness.

Community Health Needs Assessment Marketing Plan

The hospital will make the Community Health Needs Assessment Summary available upon request at Mercy Hospital Tishomingo, and a copy will be available to be downloaded from the hospital's website (<https://www.mercy.net/practice/mercy-hospital-tishomingo/>). This document will also be available on the OSU Center for Rural Health blog site: (<http://osururalhealth.blogspot.com/p/chna.html>).

Appendix A- Hospital Services/Community Benefits

Mercy Hospital Tishomingo Hospital Services and Community Benefits

Inpatient Services

Acute Beds*
Swing Beds*
Laboratory
Health Information Management - Electronic Health Record
Physical Therapy
Speech Therapy
Radiology – X-ray, CT, Ultrasound
Drug Room
Dietary
Specialist Referral
Occupational therapy
Respiratory therapy

Outpatient Services

Emergency Department
Infusion Services
Laboratory
Radiology—Ultrasound, X-ray, CT
Bilingual Services
Respiratory therapy

Community Activities

Diabetes Coalition
Johnston County Chamber of Commerce
Johnston County Kids
Tishomingo Development Team
Charitable Care for Uninsured
United Way of South-Central Oklahoma
Johnston County Health Care Coalition
Partner of Johnston County E911
Partner of Johnston County EMS
Sooner Care/Medicaid Enroller
Johnston County Health and Wellness Committee Chickasaw Festival Parade
Partner with Tishomingo and Ravia Public Schools for weekend backpack program
Southern Oklahoma Workforce Board
Johnston County Healthcare Center for Workforce Excellence Member
Partner with Murray State College and Family Health Center of Southern OK to host community vaccination (COVID) events

Accreditation

Certified by Medicare/Medicaid as Critical Access Hospital.
CLIA

Hospital Advisory Board 2021

Kristie Cannon

Joy McDaniel

Dr. Wellie Adlaon, Hospital Chief of Staff

Clint Spence

Lori McMillin, PT, Hospital Administrator

Sr. Rebecca Hendricks, Sisters of Mercy

The hospital opened in 1960.

All 25 beds of Mercy Hospital Tishomingo are “swing” beds that may be used in any combination for hospital “acute care” or “skilled nursing care.” Acute care means the patient is a bed patient in the hospital because of a serious illness or injury that require frequent monitoring by medical professionals but is expected to be temporary. Under terms of our licensure, after 96 hours, inpatients requiring further acute care must be transferred to a larger hospital. Skilled nursing is care by registered nurses or licensed practical nurses for a patient whose condition does not rise to the level of “acute care” but still needs 24-hour medical or nursing care or rehabilitative services. Skilled nursing stays may extend beyond 96 hours. A skilled nursing patient generally is receiving care either before or after a stay in a larger hospital.

Appendix B Community Input Participants

Mercy Hospital Tishomingo Community Health Needs Assessment Community Input Attendees

Name	Organization
Lori McMillin	Mercy Hospital Tishomingo
Quinton Jones	Murray State College
Becky Henthorn	Murray State College
Benjamin Henthorn	
Dana Bolt	OSU Extension
Jordyn Frazier	Murray State College
Dr. Joy McDaniel	Murray State College
Interview Participant	
Karen Walker	Oklahoma State Dept. of Health

Appendix C- Demographic and Economic Data

The Economic and Demographic Analysis of the Mercy Hospital Tishomingo Medical Service Area

As part of the Community Health Needs Assessment

Economic Data

2019 Per Capita Income ¹	\$34,931 (61st highest in state)
Employment (August 2021, preliminary) ²	3,664 (5.7% from 2020)
Unemployment (August 2021, preliminary) ²	129 (-55.2% from 2020)
Unemployment rate (August 2021, preliminary) ²	3.4% (65th lowest in state)
2019 Poverty rate ³	21.0% (63rd lowest in state)
2019 Child poverty rate ³	31.1% (70th lowest in state)
2019 Transfer Payments ¹	\$127,520,000 (32.9% of total personal income, 62nd lowest in state)
2019 Medical Benefits as a share of Transfer Payments ¹	44.3% (64th lowest in state)

¹Bureau of Economic Analysis, Regional Data, 2021, ²Bureau of Labor Statistics 2019-2021, ³U.S. Census Bureau, Small Area Income and Poverty, 2021

Education Data

At Least High School Diploma ¹	86.0% (43rd highest in state)
Some College ¹	51.1% (51st highest in state)
At Least Bachelor's Degree ¹	20.1% (31st highest in state)
2018-2019 Free and Reduced Lunch Eligible ²	76.9% (70th lowest in state)

¹U.S. Census Bureau, American Community Survey, 2015-2019, ²National Center for Education Statistics, 2018-2019.

