



**Community Health Needs Assessment
2024 Report**

Table of Contents

Executive Summary	3
Background and Methodology	4
Osborne County Demographic Information	5
Population Demographics	5
Unemployment.....	6
Poverty	6
Education.....	6
About Osborne County Memorial Hospital	7
OCMH Services and Providers	8
Osborne County Inpatient Origin Reports.....	9
Survey Participation and Responses.....	11
Survey Responses for Town Hall Discussion.....	12
Community Leader Perspectives and Future Casting.....	14
Perspectives on Current Services	14
Future Support and Solutions for Needs.....	15
Appendices	16

Executive Summary

Osborne County Memorial Hospital completed its 2024 Community Health Needs Assessment in accordance with IRS requirements by collecting community health input and data from the general public in the county. OCMH hosted a town hall with leaders from the area to review the survey results and add additional feedback. Based on the data and feedback an implementation plan will be created.

Overall, the assessment found that Osborne County residents believe the county is relatively healthy. Residents have adequate access to healthcare although one of the top ongoing and most pressing topics is recruiting new providers to support the medical staff.

Six areas for concern rose to the top needs for increased community health. These topics will be addressed in the implementation plan. Included were:

1. Child Care Access
2. Housing
3. Provider
4. Mental Health Access (includes strategies to prevent and support related areas such as suicide and substance abuse)
5. Nursing Home/Senior Care
6. Affordable Insurance/Access to Medicaid

Community leaders pointed to individuals and community groups supporting efforts to increase child care access and housing. They also noted that while these are areas impacting community health, OCMH may not be responsible for a solution.

According to the 2024 County Health Rankings compiled by the Kansas Health Institute, the areas of need for Osborne County are the same or similar to that of neighboring counties and counties with similar demographic makeup in the state and nation.

OCMH will consider this data as it develops its CHNA implementation plan. The following report shares more details about the assessment process, survey results and town hall discussion.

Background and Methodology

The federal Patient Protection and Affordable Care Act (ACA) requires that each registered 501(c)3 hospital conduct a Community Health Needs Assessment (CHNA) at least once every three years and adopt a strategy to meet community health needs. Any hospital that has filed a 990 is required to conduct a CHNA.

Osborne County Memorial Hospital completed its CHNA in the spring of 2024 with two parts. The general public was encouraged to complete a health survey in April. The survey was open for two weeks and 58 residents completed the survey either online or by paper form.

This was followed with a town hall meeting to discuss survey results and gather additional feedback. OCMH invited community leaders from all municipalities in the county. This included city officials, law enforcement, school officials, economic development personnel and board members, major industry representatives, hospital and other healthcare and mental health professionals, community foundation representatives and other key service providers. Twenty individuals participated in the town hall.

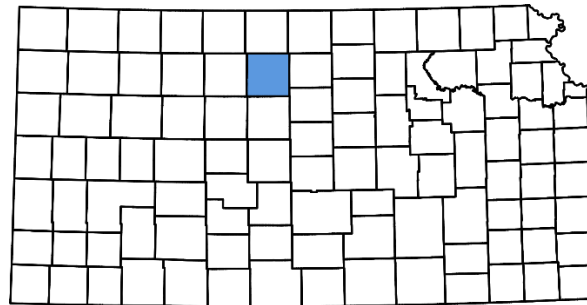
Feedback from the survey and town hall will be used along with the 2024 County Health Rankings report from the Kansas Health Institute and the Economic Impact Report from the Kansas Hospital Association to develop an implementation plan.

The final CHNA report as well as the implementation plan will be made available on the OCMH website and share directly with the community leaders invited to the town hall.

Osborne County Demographic Information

Osborne County is located in northcentral Kansas about 40 miles from the Nebraska border. It is classified as a non-metro area in the 2020 U.S. Census. About 3,500 residents in five municipalities and the outlying areas. Osborne County’s population is decreasing. According to 2021 USDA ERS data, the county population is down 21% compared to 2000 U.S. Census data.

Residents in Osborne County tend to be older, earn less income, and are less likely to have health insurance when compared to residents statewide.



Population Demographics

Based on five years of data, the median age of county residents is 46.1 years, compared to 37 years statewide. In the same period, 24.6 percent of the population is 65 or older, while 15.8 percent of all Kansans fit this description. The population is split nearly evenly between males and females. The majority of individuals are white and households have an average of 2.2 people.

Label	Kansas		Osborne County, Kansas		Downs 67437		Osborne 67473		Portis 67474		Alton 67623		Natoma 67651	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
SEX AND AGE														
Total population	2,937,880	100.0%	3,500	100.0%	995	100.0%	1,645	100.0%	194	100.0%	237	100.0%	438	100.0%
Selected Age Categories														
65 years and over	490,390	16.7%	929	26.5%	307	30.9%	411	25.0%	48	24.7%	61	25.7%	104	23.7%
Male population	1,462,305	100.0%	1,726	100.0%	494	100.0%	793	100.0%	99	100.0%	125	100.0%	223	100.0%
Female population	1,475,575	100.0%	1,774	100.0%	501	100.0%	852	100.0%	95	100.0%	112	100.0%	215	100.0%
RACE														
One Race	2,657,373	90.5%	3,371	96.3%	953	95.8%	1,591	96.7%	190	97.9%	229	96.6%	414	94.5%
White	2,222,462	75.6%	3,304	94.4%	928	93.3%	1,558	94.7%	188	96.9%	227	95.8%	412	94.1%
Black or African American	168,809	5.7%	1	0.0%	0	0.0%	1	0.1%	0	0.0%	0	0.0%	0	0.0%
American Indian and Alaska Native	30,995	1.1%	19	0.5%	11	1.1%	7	0.4%	0	0.0%	0	0.0%	0	0.0%
Asian	86,273	2.9%	18	0.5%	3	0.3%	9	0.5%	1	0.5%	0	0.0%	2	0.5%
Native Hawaiian and Other Pacific Islander	3,412	0.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Some Other Race	145,422	4.9%	29	0.8%	11	1.1%	16	1.0%	1	0.5%	2	0.8%	0	0.0%
Two or More Races	280,507	9.5%	129	3.7%	42	4.2%	54	3.3%	4	2.1%	8	3.4%	24	5.5%
HOUSEHOLDS BY TYPE														
Total households	1,151,360	100.0%	1,563	100.0%	476	100.0%	715	100.0%	85	100.0%	99	100.0%	184	100.0%
HOUSING OCCUPANCY														
Total housing units	1,275,689	100.0%	2,044	100.0%	600	100.0%	870	100.0%	121	100.0%	158	100.0%	288	100.0%
Occupied housing units	1,151,360	90.3%	1,563	76.5%	476	79.3%	715	82.2%	85	70.2%	99	62.7%	184	63.9%
Source: US Census Data														
https://data.census.gov/tables/DECENNIALDP2020.DP1?_lang=040XX00US20_050XX00US20141_860XX00US67437,67473,67474,67623,67651&d=DEC%20Demographic%20Profile														

Unemployment

The unemployment rate is below that of the Kansas average and the median household income is 17% less than the statewide average.

Name	Unemployment Rate (percentage)										Median Household Income (2021)	% of State Median HH Income
	2014	2015	2016	2017	2018	2019	2020	2021	2022			
Kansas	4.5	4.2	4	3.6	3.4	3.3	5.8	3.3	2.7		\$64,128	100.00%
Osborne County	3.7	3.5	3.4	2.7	2.5	2	2.7	1.9	2		\$52,866	82.40%

Source: USDA Economic Research Service

https://data.ers.usda.gov/reports.aspx?ID=17828#Pa34e42bb4f1a40d1b9446c690898a570_4_113IT1

Poverty

Osborne County as 12% poverty with the largest concern in children ages 0-17. Of the population, 21% of county residents are 18 years old or younger.

	All people in poverty (2021)			Children ages 0-17 in poverty (2021)		
	Percent	90% confidence interval of estimate		Percent	90% confidence interval of estimate	
		Lower Bound	Upper Bound		Lower Bound	Upper Bound
Kansas	11.6	11.2	12	13.5	12.8	14.2
Osborne	12.1	9.3	14.9	16.9	11.7	22.1

Source: USDA Economic Research Service

<https://data.ers.usda.gov/reports.aspx?ID=17826>

Education

A higher percentage of Osborne County students complete high school than the state of Kansas but fewer complete any college.

Education Completion	Osborne County			Kansas		
	2000	2008-2012	2017-2021	2000	2008-2012	2017-2021
Completing College	15.50%	18.90%	21.50%	25.80%	30.00%	34.40%
Completing Some College	15.50%	18.90%	21.50%	30.40%	31.90%	31.50%
Completing High School Only	40.30%	36.50%	34.20%	29.80%	27.80%	25.70%
Not Completing High School	15.20%	12.50%	5.90%	14.00%	10.30%	8.40%

Source: USDA Economic Research Service

<https://data.ers.usda.gov/reports.aspx?ID=17829>

About Osborne County Memorial Hospital

Osborne County Memorial Hospital (OCMH) was built as a district hospital in 1958. It was later transferred to Osborne County ownership through a vote of the people.

The original building had eight patient rooms accommodating 16 patient beds. In 1968 the hospital was expanded to 29 beds to provide inpatient, outpatient, and swing bed services.

In 2003, OCMH applied for and was granted Critical Access Hospital (CAH) status through the Centers of Medicare and Medicaid Services (CMS) and the State of Kansas. As a CAH, the hospital is licensed for 25 beds and continues to provide services to a multi-generational population. As the only hospital in the county, OCMH continues to provide inpatient, outpatient and swing bed services. The Goad Medical Clinic was certified as a Rural Health Clinic (RHC) in 2010.

In March 2020, the CAH and RHC were relocated to its current location at 237 W Harrison Street. This new facility is equipped with 16 patient beds and eight clinic exam rooms.

The hospital is funded through revenue from operations, tax appropriations from the County and a 1% sales tax. In addition, the charitable contributions of patients and families have allowed OCMH to expand and improve services to meet the needs of the communities it serves.

The hospital is governed by a five-member Board of Directors appointed by the Osborne County Commissioners and the Hospital Administrator is responsible for providing strategic leadership and management of staff and key services. Hospital board members include John Girard, Katie Lix, Greg Mick, Janel Burch and Ginger Howell. Doris Brown serves as the CEO at OCMH.

OCMH's mission is to achieve excellence in rural healthcare in partnership with the communities we serve."

The organization's vision statement is "OCMH is a provider of choice for strategically targeted services to residents of North Central Kansas. Our community supported campus fosters an exemplary rural healthcare team that provides compassionate care to those we serve."

OCMH is currently working toward a strategic plan developed in 2022 that will complete in 2025. Five pillars have been identified as strategic needs: growth, service, people, quality and finance.

OCMH Services and Providers

OCMH services include emergency medicine, acute care, preventive care, specialty services, lab and radiology services, inpatient and outpatient physical therapy, swing-bed and others.

- Acute Care
- Behavioral Health
- Cardiac Rehab
- Cardiology
- Emergency Room
- Dietetic Consult
- Laboratory
- Pain Management
- Physical Therapy
- Pulmonary Rehabilitation
- Occupational Therapy
- Orthopedics
- Radiology
- Respiratory Therapy
- Rural Health Clinic
- Skilled Care
- Sleep Study
- Social Services
- Speech Therapy
- Surgical Services
- Urology
- Wound Clinic

OCMH partners with providers and other community and regional entities to offer additional services in the county. Those services include:

- Alzheimer Center
- Case Management
- Chaplaincy/Pastoral Care
- Crisis Prevention
- Geriatric Services
- Psychiatric Services
- Women's Health Services
- Adult Day Care
- Assisted Living
- Home Health
- Hospice
- Long Term Care
- Nursing Home Care
- Retirement Housing
- Ambulance Services
- Alcoholism-Drug Abuse
- Blood Donor Services
- Chiropractic Services
- Health Information Center
- Health Screenings
- Meals on Wheels
- Nutrition Programs (WIC)
- Patient Education
- Support Groups
- Teen Outreach Services
- Transportation to Health Facilities

OCMH is pleased to have five providers on staff and six visiting providers:

- Dr. Barbara Brown, DO (OCMH)
- Dr. Theresia Neill, MD (OCMH)
- Katie Crossland, APRN (OCMH)
- Ashly Doering, FNP (OCMH)
- Joshua Choate, PA-C (OCMH)
- Mary Jo Gubitoso, DNP, ARNP-C (Debakey Heart Institute)
- Dr. Greg Boxburger, MD (Kansas Physician Group)
- Dr. Travis Rump, MD (Salina Regional Hospital)
- Jacob Miller, CRNA (Central Iowa Pain and Wellness)
- Dr. Paul Teget, MD (Hays Medical Clinic)
- Dr. Michael Matteucci (Salina Urology Associates)

Osborne County Inpatient Origin Reports



Inpatient Utilization by Hospital OSBORNE, KS 2019 Q1 - 2024 Q2

Top N Hospitals
10

Patient State
KS

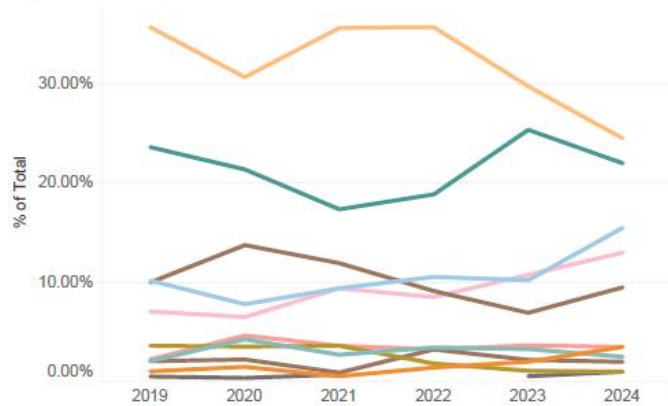
County
OSBORNE, KS

Inpatient Hospital Volume

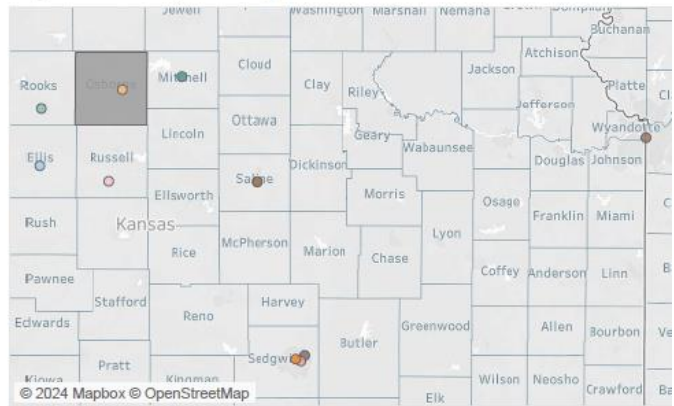
Rank	Hospital	2019		2020		2021		2022		2023		2024	
		Count of ..	% of Mar..	Count of ..	% of Mar..	Count of ..	% of Mar..	Count of ..	% of Mar..	Count of ..	% of Mar..	Count of ..	% of Mar..
1	Osborne County Memorial ..	207	35.69%	165	30.67%	197	35.62%	176	35.70%	163	29.74%	49	24.50%
2	Mitchell County Hospital He..	137	23.62%	115	21.38%	96	17.36%	93	18.86%	139	25.36%	44	22.00%
3	HaysMed - Hays, KS	59	10.17%	42	7.81%	52	9.40%	52	10.55%	56	10.22%	31	15.50%
4	Smith County Memorial Ho..	41	7.07%	35	6.51%	52	9.40%	42	8.52%	59	10.77%	26	13.00%
5	Salina Regional Health Cen..	58	10.00%	74	13.75%	66	11.93%	45	9.13%	38	6.93%	19	9.50%
6	Ascension Via Christi Hospi..	6	1.03%	8	1.49%	3	0.54%	7	1.42%	11	2.01%	7	3.50%
	Wesley Healthcare - Wicht..	13	2.24%	25	4.65%	20	3.62%	16	3.25%	20	3.65%	7	3.50%
8	Rooks County Health Cent..	12	2.07%	23	4.28%	15	2.71%	17	3.45%	18	3.28%	5	2.50%
9	The University of Kansas H..	12	2.07%	12	2.23%	5	0.90%	16	3.25%	12	2.19%	4	2.00%
10	Salina Surgical Hospital - S..	21	3.62%	19	3.53%	20	3.62%	9	1.83%	6	1.09%	2	1.00%
	Wesley Woodlawn Hospital..	3	0.52%	2	0.37%	4	0.72%			3	0.55%	2	1.00%

hospital
■ Ascension Via Christi Hospitals ... ■ Mitchell County Hospital Health ... ■ Rooks County Health Center - P... ■ Salina Surgical Hospital - Salina... ■ The University of Kansas Health...
■ HaysMed - Hays, KS ■ Osborne County Memorial Hosp... ■ Salina Regional Health Center - .. ■ Smith County Memorial Hospital... ■ Wesley Healthcare - Wichita, KS

Inpatient Hospital Market Trend



Inpatient Hospital Map



©2024 Hospital Industry Data Institute
2024-05-21 10:02:35.006



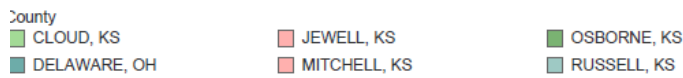
Inpatient Market Penetration by County

Osborne County Memorial Hospital - Osborne, KS
2019 Q1 - 2024 Q2

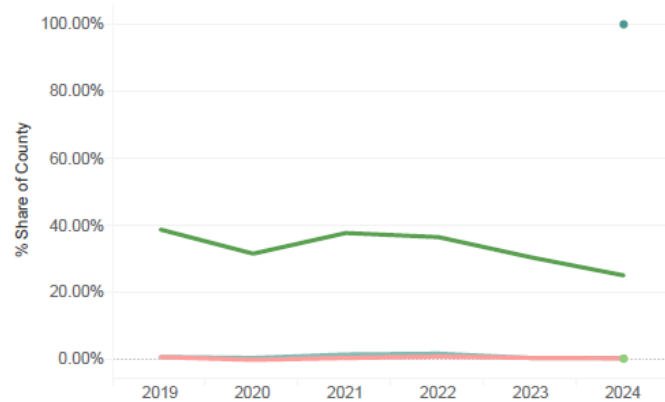
Hospital: Osborne County Me...
Top N Counties: 10

Inpatient County Volume

Rank	County	2019		2020		2021		2022		2023		2024	
		Count of Claim ID	% of Market Share by ...	Count of Claim ID	% of Market Share by ...	Count of Claim ID	% of Market Share by ...	Count of Claim ID	% of Market Share by ...	Count of Claim ID	% of Market Share by ...	Count of Claim ID	% of Market Share by ...
1	OSBORNE, KS	207	38.91%	165	31.73%	197	37.88%	176	36.67%	163	30.64%	49	25.26%
2	MITCHELL, KS	10	0.93%	1	0.13%	5	0.66%	8	1.06%	6	0.71%	2	0.58%
	RUSSELL, KS	8	1.00%	5	0.69%	11	1.73%	14	1.97%	5	0.68%	2	0.70%
4	CLOUD, KS											1	0.48%
	DELAWARE, OH											1	100.00%
	JEWELL, KS											1	0.53%



Inpatient County Market Trend



©2024 Hospital Industry Data Institute
2024-05-21 10:02:35.006

Inpatient County Map



Survey Participation and Responses

The full results of the public survey are attached to this report.