Payer Source Data

2019 Uninsured Rate (under 65) ¹	17.9% (32nd lowest in state)
2019 Uninsured Rate (under 19) ¹	10.3% (49th lowest in state)
2019 Medicare share of total population ²	22.6% (45th lowest in state)
2019 Medicaid share of total population ³	33.0% (60th lowest in state)

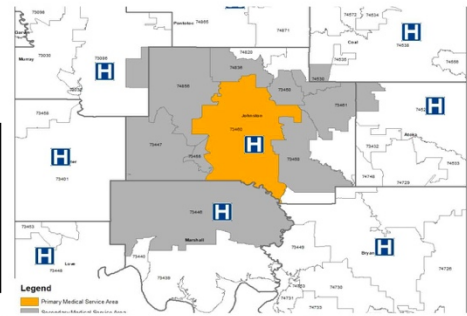
¹U.S. Census Bureau, Small Area Health Insurance Estimates, 2018, ²Centers for Medicare & Medicaid Services, Medicare Aged and Disabled by State and County, 2019

³Oklahoma Health Care Authority, Total Enrollment by County, 2019

Population (2015-2019)

Johnston County	11,064 (1.0% from 2010)
Oklahoma	3,956,971 (5.5% from 2010)
Primary Medical Service Area	4,766 (0.4% from 2010)
Secondary Medical Service Area	13,844 (5.4% from 2010)

U.S. Census Bureau, 2015-2019 American Community Survey 2010 Decennial Census



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**Percent of Total Population by Age Group for Mercy Hospital Healdton Medical Service Areas,
Carter County and Oklahoma**

Age Groups	Primary Medical Service Area	Secondary Medical Service Area	Carter County	Oklahoma
15-19 ACS				
0-14	19.8%	19.8%	20.8%	20.1%
15-19	6.6%	7.0%	6.7%	6.9%
20-24	5.2%	4.7%	5.8%	6.8%
25-44	25.0%	24.5%	25.2%	26.2%
45-64	24.8%	26.8%	25.1%	23.9%
65+	18.6%	17.1%	16.4%	16.1%
Totals	100.0%	100.0%	100.0%	100.0%
Total Population	11,096	24,548	48,319	3,956,971

SOURCE: U.S. Census Bureau, Decennial Census data for 2010 and American Community Survey data for 2015-2019 (www.census.gov [August 2021]).

Percent of Total Population by Race and Ethnicity for Mercy Hospital Healdton Medical Service Areas, Carter County and Oklahoma

Race/Ethnic Groups	Primary Medical Service Area	Secondary Medical Service Area	Carter County	Oklahoma
15-19 ACS				
White	86.5%	81.9%	74.6%	72.4%
Black	2.3%	2.3%	6.5%	7.3%
Native American ¹	5.1%	6.8%	7.8%	8.0%
Other ²	1.0%	1.6%	2.4%	4.7%
Two or more Races ³	5.1%	7.4%	8.6%	7.6%
Hispanic Origin ⁴	3.6%	5.9%	7.3%	11.1%
Total Population	11,096	24,548	48,319	3,956,971

SOURCE: U.S. Census Bureau, Decennial Census data for 2010 and American Community Survey data for 2015-2019 (www.census.gov [August 2021]).

For additional information, please contact:
 Lara Brooks, Rural Health Analyst, lara.brooks@okstate.edu
 Corie Kaiser, Director, corie.kaiser@okstate.edu
 Oklahoma Office of Rural Health

This project is/was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number U2WRH33319 and title: Medicare Rural Hospital Flexibility Grant Program for \$673,496, 0% financed with nongovernmental sources. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.



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Mercy Hospital Tishomingo Economic Impact



Healthcare, especially a hospital, plays a vital role in local economies.

Mercy Hospital Tishomingo **directly** employs **69** individuals with an annual payroll of over **\$7.1 million** including benefits

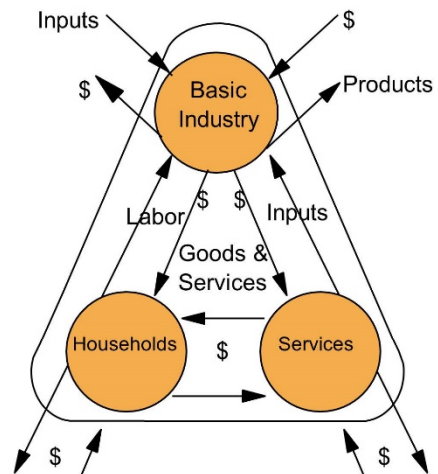
- These employees and income create an additional **27** jobs and over **\$1.2 million** in income as they interact with other sectors of the local economy
- **Total impacts= 96 jobs and over \$8.4 million**
- Other segments of the healthcare sector (Pharmacies, EMS, etc.) provide another **397 jobs** and an additional **\$21.8 million** in wages
- Their interactions and transactions within the local economy including the hospital's impact create:
- **Total health sector impacts= 559 jobs and \$33.0 million**
- Over **\$6.6 million** in retail sales generated from the presence of the health sector

Healthcare and Your Local Economy:

- Attracts retirees and families
- Appeals to businesses looking to establish and/or relocate
- High-quality healthcare services and infrastructure foster community development
- Positive impact on retail sales of local economy

Consider what could be lost without the hospital:

- Pharmacies
- Other Healthcare Providers and Services
- Physicians/Specialists
- Potential Retail Sales



Source: Doeksen, G.A., T. Johnson, and C. Willoughby. 1997. Measuring the Economic Importance of the Health Sector on a Local Economy: A Brief Literature Review and Procedures to Measure Local Impacts

For additional information, please contact:
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 Corie Kaiser, Director, corie.kaiser@okstate.edu
 Oklahoma Office of Rural Health
 Phone: 405.945.8609



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Multipliers were derived from IMPLAN 2019, sales tax data were derived from County FY2021 Oklahoma Tax Commission data, and 2019 personal income estimates from Bureau of Economic Analysis.