Demographic Details

Fifty-eight individuals completed the CHNA survey and 20 community leaders attended the town hall.

Most respondents were from Osborne or Downs. The age range of those completing the survey varied between 26 and 75. Most respondents were female.

Hospital employees, business owners and merchants and community board members were the top three groups represented.

Current Status of Health Services

On average respondents ranked the current status of health services at 3.69 out of 5 (1 = poor and 5 = very good).

Household Healthcare Choices

Of respondents, 89.7% had been to OCMH in the past two years for healthcare services. The majority responded that they were “very satisfied” with the service they experienced at OCMH.

Additionally, 74.1% of respondents received healthcare services outside of Osborne County. This includes services at facilities in neighboring counties and specialists that require travel of one hour drive or more.

Other Health Needs for Discussion

Respondents indicated that discussion at the town hall should include:

- Housing
- Lack of Providers/Qualified Staff
- Drug/Substance Abuse
- Behavioral/Mental Health
- Cancer

Survey Responses for Town Hall Discussion

The public identified key areas of focus for each ongoing needs, current most pressing priorities and root causes of poor health in the community.

When it came to community and personal healthiness, most survey respondents gave community health a 3 (1 = poor and 5 = very good), personal health received a rating of 4 and overall quality of healthcare received a 4.

Root causes of poor health in communities included:

1. Lack of Exercise
2. Lack of Health & Wellness
3. Lack of Health Insurance
4. Neglect
5. Chronic Disease Management and Lack of Nutrition/Access to Healthy Foods (tied for 5th)

When correlating the root causes to the 2024 County Health Rankings, it was noted that the driver of “% Reporting Poor or Fair Health” for the county was 15% compared to the state average of 14%, obesity was noted as 39% compared to the state average of 37% and access to exercise opportunities was noted at 43% compared to the state average of 80%.

The top eight “Ongoing Needs” identified include (ranked highest priority to lowest):

1. Child Care Access
2. Housing
3. Provider
4. Mental Health Access
5. Nursing Home/Senior Care
6. Affordable Insurance/Access to Medicaid
7. Treatment
8. Specialty Services

The top eight “Current Most Pressing Needs” identified include (ranked highest priority to lowest):

1. Child Care Access
2. Housing
3. Provider
4. Mental Health Access
5. Affordable Insurance/Access to Medicaid
6. Nursing Home/Senior Care
7. Substance Abuse
8. Home Health

While the order is slightly different, leaders noted that each of the categories included the same topics or related areas of need. Leaders were asked to narrow each list to their top three in each category.

The group determined the top three in “Ongoing Needs” are:

1. Child Care Access
2. Provider
3. Housing

Of the “Current Most Pressing Needs” listed based on survey results the group narrowed the top three areas to:

1. Child Care Access
2. Provider
3. Housing and Substance Abuse tied

During the town hall these topics were discussed and the group was asked to share perspectives on the rankings and why topics might be considered the highest priorities for residents.

When reviewing County Health Rankings for the surrounding counties, they also identify the same areas of need.

Community Leader Perspectives and Future Casting

At the town hall, community leaders were presented with survey results and the 2024 County Health Rankings for their input and feedback. Community leaders present at the town all meeting included:

- Jim Hindman, Osborne Industries
- Amy Conrad, Osborne Industries
- Drew Cheney, Solomon Valley Vision
- Kim Cheney, Solomon Valley Vision
- Collin Jones, Downs City Council member
- Stacey Hardy, OCMH
- Kim Henke, OCMH
- Cindy Hyde, OCMH
- Kaley Conner, High Plains Mental Health
- Janel Burch, OCMH Board Member
- Eldon Koepke, OCMH
- Dave Haneke, Parkview
- Dorothy Ellsworth, Osborne United Methodist Church
- Scottie Becker, Osborne County Sheriff's Department
- Nadine Sigle, Osborne County Community Foundation
- Darlene Earl, Osborne Chamber of Commerce
- Jim Struckhoff, Downs Care and Rehab
- Amy Doane, OCMH
- Doris Brown, OCMH

Perspectives on Current Services

Leaders participated in discussion about why issues are critical and the challenges they see.

Access to Fitness/Exercise Opportunities

OCMH is nearly finished with the creation of a walking trail around the hospital campus. The next phase of the plan is to add a community garden and park somewhere on the campus.

Mental Health Access

High Plains Mental Health is just down the street from OCMH which gives Osborne County residents better access than some of the surrounding counties. The Osborne HMPH office is the most consistent field office and they too are in need of providers who want to live and work in rural Kansas.

Nursing Home/Senior Care

Osborne County is lucky to have two nursing home facilities in the county however there is a lack of assisted living or home health options to allow people to age in their home. Changes to nursing home regulations may require an RN at the facility 24 hours a day instead of the current 8 hours. This will greatly increase costs for facilities that already run on a very thin or negative profit margin. They need help recruiting nursing staff of all kinds. Nursing education programs have long wait lists and there are not enough spaces at schools close to home for residents who need to stay close to family while continuing their education.

Other perspectives included that most Western Kansas counties are dealing with the same issues. Another note was the high number of cancer and Parkinson diagnoses in the region.

Future Support and Solutions for Needs

When asked about future casting and how the hospital can begin to work on these issues or partner with other entities to create strategies, the group shared several ideas.

Child Care Access

School districts may be able to help although the Osborne district has not been interested because of the cost and regulations associated with running child care centers. Osborne Economic Development has tried to start a new facility but had a hard time recruiting a provider and meeting regulations.

Housing

Local individuals are starting to work on a plan for housing. Alton and Natoma both have housing projects started and have received letters of support from the hospital. Both communities have been doing good work and would be good resources for housing projects in other communities in the county. The Kansas Department of Commerce has a grant program for 2nd story Main Street apartments. The program is currently only open to Main Street participants but hopefully will open wider in the future.

Mental Health Access

The hospital has added Avera behavioral health to its ER telehealth services to help with screening needs. High Plains Mental Health has a new mobile crisis program that includes responders to 988 and 1-800 calls to HPMH for emergency support. The program has already helped keep several people out of ERs and hospitals. One concern is the stigma around getting mental health support in small communities. Residents may have access but they are unwilling to seek help because of concerns of what people may say. HPMH offers a mental health first aid course that trains participants to identify and respond to warning signs to get further help. This course is offered for free and can help reduce stigma as more people are educated.

Affordable Insurance/Access to Medicaid

There isn't much the county can do about this except work with state officials to expand Medicaid so more people have access.

Other comments from this discussion included the idea of working with the state legislature and agencies to remove some of the restrictions and regulations that make it difficult for community groups, the healthcare industry and others to access programs and funding.

Appendices

The following appendices are included as references for this report.

- A. Osborne County Memorial Hospital 2024 Community Health Needs Assessment Compiled Survey Results
- B. Community Health Needs Assessment Town Hall Presentation
- C. 2024 Osborne County Health Rankings (Kansas Health Institutes)
- D. 2024 Osborne County Healthcare Economic Impact Report (Kansas Health Association)

Osborne County Memorial Hospital 2024 Community Health Needs Assessment

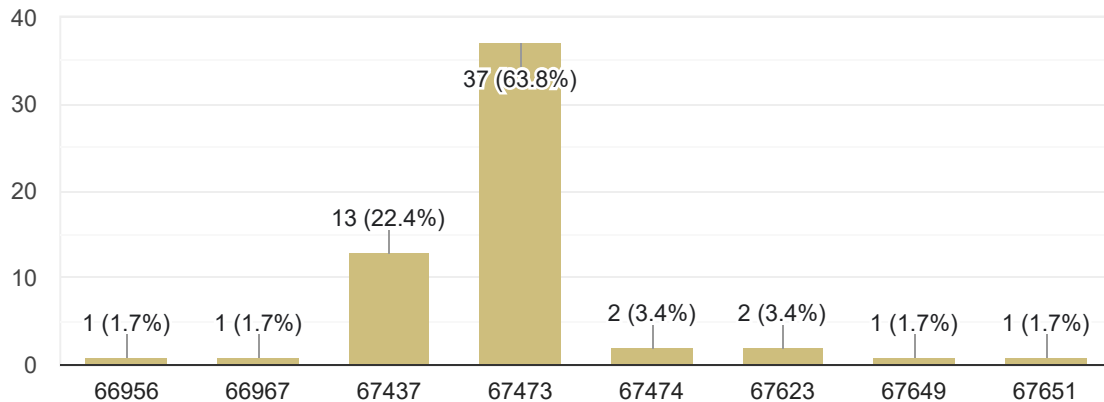
58 responses

Please provide a few demographic details.

What is the zip code of your residence?

 Copy

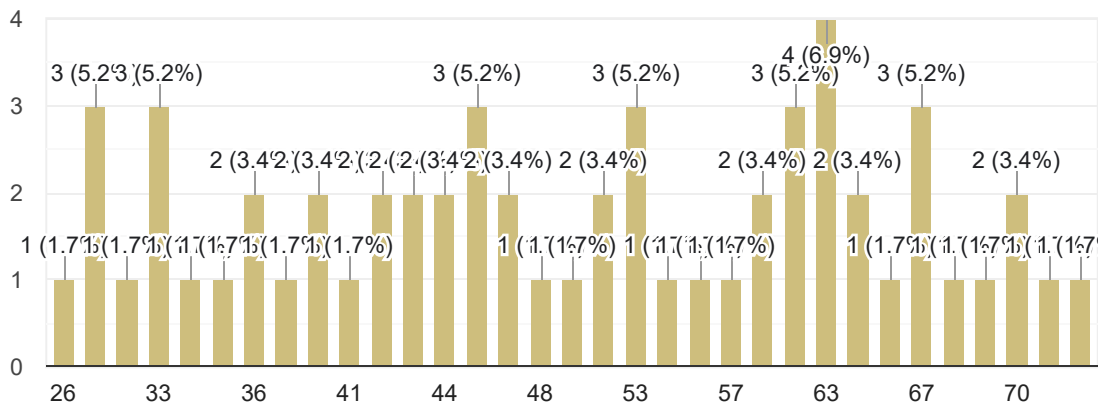
58 responses



What is your age?

 Copy

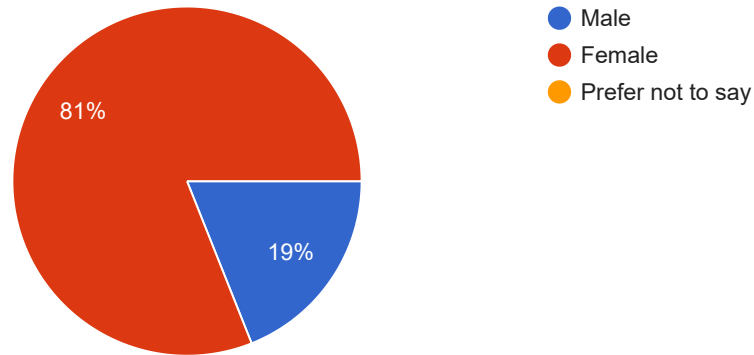
58 responses



What is your gender?

 Copy

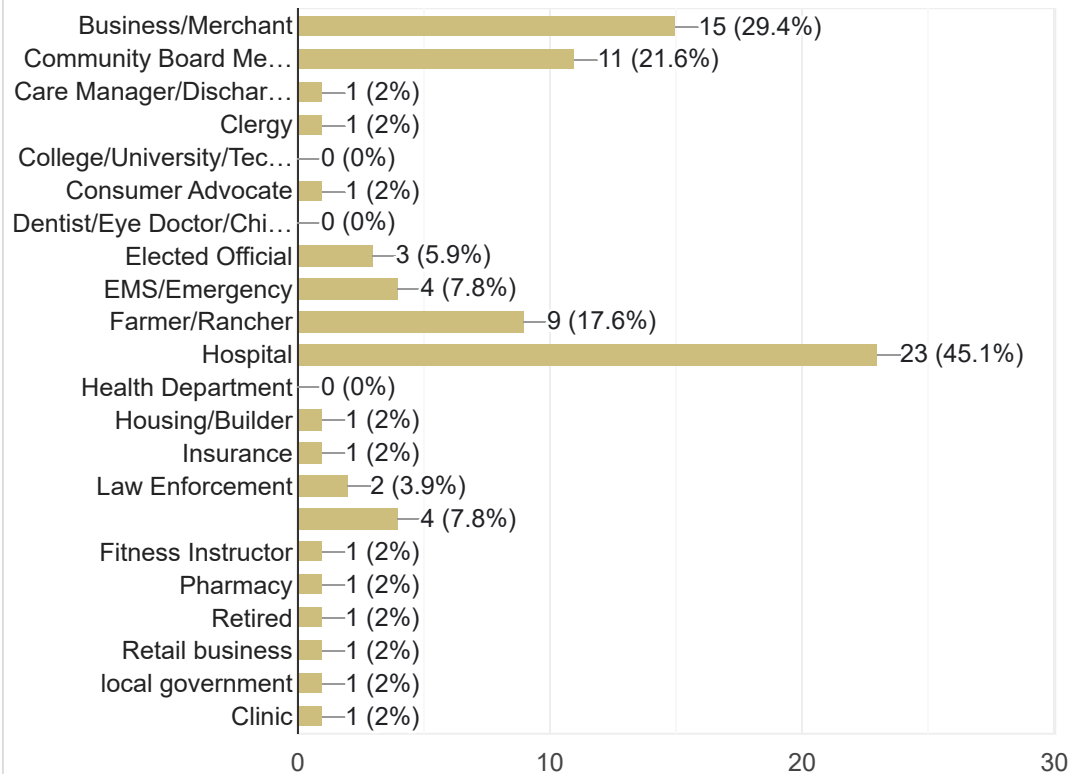
58 responses



Are you involved in any of the following?

 Copy

51 responses



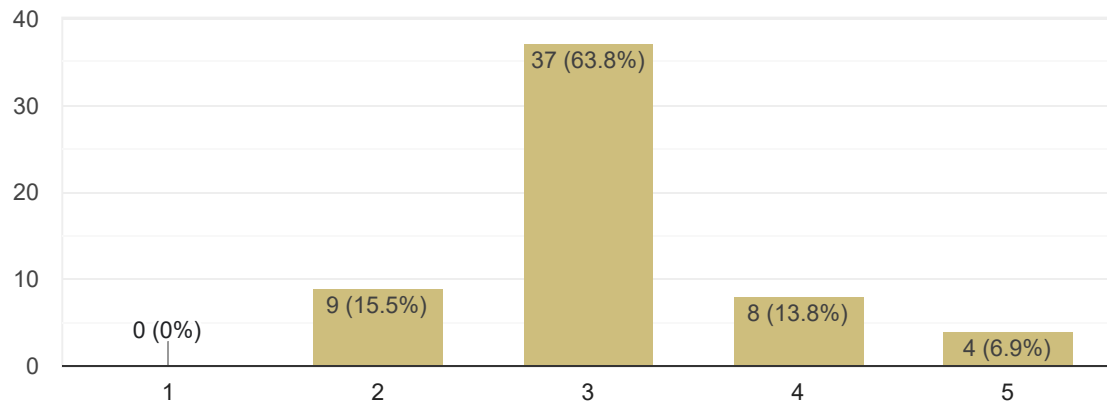
Please rate the current state of the following health conditions.



How would you rate your community as a "Healthy Community"?



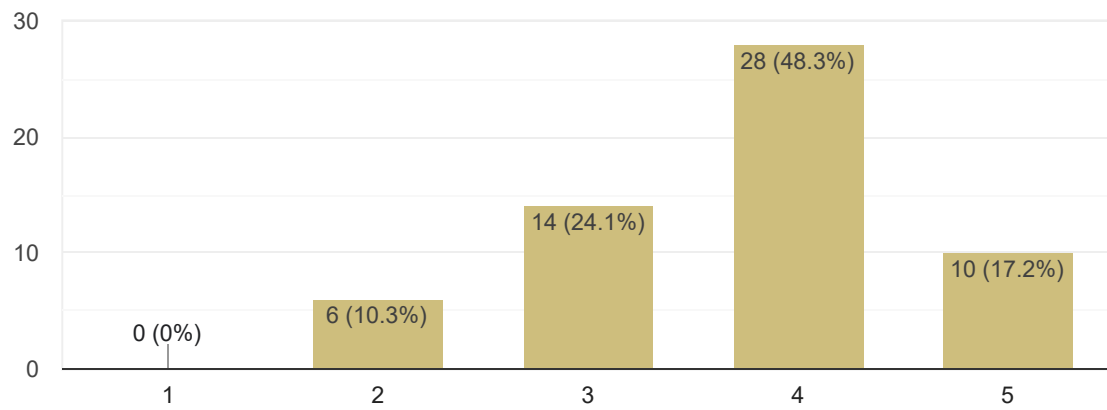
58 responses



How would you rate your own personal health?



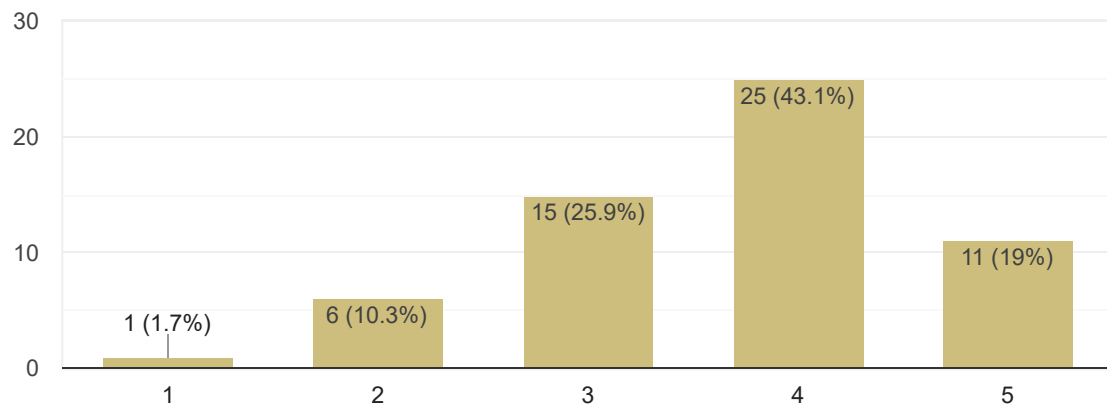
58 responses



How would you rate the overall quality of healthcare in your community?



58 responses

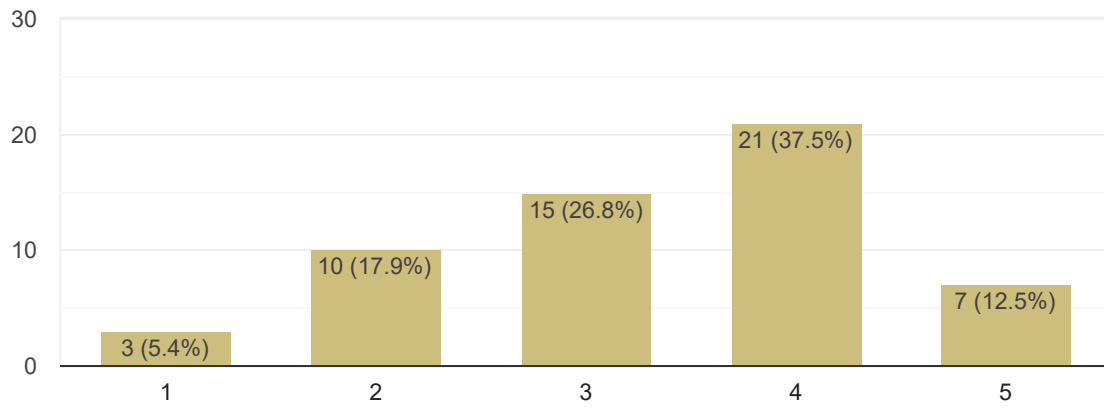


Please rate the current status of the following health services.