Appendix D- Johnston County Health Indicators and Outcomes

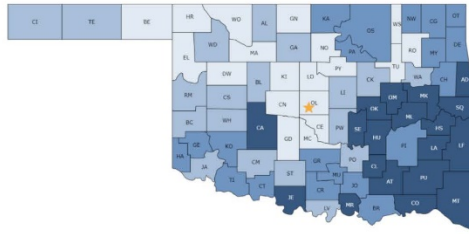
Health Indicators and Outcomes for Johnston County As part of the Community Health Needs Assessment

Table 1. Health Factors (Overall Rank 58)

Category (Rank)	Johnston County	Error Margin	Top U.S. Performers	Oklahoma
Health Behaviors (60)				
Adult Smoking	26%	23-29%	16%	20%
Adult Obesity	39%	29-49%	26%	35%
Food Environment Index	6.1		8.7	5.8
Physical Inactivity	26%	1-35%	19%	28%
Access to Exercise Opportunities	42%		91%	71%
Excessive Drinking	14%	14-15%	15%	15%
Alcohol-Impaired Driving Deaths	36%	25-47%	11%	27%
Sexually Transmitted Infections	524		161	559
Teen Births	34	44-52	12	33
Clinical Care (40)				
Uninsured	19%	17-21%	6%	17%
Primary Care Physicians	3,650:1		1,030:1	1,640:1
Dentists	1,230:1		1,210:1	1,610:1
Mental Health Providers	120:1		270:1	240:1
Preventable Hospital Stays	5,070		2,565	4,781
Mammography Screening	31%		51%	38%
Flu Vaccinations	47%		55%	49%
Social & Economic Factors (61)				
High School Graduation	86%	84-88%	94%	88%
Some College	51%	44-58%	73%	60%
Unemployment	4.3%		2.6%	3.3%
Children in Poverty	31%	23-39%	10%	20%
Income Inequality	4.2	3.6-4.8	3.7	4.6
Children in Single-Parent Household	22%	16-28%	14%	27%
Social Associations	12.8		18.2	11.5
Violent Crime Rate	132		63	428
Injury Deaths	170	138-209	59	94
Physical Environment (29)				
Air-Pollution- Particulate Matter	8.1		5.2	8.2
Drinking Water Violations	Yes			
Severe Housing Problems	10%	8-13%	9%	14%
Driving Alone to Work	78%	75-82%	72%	82%
Long Commute- Driving Alone	35%	30-40%	16%	27%

Source: County Health Rankings & Roadmaps; University of Wisconsin Population Health Institute; Robert Wood Johnson Foundation



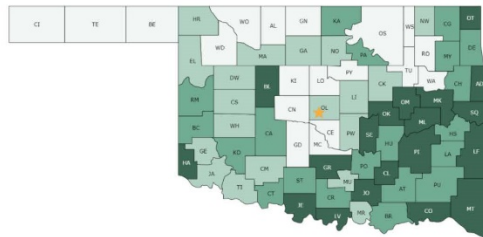


Health Factor Ranks 1 to 19 20 to 38 39 to 58 59 to 77

Table 2. Health Outcomes (Overall Rank 74)

Category (Rank)	Johnston County	Error Margin	Top U.S. Performers	Oklahoma
Length of Life (73)				
Premature Death	14,600	11,800-17,400	5,400	9,100
Quality of Life (71)				
Poor or Fair Health	24%	22-27%	14%	21%
Poor Physical Health Days	5.4	5.0-5.8	3.4	4.5
Poor Mental Health Days	5.5	5.1-5.8	3.8	4.8
Low Birth Weight	9%	7-11%	6%	8%

Source: County Health Rankings & Roadmaps; University of Wisconsin Population Health Institute; Robert Wood Johnson Foundation



Health Outcome Ranks 1 to 19 20 to 38 39 to 58 59 to 77

For additional information, please contact
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 Corie Kaiser, Director, corie.kaiser@okstate.edu
 Oklahoma Office of Rural Health

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Appendix E- Survey Form and Survey Results

Mercy Hospital Tishomingo Local Health Services Survey

Please return completed survey by September 30, 2021



The zip code of my residence is: _____

What is your current age: _____

- Has your household used the services of a hospital in the past 24 months?
 - Yes (*Go to Q2*)
 - No (*Skip to Q7*)
 - Don't know (*Skip to Q7*)
- At which hospital(s) were services received? (*please check/list all that apply*)
 - Mercy Hospital Tishomingo (*Skip to Q4*)
 - Other (*Please specify Hospital and City, then go to Q3*)

- If you responded in Q2 that your household received care at a hospital other than Mercy Hospital Tishomingo, why did you or your family member choose that hospital? (*Please answer then skip to Q6*)
 - Physician referral
 - Quality of care/Lack of confidence
 - Closer, more convenient location
 - Availability of specialty care
 - Insurance reasons
 - Other (*Please list below*)

- If you responded in Q2 that your household received care at Mercy Hospital Tishomingo, what hospital service(s) were used?
 - Diagnostic imaging (X-ray, MRI, CT, Ultrasound)
 - Respiratory therapy
 - Laboratory
 - Hospital Inpatient
 - Outpatient infusion
 - Skilled nursing (swing bed)
 - Physician services
 - Emergency room (ER)
 - Physical, speech, or occupational therapy
 - Other (*Please list below*)

- How satisfied was your household with the services you received at Mercy Hospital Tishomingo?
 - Satisfied
 - Dissatisfied
 - Don't know

- Has your household been to a specialist in the past 24 months?
 - Yes
 - No (*Skip to Q10*)
 - Don't know (*Skip to Q10*)

- What type of specialist has your household been to in the past 24 months and in which city were they located?

Type of Specialist	City

- Did the specialist request further testing, laboratory work and/or x-rays?
 - Yes
 - No
 - Don't know

- If yes, in which city were the tests or laboratory work performed?

Continue on reverse side...

10. What kind of medical provider do you use for routine care *(Please select all that apply)* ?
- Primary Care physician
 - Tribal Health Center
 - Income Based Health Center
 - Urgent care/Walk in clinic
 - Health Department
 - Mid-Level Clinic (Nurse Practitioner or PA)
 - Emergency Room/Hospital
 - Specialist
 - Other *(Please list below)*
-

11. Has your household been to a primary care (family) doctor in the Tishomingo area?
- Yes *(Go to Q12)*
 - No *(Skip to Q13)*
 - Don't know *(Skip to Q13)*

12. How satisfied was your household with the quality of care received in the Tishomingo area?
- Satisfied
 - Dissatisfied
 - Don't know

13. Do you think there are enough primary care (family) doctors practicing in the Tishomingo area?
- Yes
 - No
 - Don't know

14. Are you able to get an appointment, within 48 hours, with your primary care (family) doctor when you need one?
- Yes
 - No
 - Don't know

15. Have you received outpatient Physical, Occupational, or Speech Therapy in the past 24 months?
- Yes
 - No *(Skip to Q17)*
 - Don't know *(Skip to Q17)*

16. How far did you travel to receive outpatient Physical, Occupational, or Speech Therapy in the past 24 months?
- 0-10 miles
 - 10-20 miles
 - 20-30 miles
 - 30-40 miles
 - 40-50 miles
 - Greater than 50 miles
 - Other

17. Have you used the services of a walk-in, urgent care or after hours clinic in the past 24 months?
- Yes
 - No
 - Don't know

18. Would you utilize a walk in and/or after hours clinic if offered in Tishomingo?
- Yes
 - No
 - Don't know

19. What concerns you most about health in the Tishomingo area *(Please select all that apply)* ?
- Heart disease
 - Cancers
 - Diabetes
 - Dental
 - Teen Pregnancy
 - Suicide
 - Mental health
 - Substance abuse
 - Obesity
 - Accessing primary care
 - Accessing specialty services
 - Motor vehicle crashes
 - Other
-

20. What additional health and wellness services would you like to see offered in the Tishomingo area?
-

21. Has your household used telemedicine services, a visit either by telephone or video with your provider, in the past year?
- Yes
 - No *(Skip to Q23)*
 - Don't know *(Skip to Q23)*

22. How satisfied was your household with the quality of care received via telemedicine?
- Satisfied
 - Dissatisfied
 - Don't know

23. How would you prefer to be notified of community events?
(Please select all that apply)
- Newspaper
 - Radio
 - Email
 - Website
 - Social Media

Please mail completed survey to:
Mercy Hospital Tishomingo
 1000 S Byrd St.
 Tishomingo, OK 73460

Or, return to hospital administration

Mercy Hospital Tishomingo Survey Results and Primary Care Physician Demand Analysis

Corie Kaiser, Director
Lara Brooks, Rural Health Analyst

Oklahoma Office of Rural Health



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Photo Courtesy of David Waters