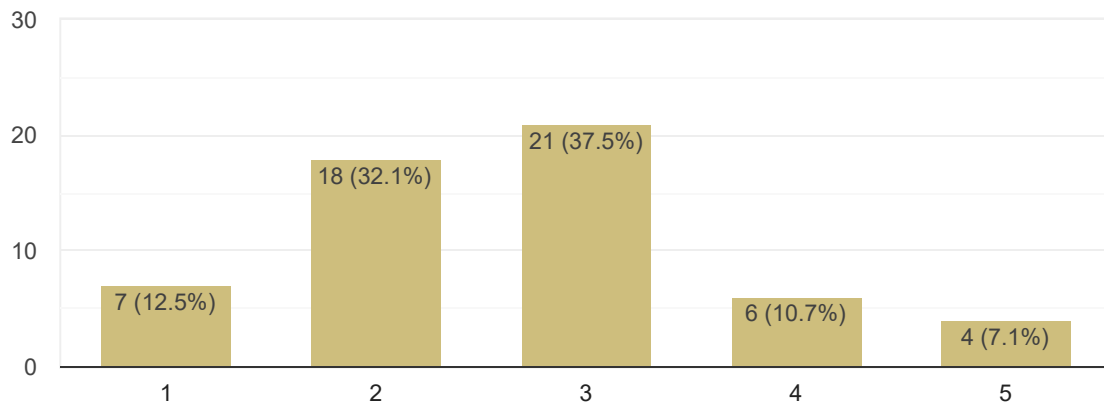
Ambulance

56 responses



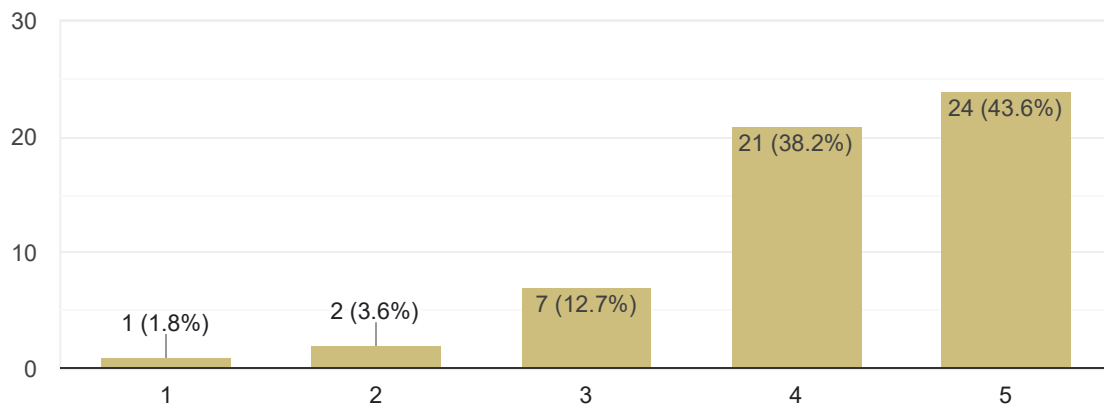
Childcare

56 responses



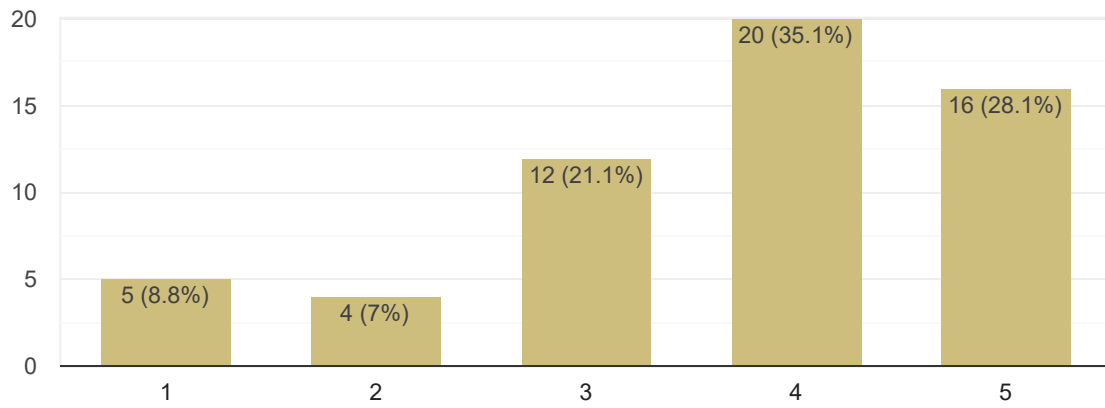
Chiropractor

55 responses



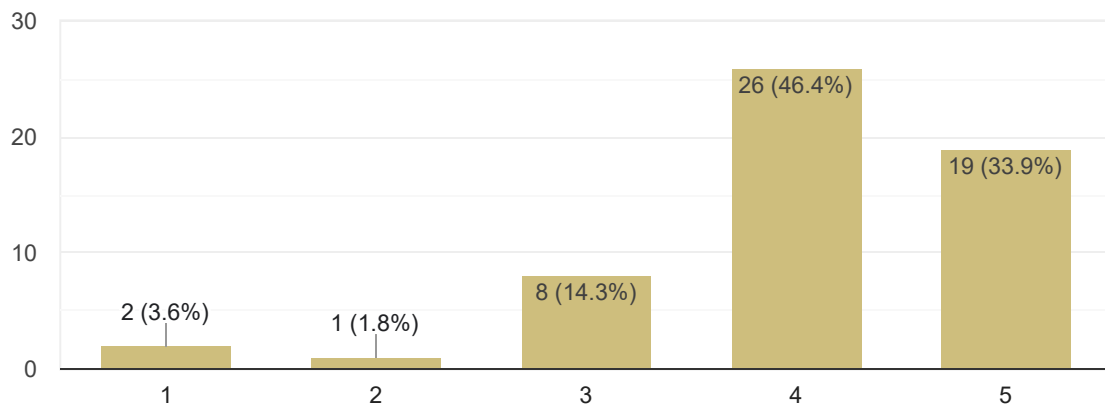
Dentist

57 responses



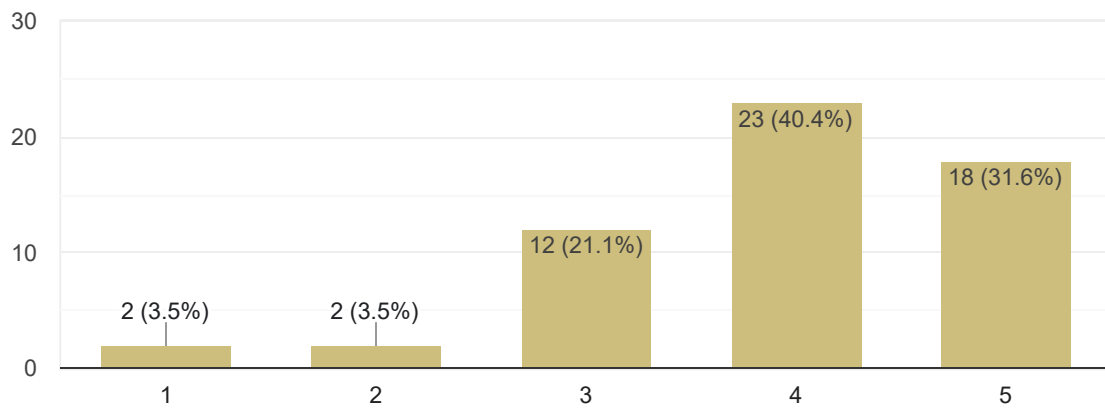
ER

56 responses



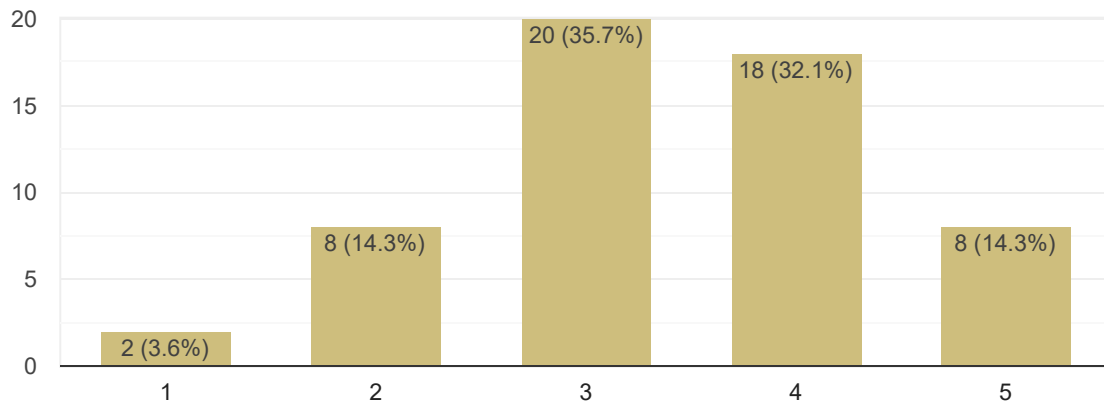
Eye Doctor/Optomtrist

57 responses



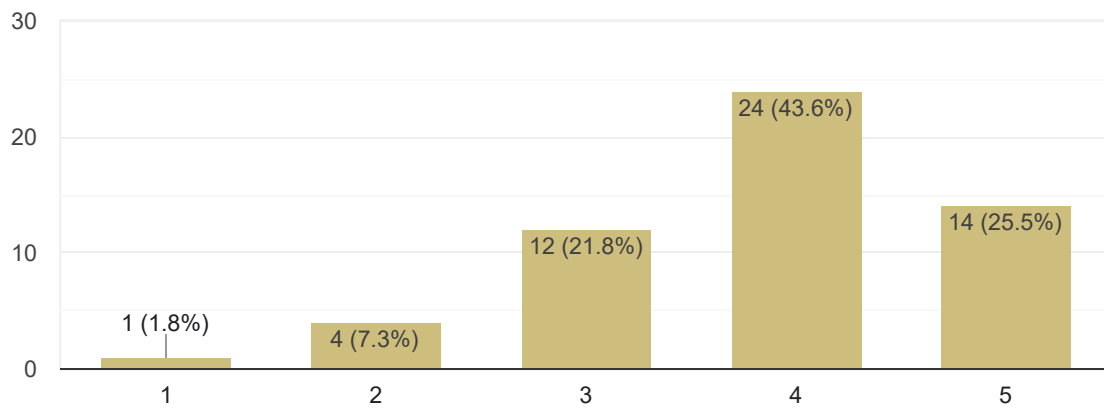
Home Health

56 responses



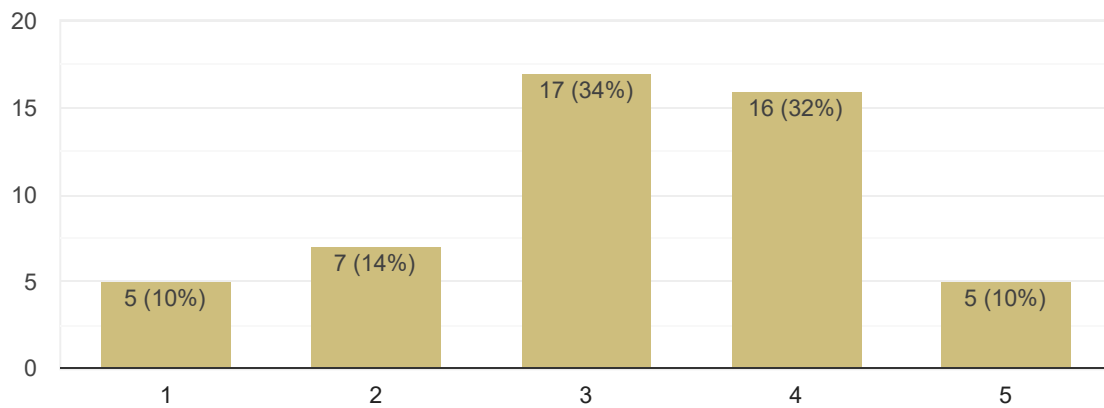
Hospice/Palliative

55 responses



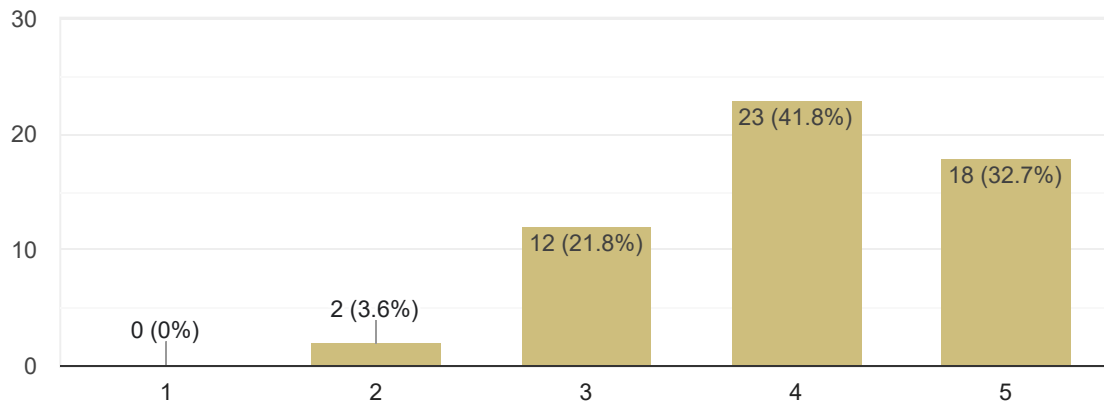
Telehealth

50 responses



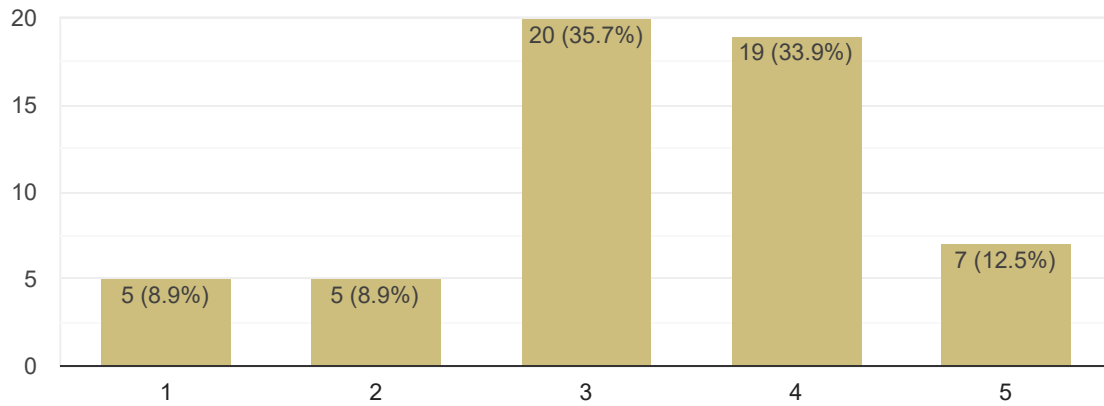
Inpatient Hospital Services

55 responses



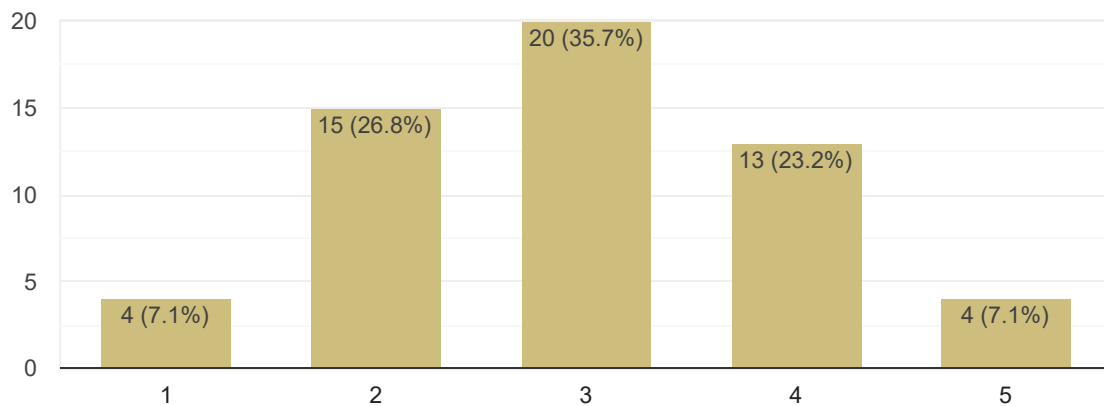
Mental Health Services

56 responses



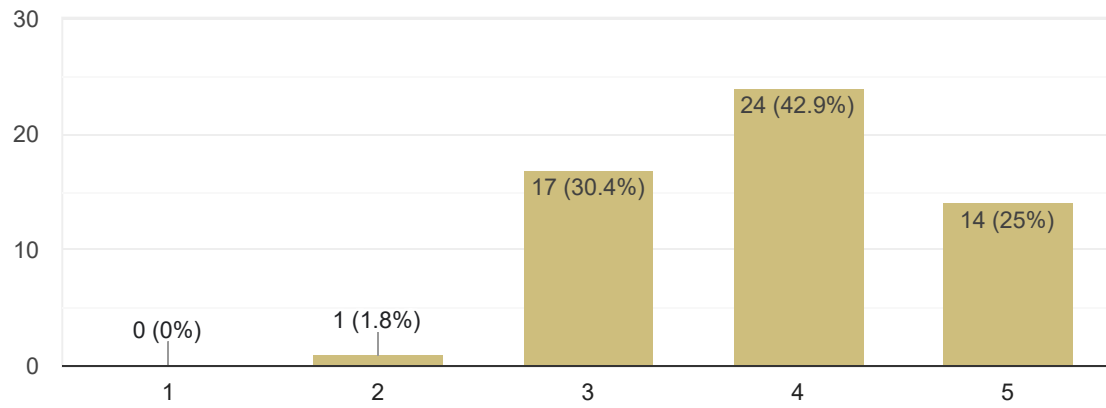
Nursing Home/Senior Living

56 responses



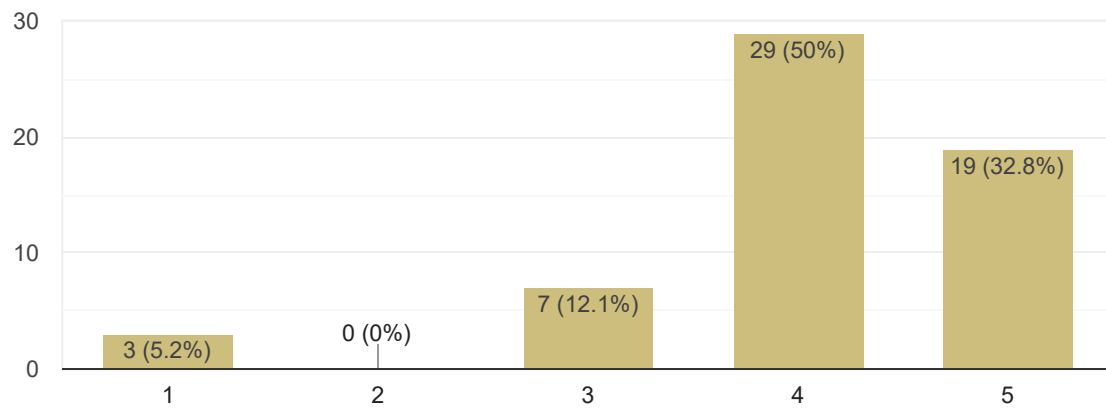
Outpatient

56 responses



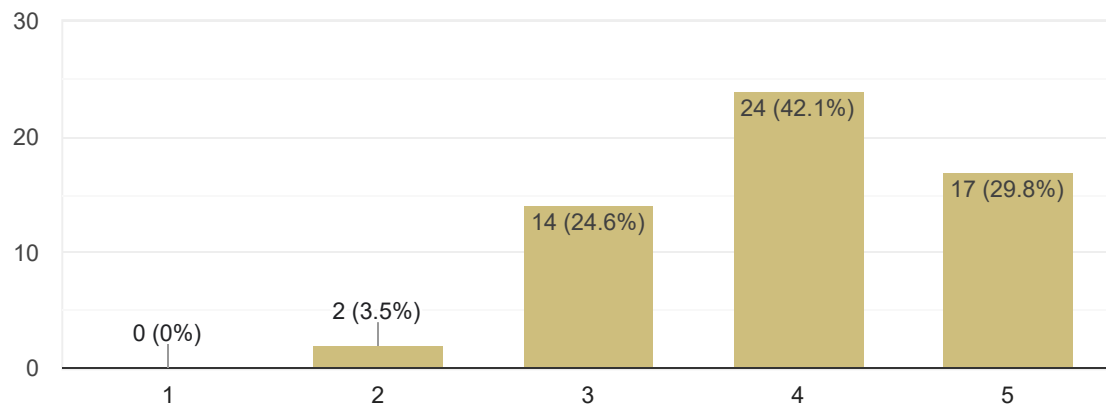
Pharmacy

58 responses



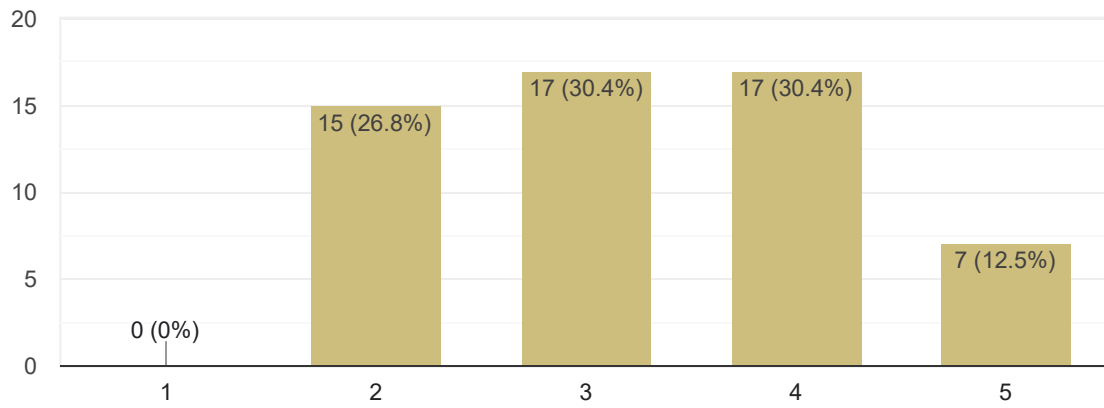
Primary Care

57 responses



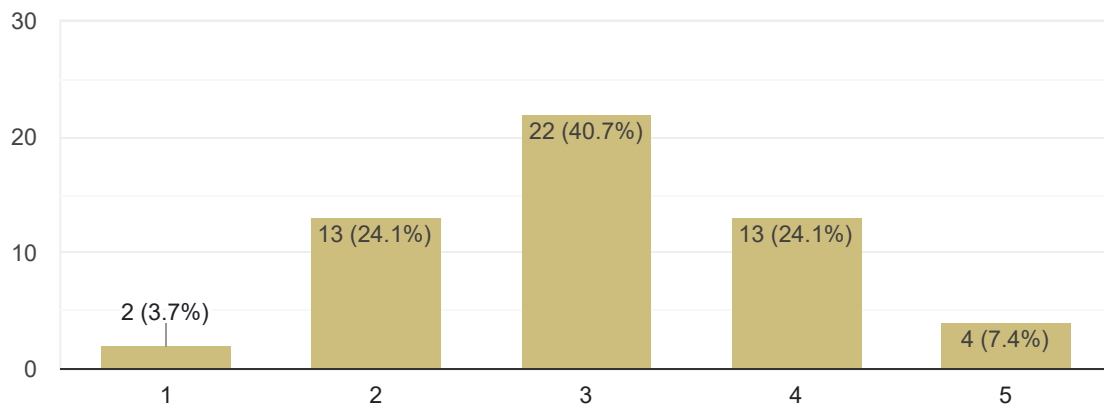
Public Health

56 responses



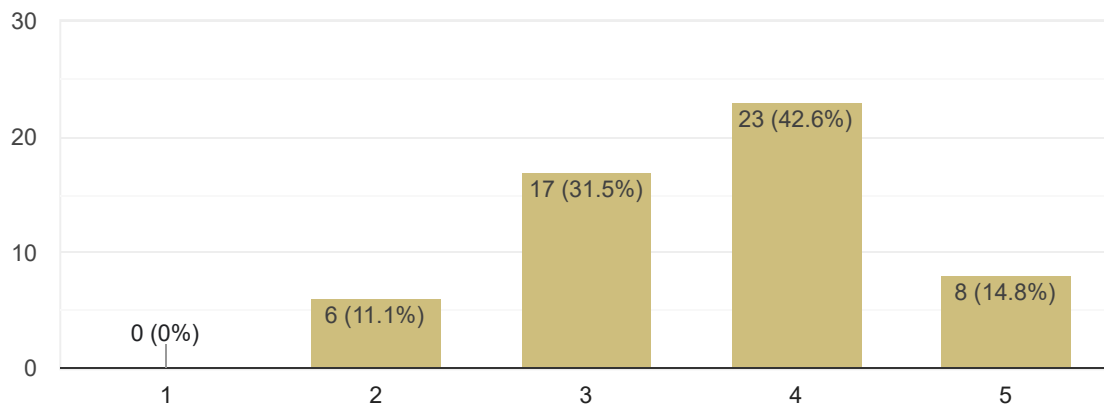
School Health

54 responses



Visiting Specialists

54 responses



In your own words, what is the general perception of healthcare delivery for our community (i.e.: Hospitals, doctors, public health, etc.). Be specific.

35 responses

Good

We have a great hospital with good providers.

Many residents leave our community to seek healthcare elsewhere.

Great for routine and chronic care. Emergency care is sufficient as long as transfer to a bigger hospital is done in needed cases. Public health could definitely be expanded with more awareness of services offered. Hopefully recruitment for family physicians is successful in the near future. More specialty providers willing to come to town would be great.

Going to be in trouble if we don't get new doctors

We are out in the sticks so we do the best we can with what we have but I'm afraid it will eventually kill somebody because they will have to be life flighted out to get care. Also it would be nice if you took Tricare.

Not a great overall understanding of services available.

We have good healthcare providers but we could use more

Not bad, but could be better

We need doctors, not just PA's.

We have a very dedicated staff and providers. I have always had great care in Osborne

Providers within our community

General perception is we have average healthcare in the community. There is a need to travel distance for specialty care.

Very good

It isn't perceived very well to some of the public and they go elsewhere. My heart is always with the town's system. The young PA's need to step up to the challenge. But we are lucky to have a hospital and I have always received the best of care!!

Hospital with lots of potential. Need to continue recruiting efforts for more providers, especially general medical care.

The doctors could be better about listening to the patients and their needs.



For small town we have great health care.

Great services and providers available overall.

The overall health care for this community is complicated as we will always have rough days and good days. Community wise we have great doctors and PAs and offer a great range of very good services. Our Dentist has horrible bedside manner and will never see me at their door step. The Eye Dr is absolutely great and recommend them to anyone. We have a wonderful Chiropractic team in town. In the hospital itself we have a great Physical Therapy Doctor, Dr Geist. I highly recommend him for anything and everything. He also has an excellent team of PTAs. Our Specialty clinic does bring in some good business with excellent results. Ambulance has good on their team and some that are not so good, but this requires a team of people that is a special breed of person to do that job and I commend them all for doing it. School health is outdated and needs reevaluated, and mental health is an ongoing problem in every facet of our community. Reception is a big deal in trying to get people to even come in the door and the hospital has greatly improved that way with room to continue growing. Nursing home has been taken over by a cooperation and I believe that it has gone downhill since. The town Pharmacy is not a place I would ever recommend, I do my business out of town.

I believe we have a solid foundation for healthcare in our community but there are areas where improvement is needed.

Overall I think as a community we are very happy with our Healthcare needs

The Osborne community is fortunate to have the healthcare that we have.

Doctors are low in numbers for our community and we definitely don't have enough staff to cover the amount of patients and be able to provide good healthcare

Small community, little choices on providers. We are an old people community, so public health is low.

Would be nice to have more specialists come to our community so individuals do not have to travel so much for appointments. Do think there is a lack of a community workout center or indoor walking space for individuals to utilize, especially during winter months that is affordable. Would be nice to have orthodontic availabilities in town.

Great with very little room to improve much

Small town health care - covers the basics

Hospital

Terrible only have one real full time dr . Hospital is a joke it's just a bad aide station. Response from doctors is terrible, it takes forever to get results of tests. And you usually have to go to another town or city to have test done.

Need to showcase the doctors NP and PA's. Have them come to schools with a get to know you Sr Center. AtBall games OCMH needs a plug about the hospital. Put fliers on cars at



football and basketball games about OCMH!! Have the newspaper do a monthly article about who the ER providers are and rural health clinic providers are. Lab people radiology etc.

Need more primary care

Need for OBGYN

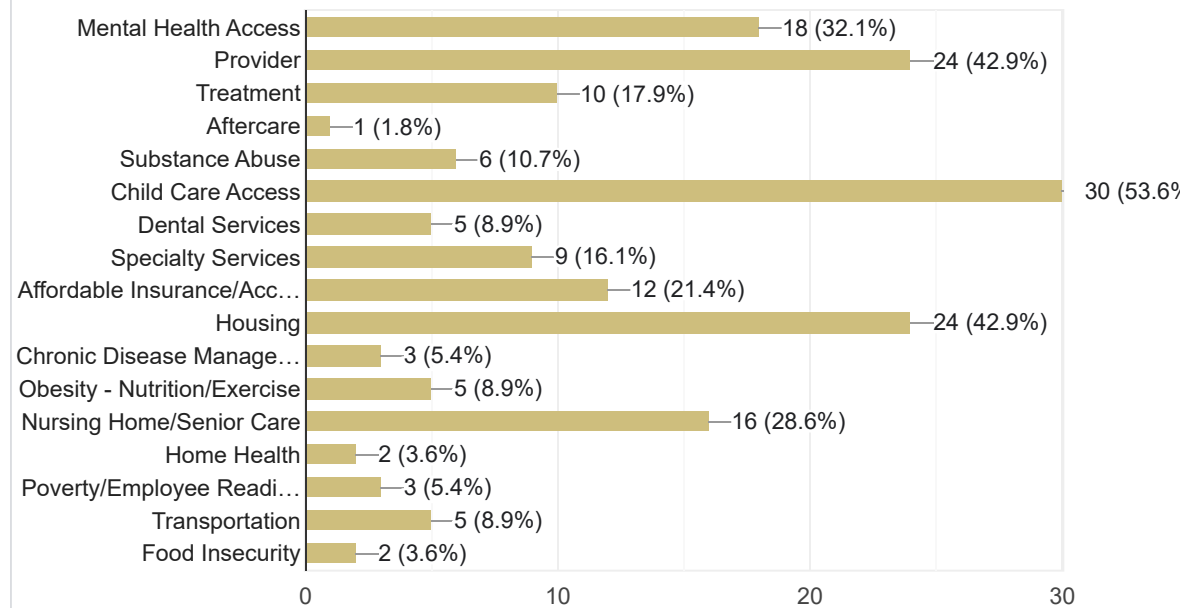
If the medical need is very advanced, we have to go elsewhere to get care.

Please consider the ongoing and current health priorities in your community.
Choose three ongoing priorities and three pressing concerns for action.



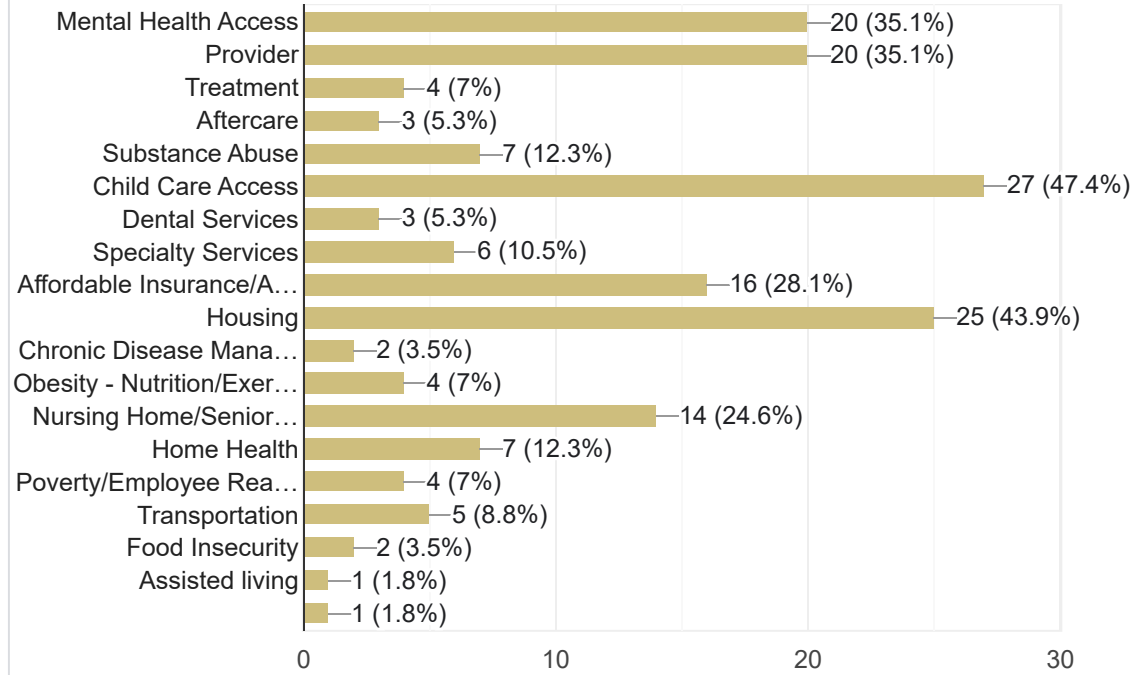
Mark TOP 3 ONGOING priorities

56 responses



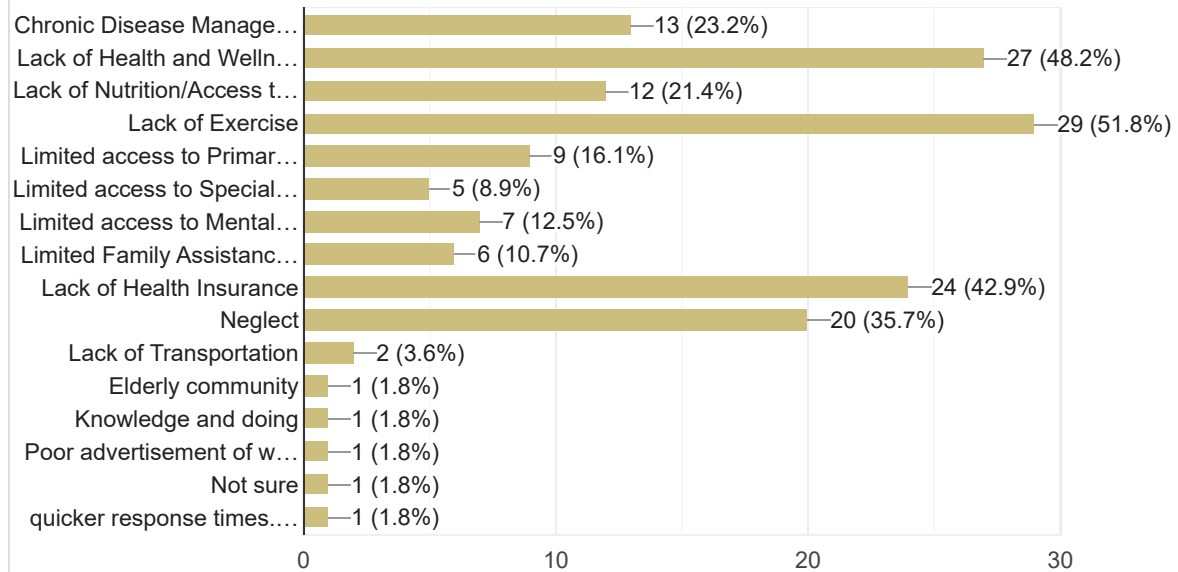
Mark TOP 3 CURRENT MOST PRESSING priorities

57 responses



What do you feel are the root causes of poor health in our community? Mark the top 3.