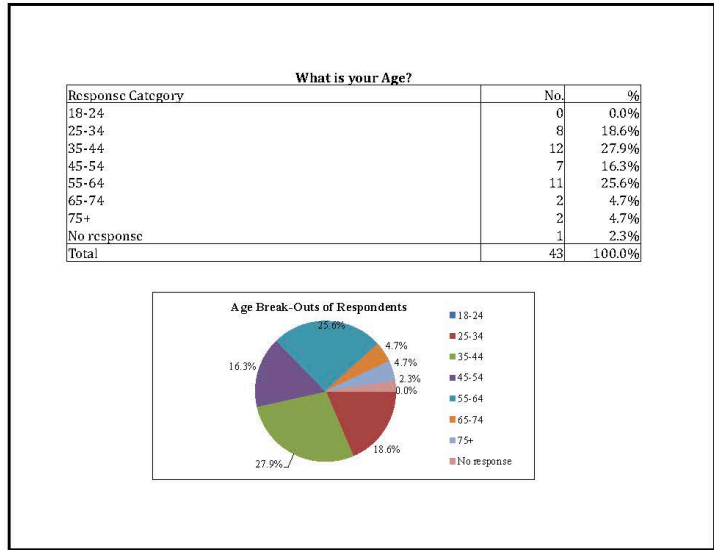
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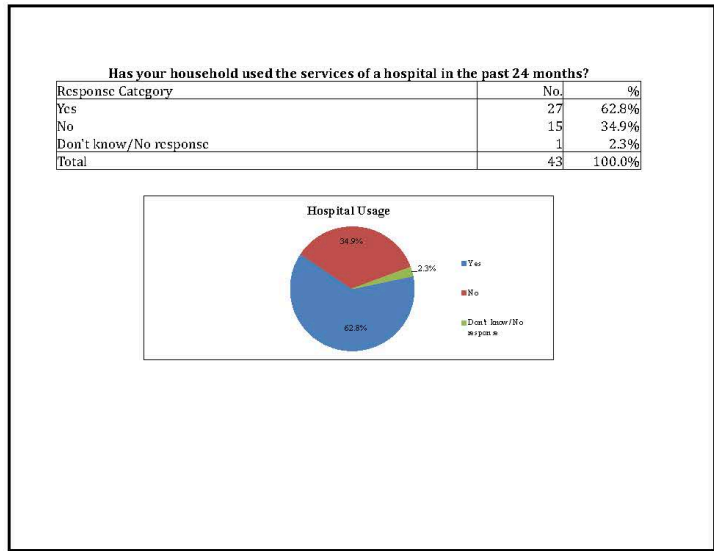
Zip Code of Residence		
Response Category	No.	%
73460- Tishomingo	24	55.8%
73450- Milburn	6	14.0%
73455- Ravia	3	7.0%
73447- Mannsville	2	4.7%
73446- Madill	2	4.7%
74825- Allen	1	2.3%
73440- Lebanon	1	2.3%
73432- Coleman	1	2.3%
73401- Ardmore	1	2.3%
74030- Drumright	1	2.3%
74820- Ada	1	2.3%
Total	43	100.0%

79 Responses in 2018

2



3



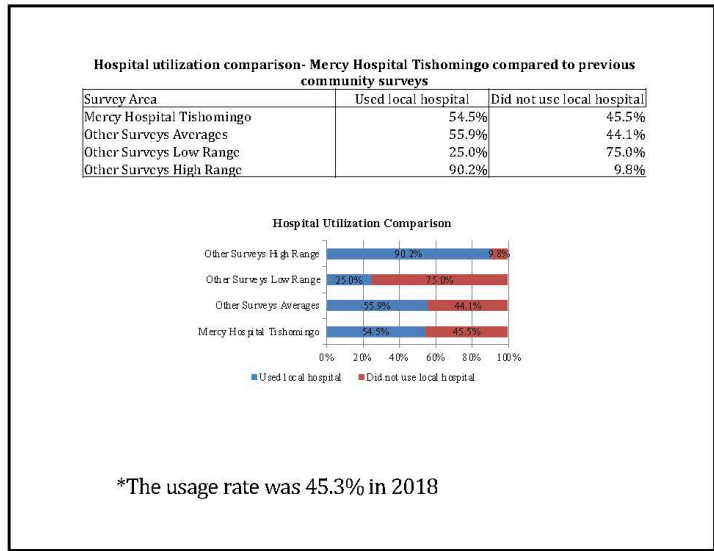
4

Where did you receive hospital services?

Response Category	No.	%
Mercy Hospital Tishomingo	24	54.5%
Mercy Hospital Ardmore	7	15.9%
AllianceHealth Durant	4	9.1%
Mercy Hospital Ada	2	4.5%
Texoma Medical Center, Sherman, TX	2	4.5%
Chickasaw Nation Medical Center, Ada	1	2.3%
AllianceHealth Madill	1	2.3%
Mercy Hospital Oklahoma City	1	2.3%
Choctaw Nation Health Care Center, Tahleah	1	2.3%
No Facility Name, North Carolina	1	2.3%
Total*	44	100.0%

*Some respondents answered more than once. Average hospitals visited per respondent = 1.63

5



6

If you responded in question 2 that your household received care at a hospital other than Mercy Hospital Tishomingo, why did you or your family member choose that hospital?

Response Category	No.	%
Availability of specialty care (Including surgery, labor and delivery)	11	50.0%
Physician referral/Transferred	5	22.7%
Closer, more convenient location	2	9.1%
Insurance reasons/Tribal health services	2	9.1%
Needed rapid Covid test- wasn't available at the time	1	4.5%
Quality of care/Lack of confidence	1	4.5%
Total*	22	100.0%

*Some respondents selected more than one category.

7

What hospital services were used at Mercy Hospital Tishomingo?

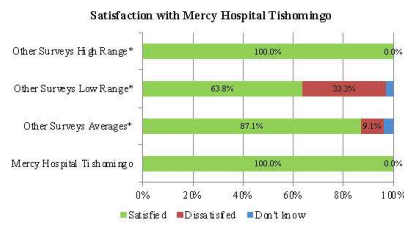
Response Category	No.	%
Emergency room	21	39.6%
Diagnostic imaging (X-ray, CT, MRI, Ultrasound)	11	20.8%
Laboratory	11	20.8%
Physician services	6	11.3%
Hospital inpatient	2	3.8%
Outpatient services	1	1.9%
Surgical services	1	1.9%
Total*	53	100.0%

*Some respondents selected more than one category. Average number of services used per respondent = 2.21

8

How satisfied were you or someone in your household with the services you received at Mercy Hospital Tishomingo?