56 responses

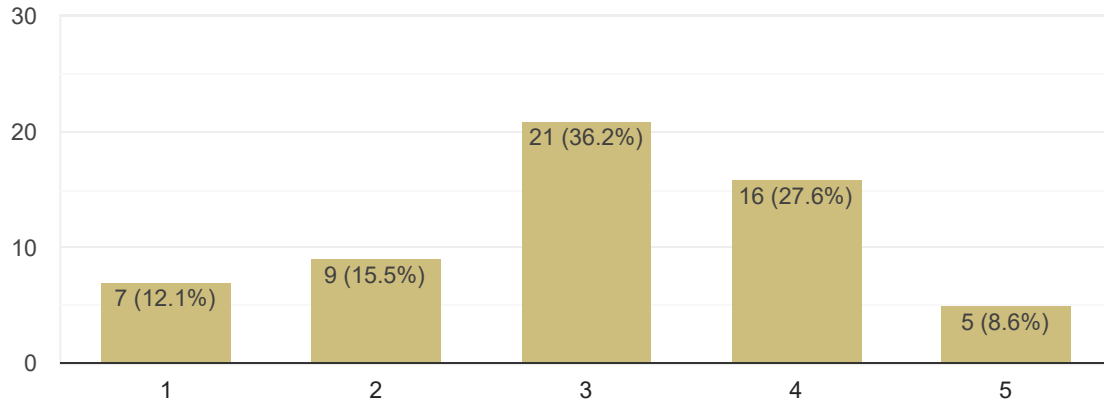


Please rate your community's readiness to respond to the following health needs.



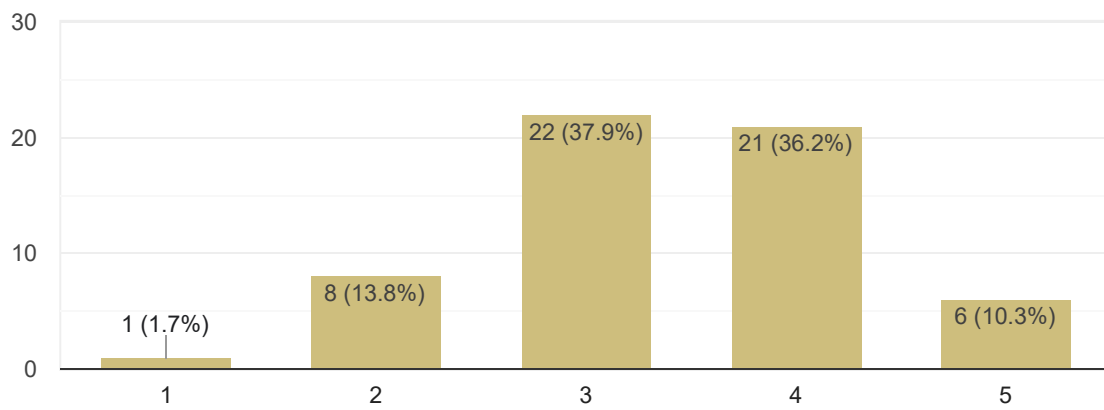
Behavior/Mental Health

58 responses



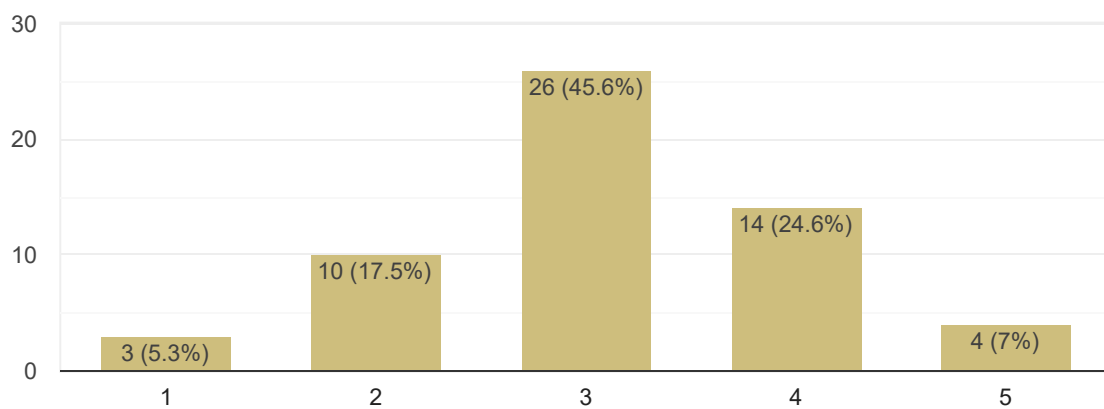
Emergency Preparedness

58 responses



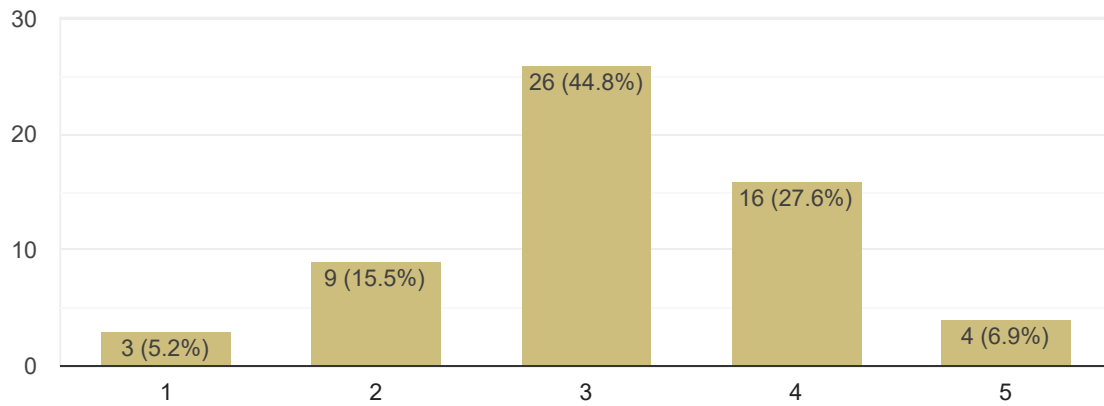
Food Nutrition Services/Education

57 responses



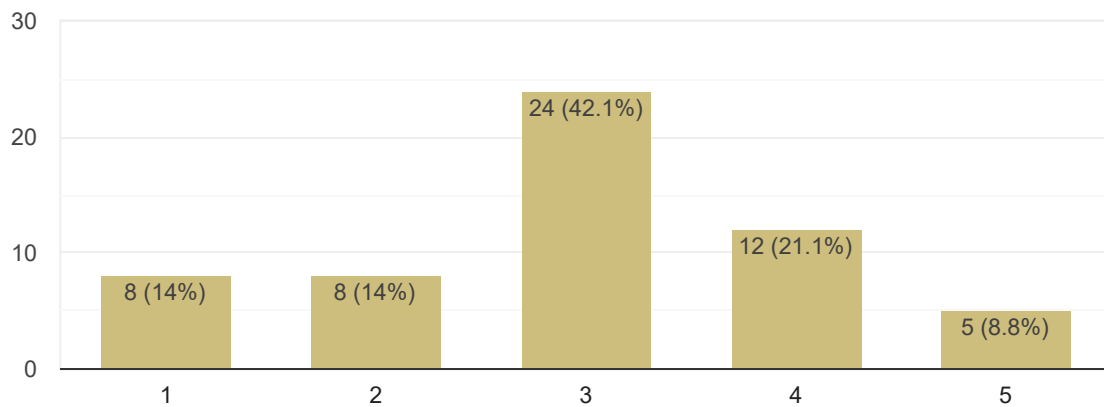
Health and Wellness Screening/Education

58 responses



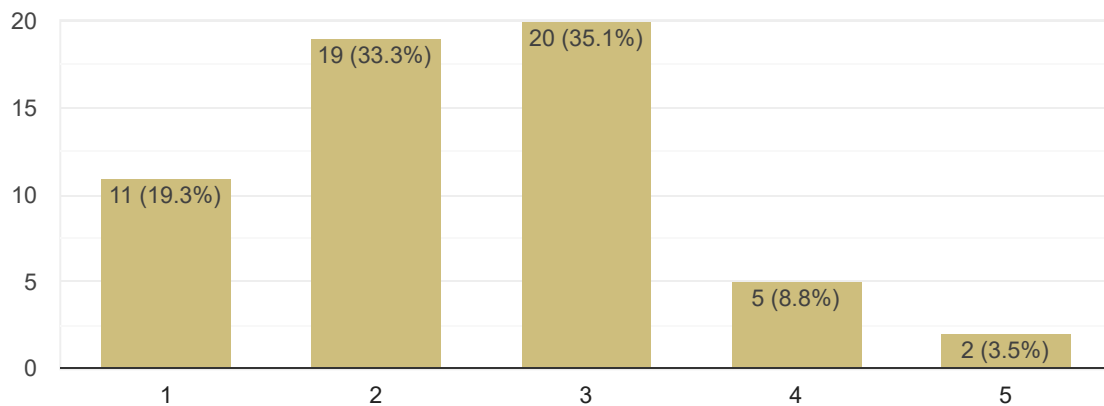
Prenatal/Child Health Programs

57 responses



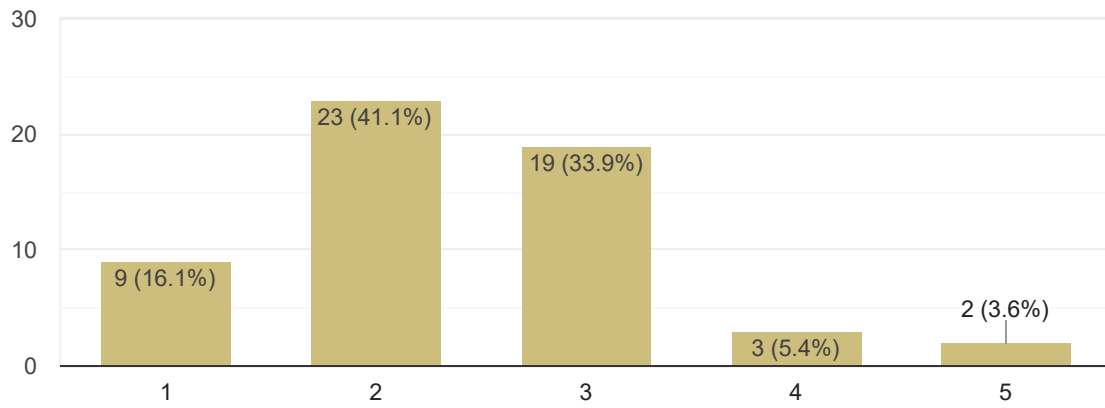
Substance Abuse/Prevention

57 responses



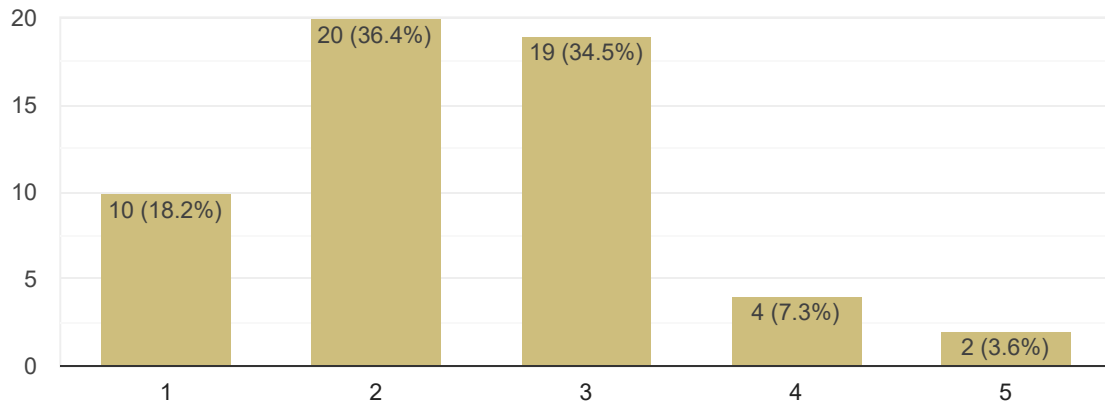
Suicide Prevention

56 responses



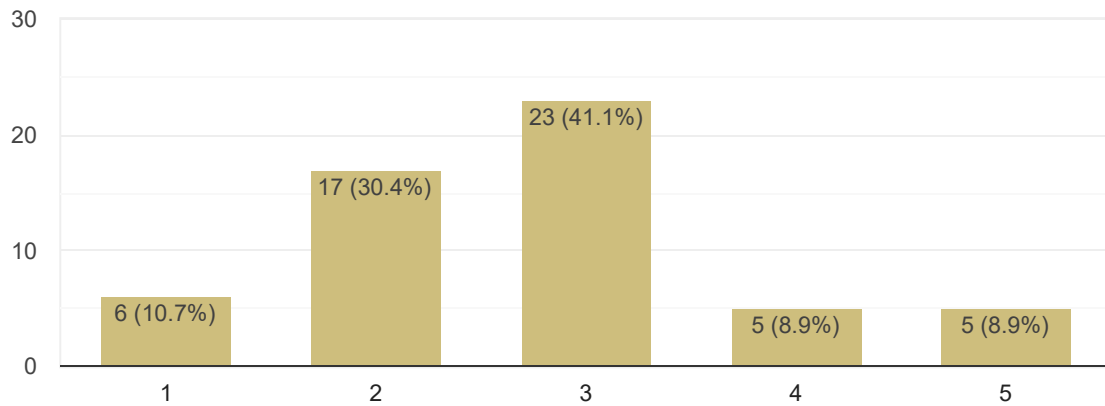
Violence/Abuse Prevention

55 responses



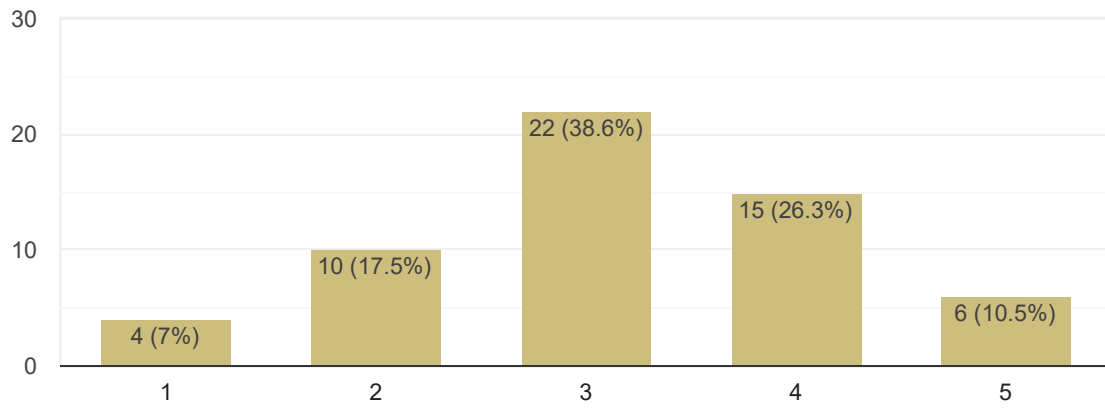
Women's Wellness Programs

56 responses



Exercise Facility/Walking Trails/etc.

57 responses



Social Determinants are impacting healthcare delivery. These determinants include:

- 1) Education Access and Quality,
- 2) Economic Stability,
- 3) Social/Community Support,
- 4) Neighborhood/Environment, and
- 5) Access to Quality Health Services.

Because this is a strong topic of interest, do you have any thoughts, ideas, and/or specific suggestions (food, housing, transportation, support, etc.) to address these five social determinants to improve our community health? Please be specific.

18 responses

Money and access are an issue. People may want to eat healthier but healthy food is more expensive.

We need more doctors and providers. Our healthcare facilities are being underutilized.

Housing is still the number one issue. No housing available for new employees of businesses that want to relocate to Osborne or for young families/individuals wanting to return to Osborne to raise a family.

Don't give people their Welfare checks unless they attend education classes.

Housing overall is a topic. Additionally the community could use Independent Living Apartments for elderly and also assisted living would be great. If we had these 2 options for the elderly - they could choose a safer place to live and then also free up housing for incoming residents.

Too many lazy people living off the system

No comment

People need to work. Jobs are available but too many expect handouts. Performing your job well gives a person self confidence, contributes to the community and is a way to insure economic stability.

Health care and medication are too expensive in rural Kansas. People forego the doctor, dentist and eye doctor because these costs are too high. When it comes to food or health care people will always choose food.

No

None

Not really...most of the community doesn't get out and stays at home. They don't participate in community events and you don't even see the families. Seems our town has plenty of



assistance for those that do nothing!!

Get new ideas of community support at the board levels, City, school and any other board that leads this community to support the town and schools. We are stagnated in the old ways and very poor management of our city to lead to a community togetherness and support the topics listed above.

Our school districts lack adequate space for our children to learn in,
We do have a high population of low socioeconomic individuals- some lacking health insurance
Increasing availability of child care so individuals are able to work

Affordable housing

Economics can be solved by those who can work need to work. It is a known fact drugs in community and law enforcement and county attorney. Don't arrest anyone.

Lack of specialized care locally makes it difficult for working people to seek the healthcare they need while still holding down a job. For example, cancer patients have to travel 1+ hour away in order to receive treatments when their bodies are physically worn down already. Often times, having to find someone to drive them. This could be lost time at work for the patient and the patient's support group.

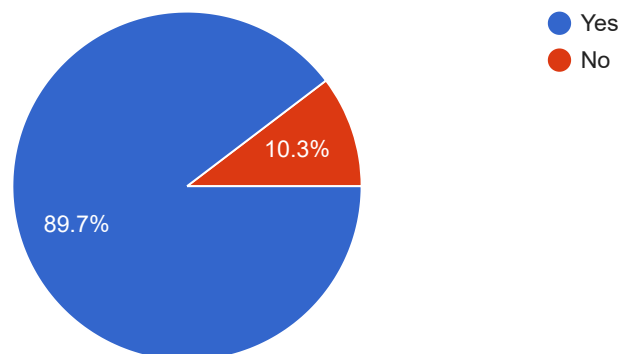
Good teachers in schools. High food cost because of Biden. Great social/community support. Too much trash and dead deers in the river 50 at a time bad on fish at game. Good access to quality health services. need more low income housing in downs. these deer need to go to the land fill. a lot of counties do that the fish and game told me. it's ban on the environment. need much better ambulance services and IGMT and medic to much better outcome. i've told the county how to do it without raising taxes. they come out of colleges from out east. they work for low pay for 2 years then trade out for a new crew. it's going on right now and it could have been done before this ambulance company currently used.