Survey Area	Satisfied	Dissatisfied	Don't know
Mercy Hospital Tishomingo	100.0%	0.0%	0.0%
Other Surveys Averages*	87.1%	9.1%	3.8%
Other Surveys Low Range*	63.8%	33.3%	2.9%
Other Surveys High Range*	100.0%	0.0%	0.0%

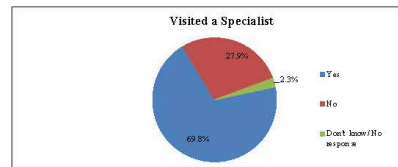


*Hospital satisfaction rate= 73.5% in 2018

9

Has your household been to a specialist in the past 24 months?

Response Category	No.	%
Yes	30	69.8%
No	12	27.9%
Don't know/No response	1	2.3%
Total	43	100.0%



10

What type of specialist has your household been to and in which city did you receive that care?

Type of Specialist	City	No.	%
Orthopedist/Ortho Surg.	Ardmore (1); Moore (1); Aurora, CO (1); Durham, NC (1); No location (1)	5	13.5%
	No location (2); Ada (1); Denison, TX (1); Sherman, TX (1)		
Dermatologist	No location (2); Ardmore (1); Oklahoma City (1)	4	10.8%
Rheumatologist	Edmond (1); Oklahoma City (1); No location (1)	3	8.1%
Surgeon	Ardmore (2); No location (1)	3	8.1%
Gastroenterologist	Ardmore (1); Oklahoma City (1)	2	5.4%
OB/GYN	Ardmore (1); No location (1)	2	5.4%
Primary Care	Ardmore (2)	2	5.4%
Urologist	No location (2)	2	5.4%
Hepatologist	Oklahoma City (1)	1	2.7%
Chiropractor	No location (1)	1	2.7%
Dentist	Tishomingo (1)	1	2.7%
Mammography	Ardmore (1)	1	2.7%
Ultrasound	Oklahoma City (1)	1	2.7%
Neurologist	No location (1)	1	2.7%
Oncologist	Ardmore (1)	1	2.7%
Otolaryngologist	Sherman, TX (1)	1	2.7%
Pulmonologist	Denison, TX (1)	1	2.7%
Total*		37	100.0%

*Some respondents answered more than once. 30 respondents had seen a specialist. Those 30 respondents reported visiting an average of 1.23 specialists.

*Top 3 Specialists in 2018: Cardiologist (10); Orthopedist/Ortho Surg. (8); Neurologist/Neursurg. (6)

11

Did the specialist request further testing, laboratory work and/or x-rays?

Response Category	No.	%
Yes	23	76.7%
No	6	20.0%
Don't know/No response	1	3.3%
Total	30	100.0%

If yes, in which city were the tests or laboratory work performed?

Response Category	No.	%
Ardmore	8	32.0%
Tishomingo	4	16.0%
Oklahoma City	4	16.0%
Durant	3	12.0%
Ada	2	8.0%
Sherman, TX	2	8.0%
Madill	1	4.0%
No response	1	4.0%
Total*	25	100.0%

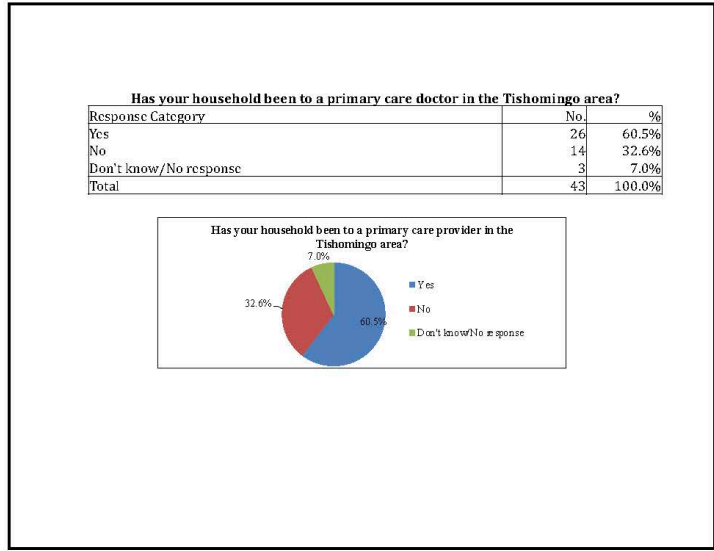
*Some respondents answered more than once. Average responses equal 1.09

12

What type of medical provider do you use for routine care?

Response Category	No.	%
Primary care physician	30	50.0%
Mid-level clinic (nurse practitioner or PA)	13	21.7%
Urgent care/Walk in clinic	7	11.7%
Tribal health center	4	6.7%
Income based health center	1	1.7%
Specialist	1	1.7%
Health department	1	1.7%
No response	3	5.0%
Total	60	100.0%

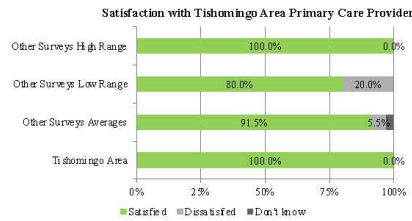
13



14

How satisfied were you or someone in your household with the quality of care received in the Tishomingo area?

Response Category	Satisfied	Dissatisfied	Don't know
Tishomingo Area	100.0%	0.0%	0.0%
Other Surveys Averages	91.5%	5.5%	3.0%
Other Surveys Low Range	80.0%	20.0%	0.6%
Other Surveys High Range	100.0%	0.0%	0.0%



*Primary Care satisfaction rate= 86.4% in 2018

15

Do you think there are enough primary care (family) doctors practicing in the Tishomingo area?

Response Category	No.	%
Yes	7	16.3%
No	26	60.5%
Don't know/No response	10	23.3%
Total	43	100.0%

Are you able to get an appointment, within 48 hours, with your primary care doctor when you need one?

Response Category	No.	%
Yes	22	51.2%
No	15	34.9%
Don't know/No response	6	14.0%
Total	43	100.0%

16

Have you used received outpatient Physical, Occupational, or Speech Therapy in the past 24 months?

Response Category	No.	%
Yes	2	4.7%
No	38	88.4%
Don't know/No response	3	7.0%
Total	43	100.0%

How far did you travel to receive outpatient Physical, Occupational, or Speech therapy in the past 24 months?

Response Category	No.	%
0-10 miles	1	50.0%
20-30 miles	1	50.0%
Total	2	100.0%

17

Have you used the services of a walk-in, urgent care or after hours clinic in the past 24 months?

Response Category	No.	%
Yes	22	51.2%
No	18	41.9%
Don't know/No response	3	7.0%
Total	43	100.0%

Would you utilize a walk in and/or after hours clinic if offered in Tishomingo?

Response Category	No.	%
Yes	28	65.1%
No	6	14.0%
Don't know/No response	9	20.9%
Total	43	100.0%

18

What concerns you most about health in the Tishomingo area?

	No.	%
Substance abuse	28	15.5%
Mental health	24	13.3%
Obesity	19	10.5%
Diabetes	19	10.5%
Accessing primary care	17	9.4%
Accessing specialty services	16	8.8%
Heart disease	13	7.2%
Cancers	12	6.6%
Suicide	10	5.5%
Dental	7	3.9%
Teen pregnancy	6	3.3%
Motor vehicle crashes	6	3.3%
All of the above	1	0.6%
Don't know/No response	3	1.7%
Total	181	100.0%

19

What additional health and wellness services would you like to see offered in the Tishomingo area?

Response Category	No.	%
Specialists: Cardiologist (2); Dermatologist (2); Endocrinologist (2); Specialists in general (1); Pulmonologist (1); Pediatrician (1)	9	16.4%
Health education: Diabetic, prenatal, heart health, fitness	5	9.1%
Urgent care/24 hour urgent care/Convenient care	4	7.3%
Don't know/No additional services	3	5.5%
Wellness center/Workout facilities/24 hour gym	3	5.5%
Outpatient therapy/Physical therapy	3	5.5%
Imaging: Mammography (2); Bone Density (1)	3	5.5%
Mental health/More providers/Greater access	3	5.5%
Optometry	3	5.5%
Primary care physicians	2	3.6%
Dieticians	1	1.8%
EOD facility for youth	1	1.8%
Greater variety in testing	1	1.8%
Health screenings	1	1.8%
Surgery services	1	1.8%
Good providers	1	1.8%
Services without vaccine requirement	1	1.8%
More availability of EMS for transfers	1	1.8%
Smoking cessation	1	1.8%
Swimming pool	1	1.8%
No response	7	12.7%
Total	55	100.0%

20

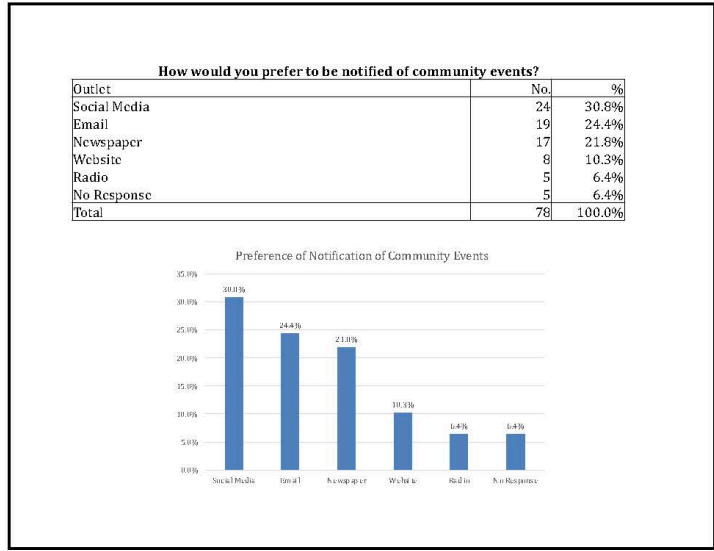
Has your household used telemedicine services, a visit either by telephone or video with your provider, in the past year?