Please respond to questions about healthcare services received by you or your family members.

 Copy

In the past 2 years, have you or someone in your household received healthcare services from Osborne County Memorial Hospital?

58 responses



If yes, explain what services.

47 responses

We go to the clinic frequently.

Family care at clinic

Routine care as well as ER and inpatient services.

Lab, xrays, clinic visits

Mostly wellness exams. Sleep study testing and routine doctor visits.

ER & inpatient care

COVID care and PT

PT

Er, physicals

Took kid to er, husband cut finger and got stitches in clinic and regular appts

Clinic, ER, Hospital

theraphy and health care.

Colonoscopy, MRI on both knees, Mammogram

Physician appointments, lab, X-ray

Clinic,lab xray,er

MRI, Physical Therapy

PT-Clinic visits-Lab visits-radiology visits

Clinic and ER

X-rays, er visit, clinic

Primary care and specialist

Family Practice

Lab and XRay, specialty clinic



General clinic visits

Emergency room

ER services, rural health clinic

colonoscopy

Specialty clinic and PA visits

ER/clinic/outpatient

Labs, primary care, xray

Outpatient

ER care

Diabetic and High blood Pressure care

ER services and inpatient services

Mammo, labs. office visits

Emergency and acute stay.

radiology, lab, primary care

Physical Training

Colonoscopy- check ups-mammo

Specialist

ER visited

Radiology lab PT

Doctor visit, PT and lab

Clinic, lab, X-ray, outpt, specialty clinics, Er.

ER and Lab work

Inpatient

Physicals, treatments for minor infections/sickness

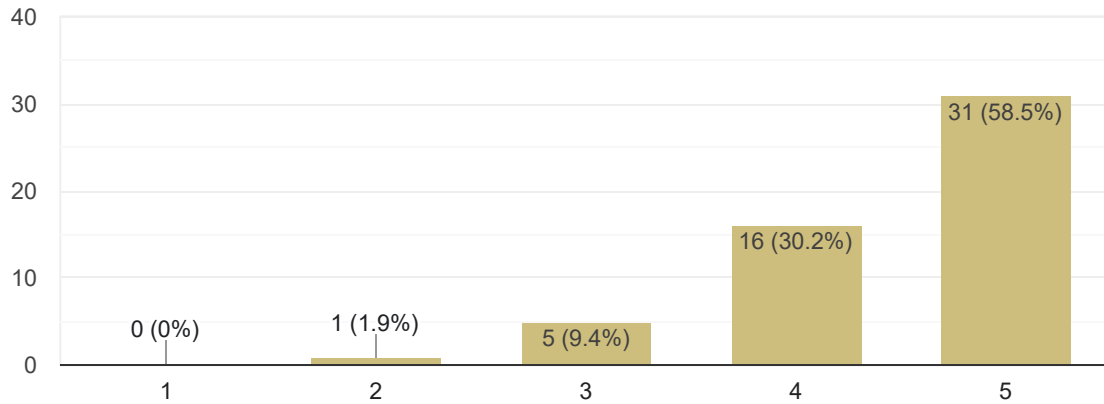


very satisfied the hospital has come along way with administrator and staff. just nee to cut toe nails like tim seivers did. i have to have my son do it and risk infection. that is the only thing the hospital needs. please have someone do it at the hospital.

 Copy

If yes, please tell us how satisfied you were with the services received from the Osborne County Memorial Hospital.

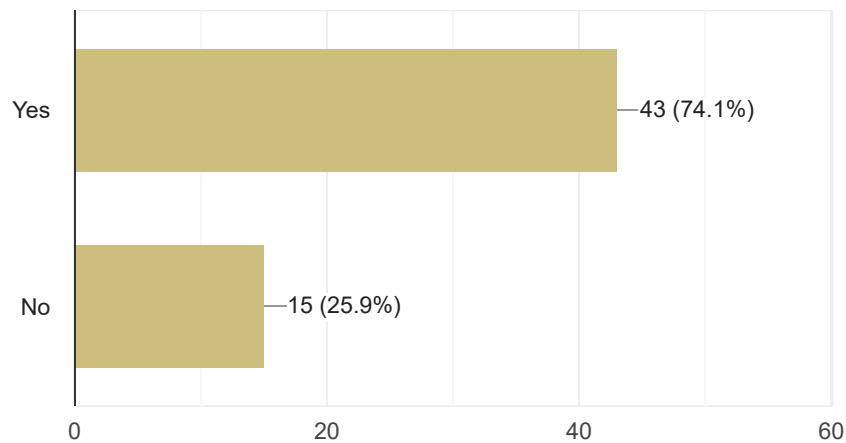
53 responses



 Copy

In the past 2 years, did you or someone in your household receive healthcare services OUTSIDE of your county?

58 responses



If yes to the above question, where and what services?

38 responses

Family care in Beloit and Smith Center

Inpatient and surgical services in Nebraska

Smith County Hospital/ primary care/labs/xrays/vet services

Hematology

Everything else because you do not take my insurance. Primary Dr all specialists

Beloit, Smith Center, Salina

Er, speciality doctor

Endocrinology

Beloit Clinic

Kearney Ne. Knee replacement.

Manhattan,KS Dr. McAtee,

Dentist in Beloit, oncologist in Salina, dermatologist in Hays

Hutchinson. Specialist

Cancer and heart surgery follow up.

Salina, pregnancy and delivery. Beloit, childcare checkups

Cardiologist Hays-dermatologist-Hays-Pulmonologist-Hays-Clinic services

Salina

Dental-Beloit and Salina; Speciality-Kearney and Salina

Specialist was recommended for rheumatologist & orthopedic dr in Salina and Russell

Orthopedic

Kidney stones removed in Salina Regional Hospital

My primary care provider is not in Osborne county



Mitchell co and wellness check and dental

rural health clinic in Smith Center, dermatology in Smith Center

Smith County Memorial Hospital, dehydration

Biopsy in Salina

Salina for clinic appt.

Debakey Heart (Hays) and Good Samaritan Hospital (Kearney, NE)

OB Smith County

primary care

Dr appoint issue

Test done

Heart Dr

Specialty doctors

Eye surgery in Salina and specialty doctor in Salina KS

Wichita gastro

Amwell, Smith County Hospital, Beloit Medical - Surgeries, wellness check-up, urgent care

pain specialist Dr. Zillinger is very good. she is from kearney NE but come sot Smith Center. and I am having other people go see her from Downs. 1-308-928-3001. Allergy Dr. Stanley out of Hays is great 1-785-301-2250



Access to care is vital, are there enough providers/staff available at the right time to care for you and your community?

48 responses

No

Yes

yes

No. We need a variety of qualified doctors.

Not enough full time physician coverage. Both physicians work part time.

I wouldn't know I can not use this hospital for primary care.

no

I believe in an emergency situation , yes but overall general health and some chronic conditions, no.

Dr brown and Katie cross land are awesome just wish there was a few more providers hard to get in to them

Not really because people don't want to work.

Kinda

I feel like we need another doctor-so no

No wait to get into clinic is lengthy

Usually

Not

Really as they all have to have their days off

No.

Yes but we need a primary care physician (MD/DO) who can cover full-time

No I think we need another Doctor

NO

Not always



Believe so

Need a MD. Dr Brown I am sure would like to retire. We need 2 doctors.

Yes

Sometimes cannot get appt with primary care physician for several weeks

Not sure

Yes. Also my hear Dr. Boxburger is very good too along with Dr. Choate

Please provide additional thoughts regarding community health.



What “new” community health programs should be created to meet current community health needs?

26 responses

Healthy fruit and vegetables like a community garden

I think the focus needs to be on recruiting qualified providers that will live in and serve our community.

Nothing new other than making sure current services are stable.

Veteran's primary care and filing of claims etc. Prenatal and baby delivery

Better access to mental health help.

Need more AA/NA and community based supports for recovery

Morning/ weekend walk in clinic

Some sort of community health fair for the public to understand all the services available by in all aspects of health (i.e.: Eye, dental, mental health, health dept. hospital) and then a way to provide that information in an ongoing format to new residents and people in crisis.

Idk

Mental health awareness and suicide awareness. Cancer is out of control here and doctors in Kansas City are seeing it too! Why?

Exercise

Education

More specialized care.

Chronic disease risk reduction education

None

Just a real desire to serve!!

More providers that actually care about the patients

Always a need for mental health

Behavior health and Teenage mental health educational programs



A childcare center, more exercise facilities/walking trails

wellness center

Free exercise places

We need to do something to fund a way to get good doctors and keep them

StatCare

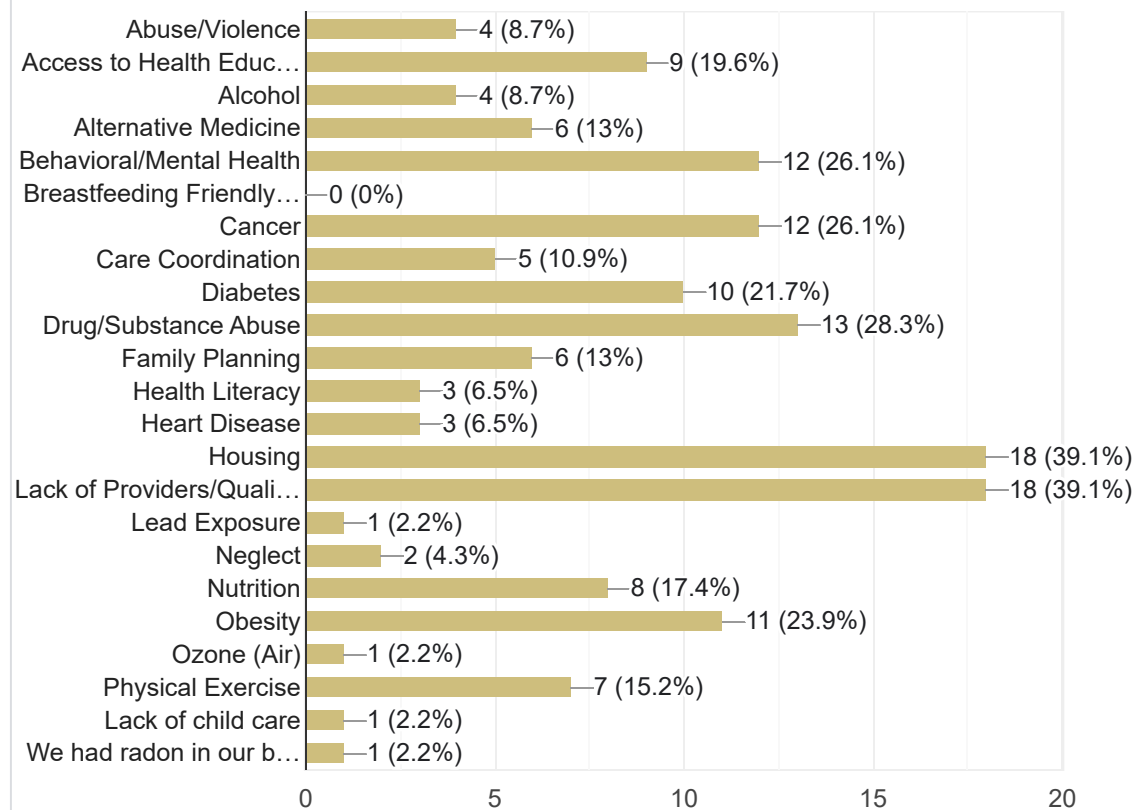
More mental health

Cancer treatment options more locally



Are there any other health needs (listed below) that need to be discussed further at our upcoming CHNA Town Hall meeting? Select all that apply.

46 responses



This content is neither created nor endorsed by Google. [Report Abuse](#) - [Terms of Service](#) - [Privacy Policy](#)

Google Forms







Our Specialty is You

COMMUNITY HEALTH NEEDS

ASSESSMENT

2024 Survey Review and Feedback

Today's Agenda

What We'll Cover

01.

What is a CHNA?

03.

2024 County Health
Rankings

05.

Your Input

02.

Review 2021 Data

04.

2024 Survey &
Feedback

06.

Wrap Up



What is a CHNA?

Introduction

A Community Health Needs Assessment (CHNA) is the process that non-profit hospitals use to identify areas of need and make plans to address community health needs. OCMH conducts an assessment every three years in compliance with IRS requirements. After gathering feedback from the public, administration will review the results and develop and implementation plan to prioritize issues.

2021 Results

Areas of Strength



01

**School
Education/Options**

02

**Medical
Services/Options
(variety birth to death)**

03

Unified Community

04

Safe Environment

05

**Health Department
(communication and
collaboration)**

2021 Results

Areas of Strength



06

Provider Availability

07

Public Transportation

08

Hospital (high-ranking)

09

Health Professionals
(young)

10

Food Programs

2021 Results

Unmet Needs



01

Affordable Health Insurance

02

Child Care

03

Mental Health

04

Awareness of Health Services

2021 Results

Unmet Needs



05

Drug Abuse

06

Suicide

07

Exercise/Fitness
Options

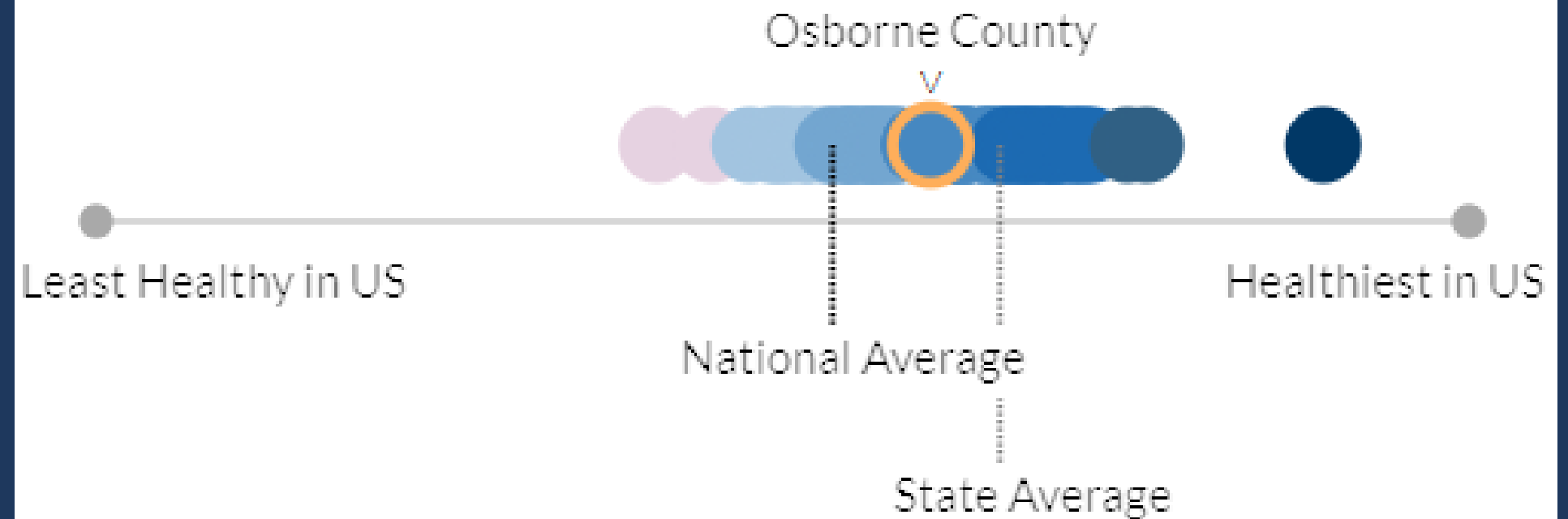
08

Food Insecurity

2024 Health Rankings

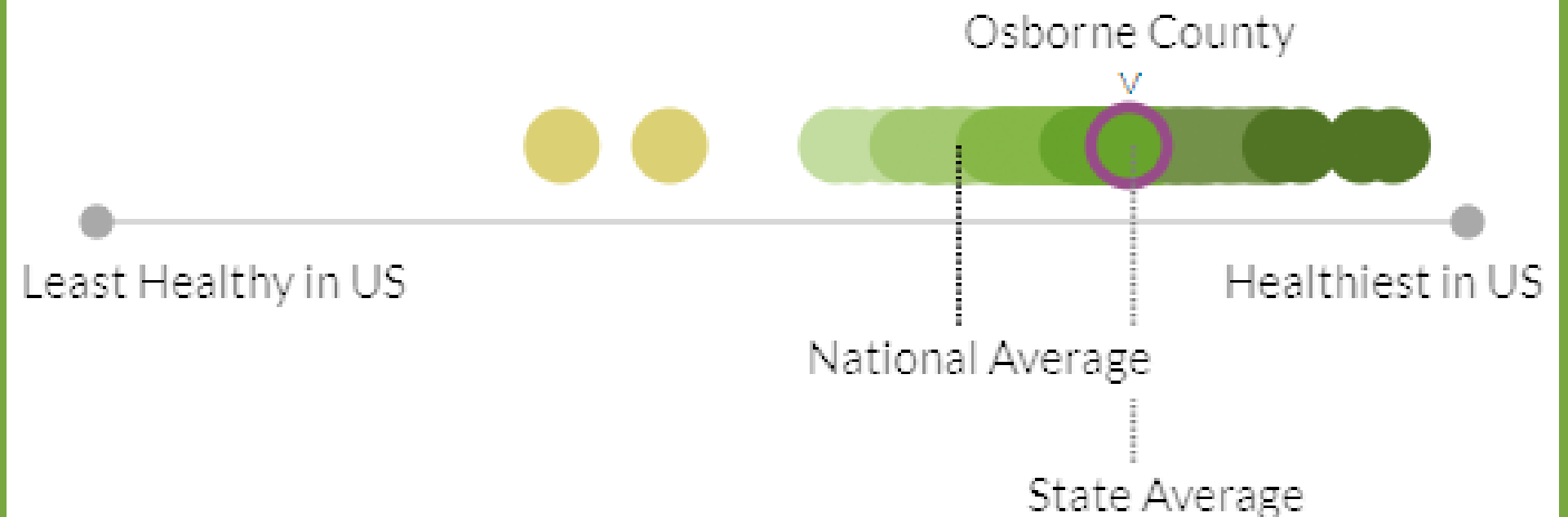
Health Factors

Osborne County ranks as healthier than the national average but less healthy than the state average for Kansas.