Response Category	No.	%
Yes	21	48.8%
No	17	39.5%
Don't know/No response	5	11.6%
Total	43	100.0%

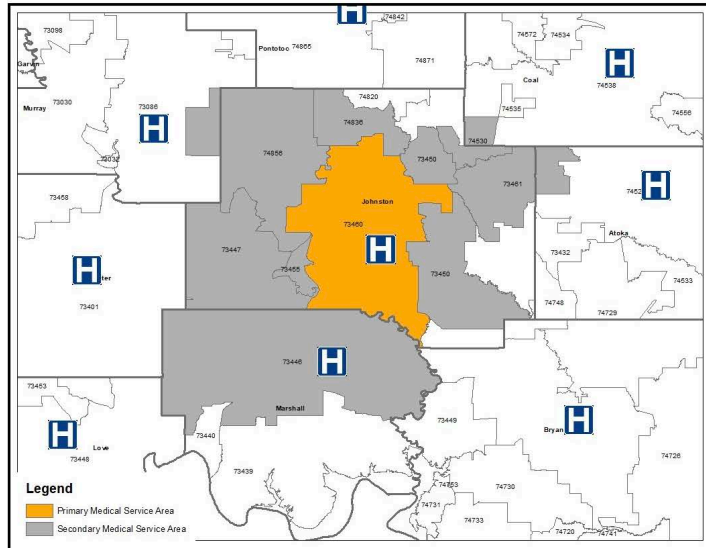
How satisfied was your household with the quality of care received via telemedicine?

Response Category	No.	%
Satisfied	17	81.0%
Dissatisfied	4	19.0%
Total	21	100.0%

21



22



23

Table 1. Mercy Hospital Tishomingo Medical Service Areas

Zip Code	City	2015-2019 ACS Population
<i>Primary Medical Service Area</i>		
73460	Tishomingo	4,766
Totals		4,766
<i>Secondary Medical Service Area</i>		
74856	Mill Creek	842
74836	Connerville	175
73450	Milburn	1,304
74530	Bromide	137
73461	Wapanucka	755
73455	Ravia	611
73447	Mannsville	1,378
73446	Madill	8,642
Totals		13,814

SOURCE: Population data from the U.S. Bureau of Census, 2015-2019 American Community Survey

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Table 2a. Annual Primary Care Physician Office Visits Generated in the Tishomingo, Oklahoma, Medical Service Areas

PRIMARY MEDICAL SERVICE AREA							
Age	Male			Female			Total Visits
	15-19 Population	Visit Rate ^(b)	Visits	15-19 Population	Visit Rate ^(b)	Visits	
Under 15	431	2.7	1,164	401	2.5	1,003	2,166
15-24	405	1.1	446	397	1.9	754	1,200
25-44	449	1.3	584	503	2.8	1,408	1,992
45-64	584	2.6	1,518	674	3.4	2,292	3,810
65-74	255	4.6	1,173	232	4.7	1,090	2,263
75+	159	5.4	859	276	5.5	1,518	2,377
Total	2,283		5,743	2,483		8,065	13,808

Primary Medical Service Area - Local Primary Care Physician office visits per year: 7,525

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SECONDARY MEDICAL SERVICE AREA

Age	Male			Female			Total Visits
	15-19 Population	Visit Rate ^(b)	Visits	15-19 Population	Visit Rate ^(b)	Visits	
Under 15	1,451	2.0	2,902	1,452	2.1	3,049	5,951
15-24	988	2.4	2,371	865	1.9	1,644	4,015
25-44	1,614	3.0	4,842	1,536	2.9	4,454	9,296
45-64	1,814	4.2	7,619	1,731	3.8	6,578	14,197
65-74	683	6.1	4,166	751	6.0	4,506	8,672
75+	477	7.4	3,530	482	6.7	3,229	6,759
Total	7,027		25,430	6,817		23,460	48,890

Secondary Medical Service Area - Local Primary Care Physician office visits per year: 26,645

Source: U. S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center of Health Statistics, "National Ambulatory Medical Care Survey: 2016 Summary."

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Table 3. Primary Care Physician Office Visits Given Usage by Local Residents in the Tishomingo, Oklahoma Medical Service Area

		Usage by Residents of Primary Service Area						
		70%	75%	80%	85%	90%	95%	100%
Usage by Residents of Secondary Service Area	5%	6,600	6,976	7,353	7,729	8,105	8,481	8,858
	10%	7,932	8,309	8,685	9,061	9,437	9,814	10,190
	15%	9,265	9,641	10,017	10,393	10,770	11,146	11,522
	20%	10,597	10,973	11,349	11,726	12,102	12,478	12,854
	25%	11,929	12,305	12,682	13,058	13,434	13,810	14,187
	30%	13,261	13,638	14,014	14,390	14,766	15,143	15,519
	35%	14,594	14,970	15,346	15,722	16,099	16,475	16,851
	40%	15,926	16,302	16,678	17,055	17,431	17,807	18,184
	45%	17,258	17,634	18,011	18,387	18,763	19,140	19,516
	50%	18,590	18,967	19,343	19,719	20,096	20,472	20,848

If 90% primary medical service area and 10 to 15% secondary medical service area, then the usage would be: 9,437 to 10,770 total primary care physician office visits in the Tishomingo area for an estimated 2.3 to 2.6 Total Primary Care Physicians.
(Based on 83.7 average weekly primary care physician visits with a 50 week year)