Health Outcomes

Osborne County ranks about the same as the Kansas average and healthier than the national average.



2024 Health Rankings

Top 5 Drivers: Health Factors

Measure	County Value	State Value	Impact on Rankings
Unemployment	2.0%	3.7%	Green
Injury Deaths	143	80	Red
Social Associations	34.3	9.1	Green
High School Completion	95%	89%	Green
Some College	73%	68%	Green

Top 5 Drivers: Health Outcomes

Measure	County Value	State Value	Impact on Rankings
Low Birthweight	5%	8%	Green
Poor Mental Health Days	4.7	4.8	Green
Poor Physical Health Days	3.4	3.3	Green
Poor or Fair Health	15%	14%	Green
Premature Death	NR	7458	NR



2024 Survey

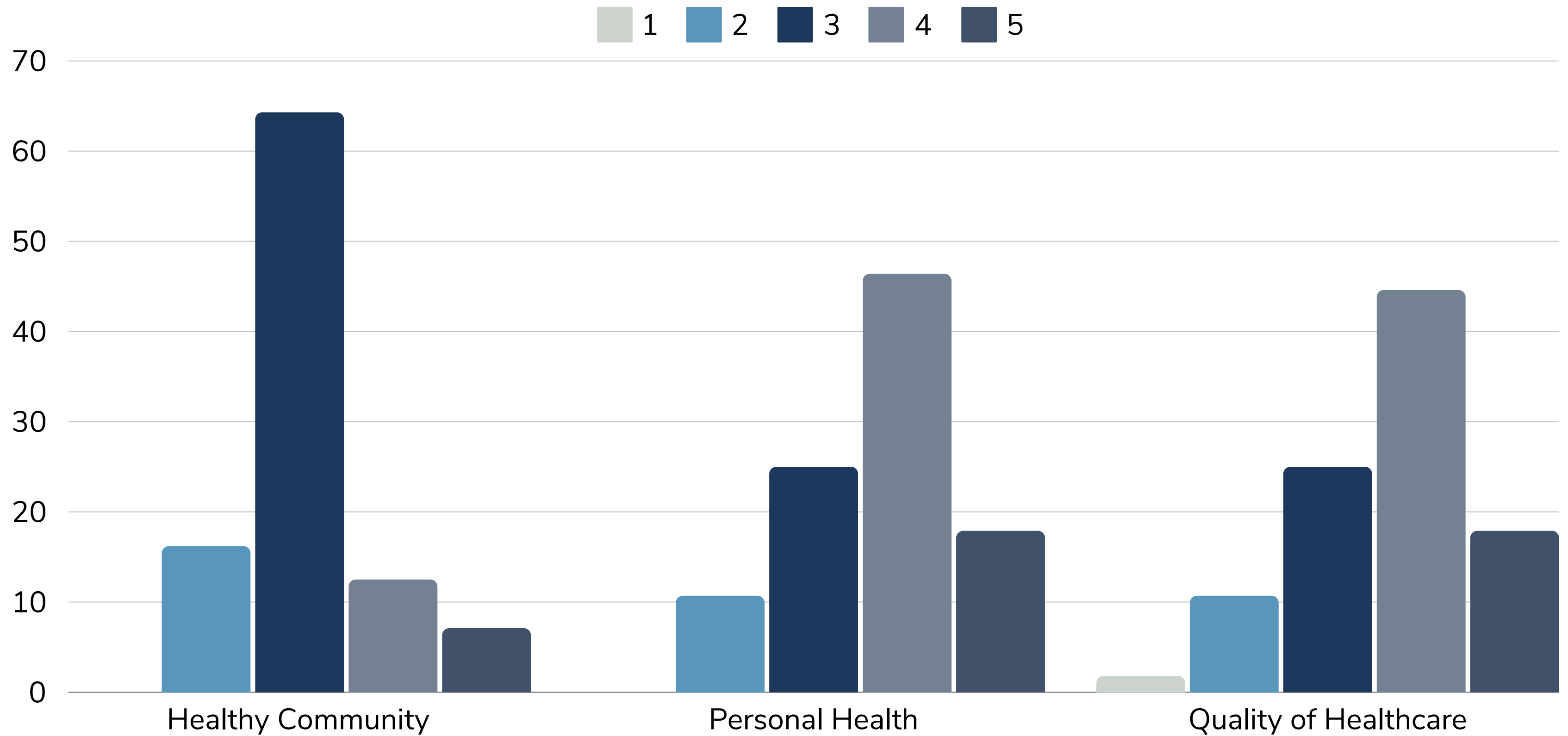
Gathering Data

In April, OCMH distributed surveys to the public for completion. Surveys were primarily completed online but some were done on paper and returned to the hospital. The survey included questions about personal health, health services, the respondent's opinion of health priorities and response readiness.



56
Survey Responses

2024 Results



2024 Feedback

Root Causes of Poor Health



01

Lack of Exercise

02

Lack of Health & Wellness

03

Lack of Health Insurance

04

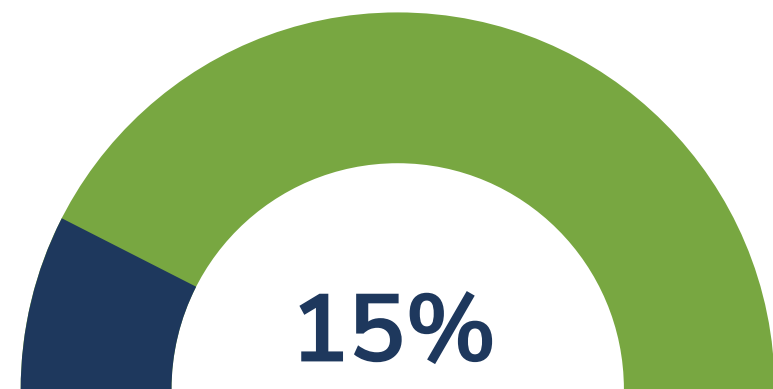
Neglect

05

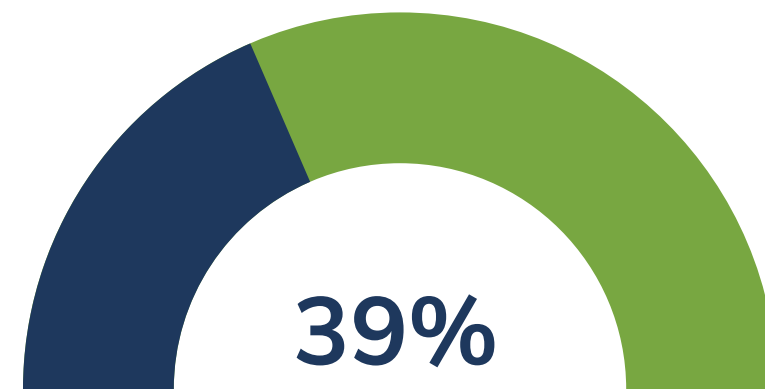
**Chronic Disease Management
Lack of Nutrition/Access to
Healthy Foods**

Correlation to 2024 Health Rankings

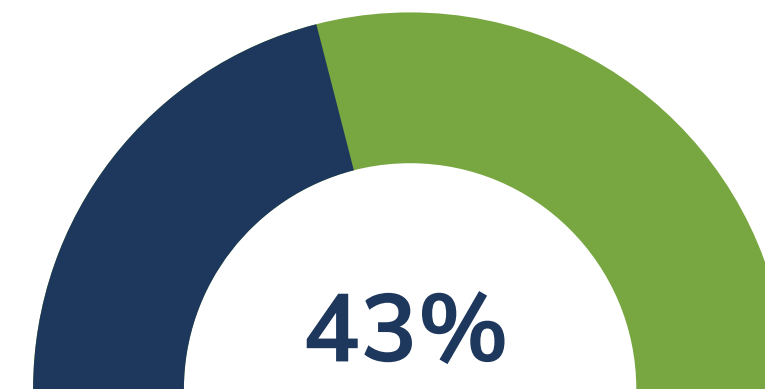
Osborne County



% Reporting poor/fair health

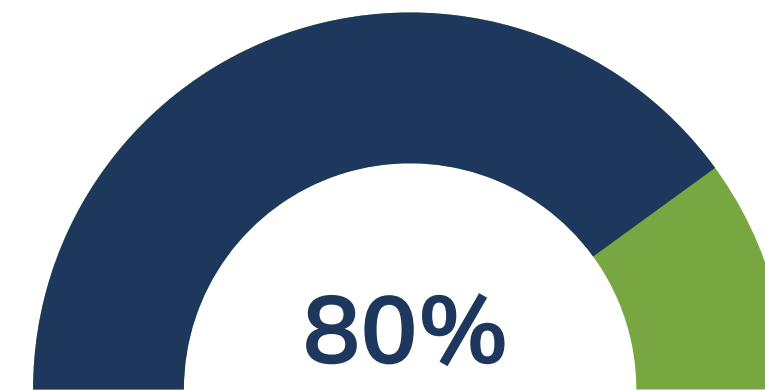
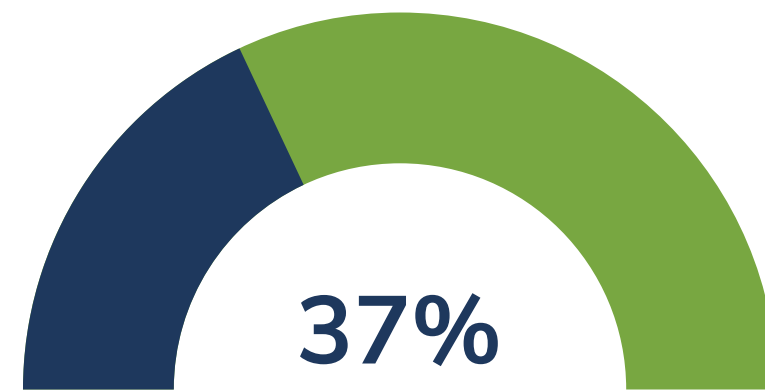
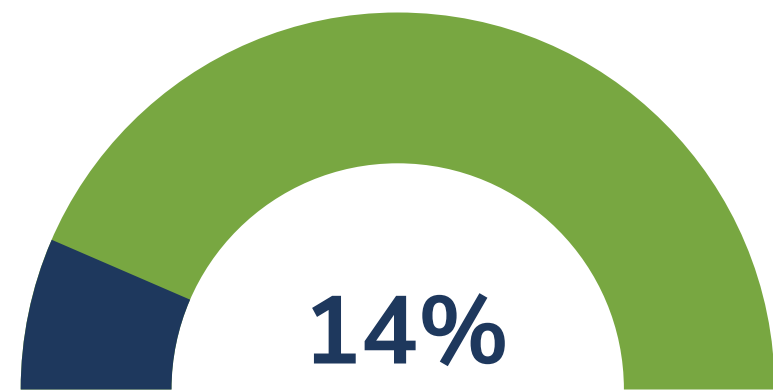


% Obese adults (age 20+)



% Access to exercise opportunities

Kansas



2024 Feedback

Top Ongoing Priorities



01

Child Care Access

02

Housing (tie)
Provider (tie)

04

Mental Health Access

05

Nursing Home/Senior
Care

2024 Feedback

Top Current Most Pressing Priorities



01

Child Care Access

02

Housing

03

Provider

04

Mental Health Access

05

Affordable
Insurance/Access to
Medicaid



Value

As a trusted community member, your opinion matters! We want to hear from you so we can provide solutions that make sense for our service area.

Your Input



Your Perspective

Does the feedback we have received match your opinion? What is different? What other areas of opportunity should we consider?



Future Targets

As we compile the results to build an implementation plan what are the most important unmet needs? What other community groups should we connect with? Is this our expertise or should we let another organization take the lead?

Get Connected With Us

Contact Information



785.345.5563



osbornecountymemorialhospital



adoane@ocmh.net



ocmh.org



237 W Harrison St
Osborne, KS 67473





THANKS

We Appreciate Your Time

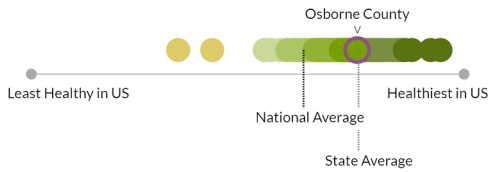
Osborne County



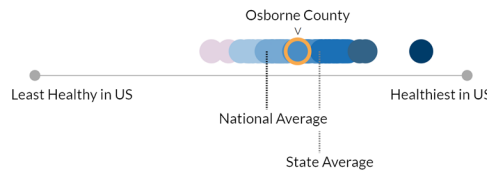
KANSAS HEALTH INSTITUTE

Informing Policy. Improving Health.

Health Outcomes



Health Factors



County Health Rankings & Roadmaps

khi.org
countyhealthrankings.org

Health Outcomes and Health Factors summaries replace the numerical ranking provided in previous years.

Each Kansas county with sufficient data is represented by a dot, placed on a continuum from least healthy to healthiest in the nation.

The color of each dot represents data-informed groupings of counties nationwide with similar Health Outcomes or Health Factors on the continuum.

Population: 3,490

	2020	2021	2022	2023	2024	Kansas 2024	U.S. 2024
Health Outcomes							
Length of life							
Premature death (years of potential life lost, per 100,000) ⁽¹⁾						8079	7972
Quality of life							
% Reporting poor or fair health, adults ⁽¹⁾		16	17	13	15	14	14
Average number of poor physical health days, adults ⁽¹⁾		4	4	3	3.4	3.2	3.3
Average number of poor mental health days, adults ⁽¹⁾		4	4	4	4.7	5.0	4.8
% Low birthweight, <2,500 grams	6.8	6	4.5	4.5	5	7	8
Health Factors							
Health Behaviors							
% Smokers, adults ⁽¹⁾		20	19	20	19	16	15
% Obese, adults age 20 and older ⁽¹⁾			36	37	39	37	34
Food environment index, 0 (worst) to 10 (best)	7.3	7.4	7.5	7.8	7.9	7.1	7.7
% Physically inactive, adults age 20 and older ⁽¹⁾			31	25	26	23	23
% Access to exercise opportunities ⁽¹⁾				42	43	80	84
% Excessive drinking, adults ⁽¹⁾		20	19	20	16	20	18
% Driving deaths with alcohol-involvement	20	33	29	29	33	20	26
Sexually transmitted infection rate, per 100,000 population	194	166	234			506.1	495.5
Teen birth rate, per 1,000 females age 15-19 ⁽¹⁾						19	17
Clinical Care							
% Uninsured, population under age 65	12	13	13	12	11	11	10
Primary care physicians rate, per 100,000 population	55	58	58	29	29	78	75
Dentists rate, per 100,000 population	58	58	58	57	57	63	74
Mental health providers rate, per 100,000 population	86	88	116	114	115	237	314
Preventable hospital stays rate, per 100,000 Medicare enrollees	6383	4989	5414	4214	3133	2576	2681
% Mammography screening, Medicare females age 65-74	44	41	41	35	40	48	43
% Flu vaccinations, Medicare enrollees	45	44	31	34	32	47	46
Social & Economic Factors							
% High school completion, adults age 25 and older ⁽²⁾		94	95	94	95	92	89
% With some college, adults age 25-44	66	73	74	69	73	71	68
% Unemployed, population age 16 and older	2.6	2	2.9	1.8	2.0	2.7	3.7
% Children in poverty	19	22	15	17	18	14	16
Income inequality ratio, 80th to 20th percentile	5	5.6	4.4	4.2	4.4	4.4	4.9
% Children in single-parent households	27	15	25	21	20	21	25
Membership associations rate, per 10,000 population	27.7	28.8	29.2	29.1	34.3	13.2	9.1
Injury death rate, per 100,000 population ⁽¹⁾					143	82	80
Physical Environment							
Average daily density of fine particulate matter ⁽³⁾	7.3	5.6	6.6	5.8	5.8	6.7	7.4
Drinking water violations?	No	Yes	Yes	Yes	Yes		
% Households with severe housing problems	10	10	9	6	6	12	17
% Driving alone to work	78	78	76	75	78	78	72
% Long commute - driving alone	14	14	13	15	15	22	36

Empty cells: Shaded cells indicate measures were omitted due to methodology change⁽¹⁾, new additions⁽²⁾, or are unavailable due to low reliability.

⁽³⁾Source data have not been updated since the 2023 County Health Rankings Release.

2024

Osborne County

The annual *County Health Rankings & Roadmaps* data release provides a snapshot of the health of each county in two summaries: **Health Factors** (which measure issues that can shape the health outcomes) and **Health Outcomes** (which measure length and quality of life). Each county is placed on a continuum from least healthy to healthiest in the nation and categorized into a group of counties with similar Health Outcomes or Health Factors. The following tables illustrate the “drivers” for health of this county.

What do these drivers mean?

The drivers indicate the measures with the greatest impact on the health of the county. Drivers labeled with a green plus sign are measures on which the county performed particularly well compared to all counties nationwide. Those labeled with a red minus sign are measures which could be improved and may warrant additional attention.

Health Factors: Drivers with the greatest impact on health, Osborne County, KS - 2024

	Measure	Description	Factor Category	County Value	U.S. Value	Direction of Impact
1	Unemployment	Percentage of population ages 16 and older unemployed but seeking work.	Social and Economic Environment	2.0%	3.7%	+
2	Injury Deaths	Number of deaths due to injury per 100,000 population.	Social and Economic Environment	143	80	-
3	Social Associations	Number of membership associations per 10,000 population.	Social and Economic Environment	34.3	9.1	+
4	High School Completion	Percentage of adults ages 25 and over with a high school diploma or equivalent.	Social and Economic Environment	95%	89%	+
5	Some College	Percentage of adults ages 25-44 with some post-secondary education.	Social and Economic Environment	73%	68%	+

Health Outcomes: Drivers with the greatest impact on health, Osborne County, KS - 2024

	Measure	Description	Factor Category	County Value	U.S. Value	Direction of Impact
1	Low Birthweight	Percentage of live births with low birthweight (< 2,500 grams).	Quality of Life	5%	8%	+
2	Poor Mental Health Days	Average number of mentally unhealthy days reported in past 30 days (age-adjusted).	Quality of Life	4.7	4.8	+
3	Poor Physical Health Days	Average number of physically unhealthy days reported in past 30 days (age-adjusted).	Quality of Life	3.4	3.3	+
4	Poor or Fair Health	Percentage of adults reporting fair or poor health (age-adjusted).	Quality of Life	15%	14%	+
5	Premature Death	Years of potential life lost before age 75 per 100,000 population (age-adjusted).	Length of Life	N/A	7972	N/A

N/A: Not applicable due to insufficient data.

+ Green Plus: Measure with a positive impact on a county’s health grouping.

- Red Minus: Measure with a negative impact on a county’s health grouping.

Technical Note: The U.S. values are provided as a point of reference. However, the drivers and direction of impact are determined by using the county value and the average across counties in the U.S. and then applying measure weights. Drivers are provided in order of impact on health for this year. Values have been rounded according to how they are presented on the County Health Rankings and Roadmaps website. For more information on the derivation of health groups, please visit: bit.ly/2024CHRzScores. For more information on data sources, year(s) of data and weights for measures, please visit bit.ly/2024CHRmeasures.



CONTINUE THE JOURNEY
**Explore resources and strategies
 to move with data to action.**



SCAN FOR MORE INFORMATION

TAKE ACTION TO IMPROVE HEALTH IN YOUR COMMUNITY

The Importance of the Health Care Sector to the Osborne County Economy

Countywide Report, October 2023

Prepared for the Kansas Hospital Association by
Institute for Policy & Social Research
University of Kansas

Patricia Oslund, Associate Researcher, IPSR
Thomas Becker, Assistant Researcher, IPSR
Dr. John Leatherman, Kansas State University, Retired
Dr. Donna K. Ginther, Director, IPSR



Table of Contents

Acknowledgments	iii
Executive Summary.....	1
Introduction.....	2
Overview of Osborne County	3
Contributions of the Health Care Sector to the Osborne County Economy	4
Definition of health care industries	4
Composition of the Osborne County economy.....	6
Individual health care industries.....	8
Connections between the health care sector and other industries in the county	9
The effect of the health care sector on local sales tax collections	13
Economic contributions summary.....	15
The Effects of Health Care on Economic Development.....	16
Osborne County Summary	18
Appendix A: Data Sources and Methods	19
Data citations	21
References	22

Acknowledgments

This study was performed by the Institute for Policy & Social Research (IPSR) at the University of Kansas. Dr. Donna Ginther, Distinguished Professor of Economics and Director, IPSR, directed the work. Thomas Becker, Assistant Researcher and Patricia Oslund, Associate Researcher, performed calculations and provided sections of the report text. Whitney Onasch and Daria Milakhina provided editorial assistance.

This study was sponsored by the Kansas Hospital Association (KHA). The authors thank KHA for the opportunity to work on this project and for their staff's thoughtful feedback on project design, implementation and presentation.

The research is modeled on previous studies completed by Dr. John Leatherman, professor emeritus from Kansas State University. The methodology of the study was developed by Dr. Leatherman and was updated and expanded by the IPSR authors. In addition, Dr. Leatherman provided invaluable assistance with modeling concepts, data interpretation and computational approaches.

Any conclusions or opinions expressed in this study remain those of the authors and do not necessarily reflect the views of the Kansas Hospital Association.

Please feel free to contact the authors if you have questions or comments, or if you think that there are problems with the data for your county. The county level data were estimated using several sources, and some of these sources may have been inaccurate. The authors appreciate public feedback.

Contacts:

Dr. Donna Ginther, Director, IPSR
University of Kansas
dginther@ku.edu

Patricia Oslund, Associate Researcher, IPSR
University of Kansas
poslund@ku.edu
785-864-9108

Executive Summary

The health care sector makes substantial contributions to the Osborne County economy. The sector employs almost 247 people directly and pays out over \$12.5 million in labor income (based on 2021 data). Health care employers provide about 10.5 percent of the county’s jobs and 12.2 percent of labor income.

In addition to providing direct employment and income, the health care sector creates multiplier effects as businesses purchase local goods and services, such as utilities, and employees spend their income at local businesses such as stores and restaurants. Including multiplier effects, the Osborne County health care sector supports 305 jobs and over \$14 million in labor income. Nursing facilities comprise the largest health care employers in the county. The table below details the contributions of individual industries within the health care sector.

In addition to jobs and income, the health care sector provides economic development effects that are less easily quantified. A quality health care sector improves the well-being of the population, and that, in turn, improves business productivity. In addition, quality health care aids in the recruitment and retention of businesses, and health care attracts and retains retirees.

Contributions of Individual Osborne County Health Care Industries, 2021

Industry	Direct Employment Contribution (jobs)	Total Employment Contribution (jobs)	Direct Labor Income Contribution (\$1000)	Total Labor Income Contribution (\$1000)
Hospitals	69.6	99.5	5,752	6,636
Offices of Physicians	2.4	3.3	335	360
Nursing and Residential Care Facilities	108.3	126.3	4,097	4,598
Offices of Other Health Practitioners	9.8	11.3	459	500
Offices of Dentists	2.2	2.5	104	113
Health and Personal Care Stores	12.9	15.0	344	410
Medical and Diagnostic Laboratories	0.0	0.0	0	0
Outpatient Care Centers	9.8	12.0	445	505
Home Health Care Services	14.1	16.0	452	505
Residential Treatment Facilities	0.0	0.0	0	0
Veterinary Services	17.4	18.7	525	562
Other Ambulatory Health Care Services	0.0	0.0	0	0
Fitness and Recreational Sports Centers	0.0	0.0	0	0
Total	246.6	304.5	12,513	14,188

Sources: IMPLAN proprietary data and Kansas Department of Labor (see Appendix A)

Introduction

A vigorous health care system is essential not only for the health and welfare of a community's residents, but also for regional economic opportunity. Historically, health-related industries have grown faster than the state's economy as a whole. Given demographic trends, this growth is likely to continue. Health care industries provide jobs, income and tax revenue, with hospitals often counting among the largest employers in rural areas. Quality health care improves business productivity, aids in the recruitment and retention of businesses and attracts and retains retirees.

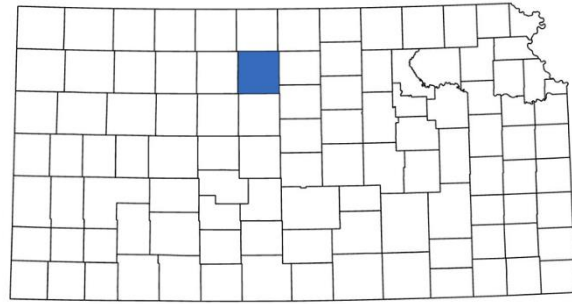
With these factors in mind, we examine the health care sector of individual Kansas counties. Our report is organized into three main sections:

- An overview of Osborne County's population and income, focusing on factors that can affect the demand and accessibility of health care
- A detailed analysis of the Osborne County economy, with a focus on individual health care industries and their contributions to jobs, income and tax revenue
- A discussion of the impact of health care on economic development, including effects on productivity, business attraction and retention, and retention and attraction of retirees.

The primary purpose of this report is to quantify the economic contributions of the health care sector in providing jobs and income. But it is important to recognize that the health care sector plays a role in a county's future stability and potential growth. Furthermore, the health care sector makes significant contributions to the physical and mental well-being of county residents.

Overview of Osborne County

Located in North Central Kansas, Osborne County is classified as non-metro in the 2020 Census. With a decreasing population of 3,512, it is the 77th largest county in Kansas by population, out of 105 counties. Its county seat and most populous city is Osborne.



Osborne County residents are older, earn less income, and are less likely to have health insurance when compared to residents statewide. Based on five years of data, the median age of county residents is 46.1 years, compared to 37 years statewide (Table 1). In the same period, 24.6 percent of the population is 65 or older, while 15.8 percent of all Kansans fit this description.

Services (other than health) is the largest sector in terms of employment countywide (Figure 1). Based on five years of data, the median household income for county residents is \$55,551, substantially less (14 percent) than the overall Kansas median income level. In 2020, 11.5 percent of Osborne County's population under 65 was uninsured, compared with 10.3 percent of all Kansans in that age group.

The Kansas Hospital Association lists one community hospital in the county. According to the Kansas Department of Health and Environment, the county averages 3,498 people for every active physician, higher than the Kansas average of 374.

Table 1: Osborne County Demographic and Economic Characteristics

Characteristic	County	Kansas
Population, 2021	3,512	2,932,099
Population, 2000	4,452	2,688,824
% growth (+) or decline (-) 2000-2021	-21.1%	9.0%
Population rank (largest to smallest)	77	105 counties
Median age of population, 2017-2021	46.1	37
% of population over 65, 2017-2021	24.6%	15.8%
% uninsured, age 0-64, 2020	11.5%	10.3%
Median household income, 2017-2021	\$55,551	\$64,521
Number of community hospitals	1	
Number of other hospitals	0	
Persons per active physician, 2021	3,498	374

Sources: See Appendix A

Contributions of the Health Care Sector to the Osborne County Economy

This section of the report defines the health care sector and quantifies its role in the Osborne County economy. Economic contributions of the sector include not only the direct jobs and income generated, but also **multiplier effects** that occur when businesses in the health care sector purchase goods and services, and when employees spend their income within the county on goods and services.

Definition of health care industries

This report uses a definition of health care that is more inclusive than most definitions used in national studies. The definition includes 13 industries as developed by Professor John Leatherman, formerly with the Office of Local Government at Kansas State University, in consultation with the Kansas Hospital Association. Table 2 shows the key industries included within the broad definition of the health care sector. Health care industries include establishments owned and operated by government entities, such as a Veteran's Administration hospital or a sports facility owned by a city. Note that not every county in the state has employment in every individual health care industry.

Employees are counted in whatever industry setting they report to every week. For example, physicians that work exclusively in hospitals (hospitalists) are counted in the hospitals industry, whereas physicians that provide care in outpatient clinics are counted in the offices of physicians industry. The same goes for counting the nurses, laboratory workers, and everyone else who works in a particular health care setting.

Throughout our report, we use the definition of health care industries in Table 2 below to summarize employment and income in the county health care sector. Telehealth providers and traveling clinicians could serve patients in more than one county. We calculate the economic impact of these services based on the location of the health care employers, not the patients.

Table 2: Key Health Care Industry Definitions

Health Care Industry	Businesses and Establishments Included
Hospitals	Medical and surgical hospitals, psychiatric hospitals and other specialty hospitals
Offices of Physicians	Offices of health practitioners with M.D. or D.O. degrees, primarily engaged in the independent practice of general or specialized medicine
Nursing and Residential Care Facilities	Skilled nursing facilities, assisted living facilities, hospices, continuing care communities and similar residential facilities
Offices of Other Health Practitioners	Optometrists, mental health professionals, audiologists, chiropractors and other practitioners without M.D. or D.O. degrees
Offices of Dentists	Family dentists, dental surgeons, periodontists, orthodontists and other dental practitioners with doctorate level degrees
Health and Personal Care Stores	Pharmacists/pharmacies, optical goods stores, medical goods and equipment stores, vitamin and nutritional supplement stores, wheelchair and other mobility equipment stores and similar establishments
Medical and Diagnostic Laboratories	Testing laboratories, breast and other diagnostic imaging centers, ultrasound imaging centers, radiological laboratory services and similar establishments
Outpatient Care Centers	Fertility clinics, family planning centers, non-residential drug addiction and substance abuse treatment centers, non-residential mental health treatment centers, free-standing emergency medicine and urgent care centers and similar facilities
Home Health Care Services	In-home hospice services, visiting nurses, home care of the elderly and home health care agencies
Residential Treatment Facilities	Residential intellectual disability, mental health, substance abuse and other facilities
Veterinary Services	Veterinary hospitals, small animal veterinary services, livestock veterinary services and veterinary testing services
Other Ambulatory Health Care Services	Blood banks, organ banks, air and ground ambulance services, employee drug testing services and smoking cessation programs
Fitness and Recreational Sports Centers	Gyms and other physical fitness facilities, skating rinks, swimming pools, tennis courts, recreational sports facilities and youth athletic facilities

Composition of the Osborne County economy

Health care industries comprise a significant portion of the Osborne County economy, as shown in Table 3 and Figures 1 and 2. The sector employs about 247 people (as of 2021) and pays out over \$12.5 million in wages and benefits. The health care sector provides about the same share of jobs (10.5 percent versus 10.6 percent) and a smaller share of income (12.2 percent share versus 12.4 percent) when compared with Kansas as a whole.

Services (other than health), wholesale and retail trade and agriculture comprise the largest economic sectors, and combined, they provide more than half the jobs and about 59 percent of labor income in the county.

Table 3. Structure of the Osborne County Economy, 2021

Sector	Employment	Labor Income (\$1000)	Output (\$1000)
Agriculture	377.2	22,517	130,277
Mining and Extraction	42.2	1,753	14,795
Construction	102.0	2,250	11,321
Manufacturing	128.4	6,033	76,616
Transportation, Utilities and Warehousing	82.1	4,010	12,799
Information, Communications and Publishing	12.8	443	10,457
Finance, Insurance and Real Estate	179.8	3,673	46,596
Wholesale and Retail Trade	401.4	20,344	89,088
Services (other than health)	518.9	17,300	42,302
Health Care Services	246.6	12,513	22,496
Government	261.3	12,000	22,203
Total	2,352.7	102,835	478,949

Health Care Services as % Total			
Kansas	10.6%	12.4%	6.8%
County	10.5%	12.2%	4.7%

Sources: IMPLAN proprietary data and Kansas Department of Labor (see Appendix A)

Note: Labor income includes employee benefits.

Figure 1: Jobs by Sector, Osborne County, 2021

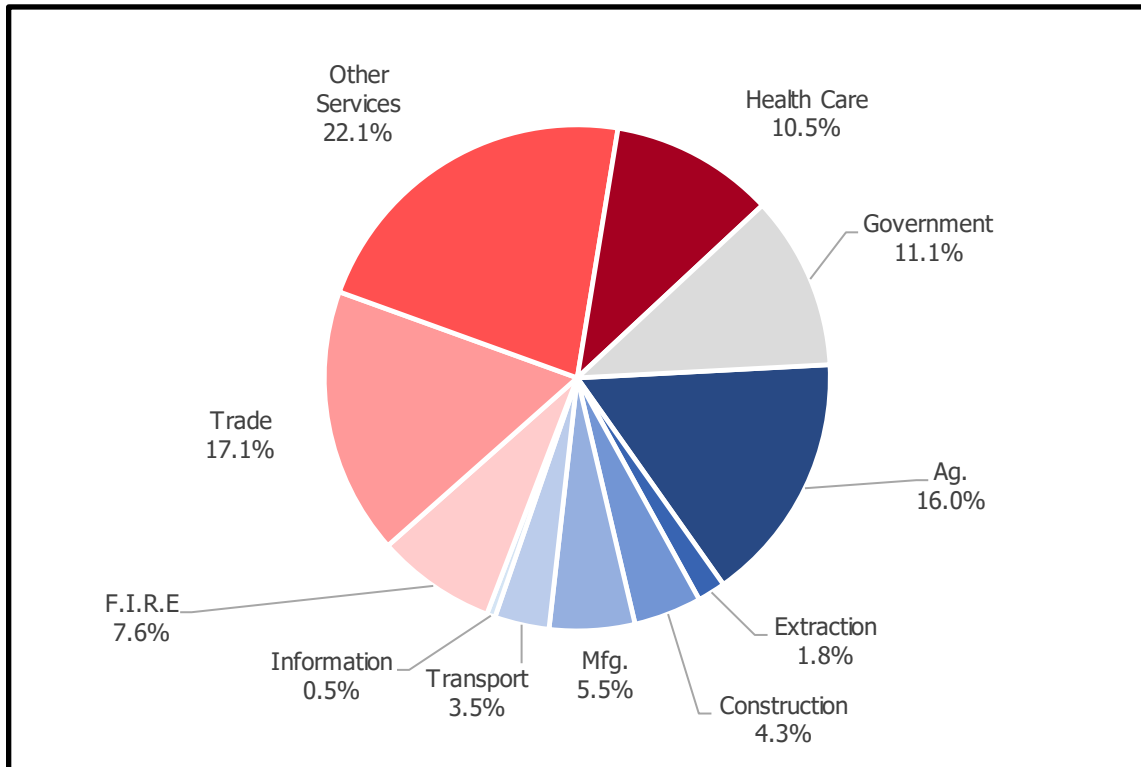
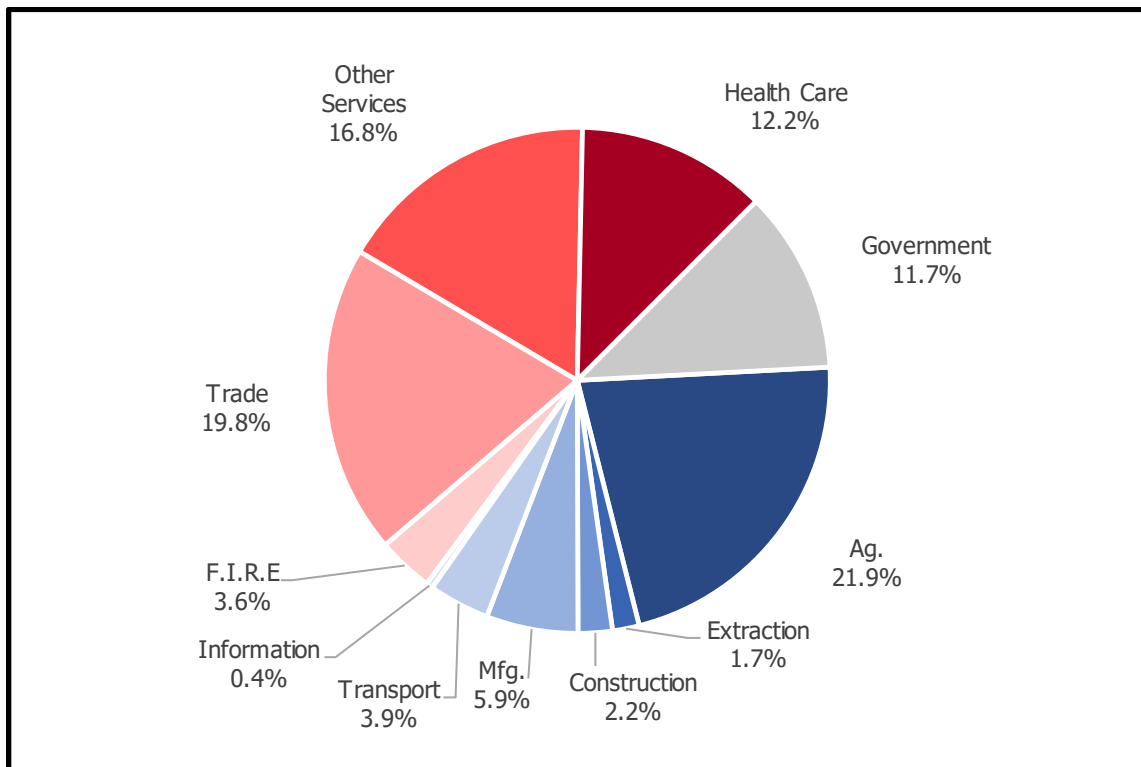


Figure 2: Labor Income by Sector, Osborne County, 2021



Individual health care industries

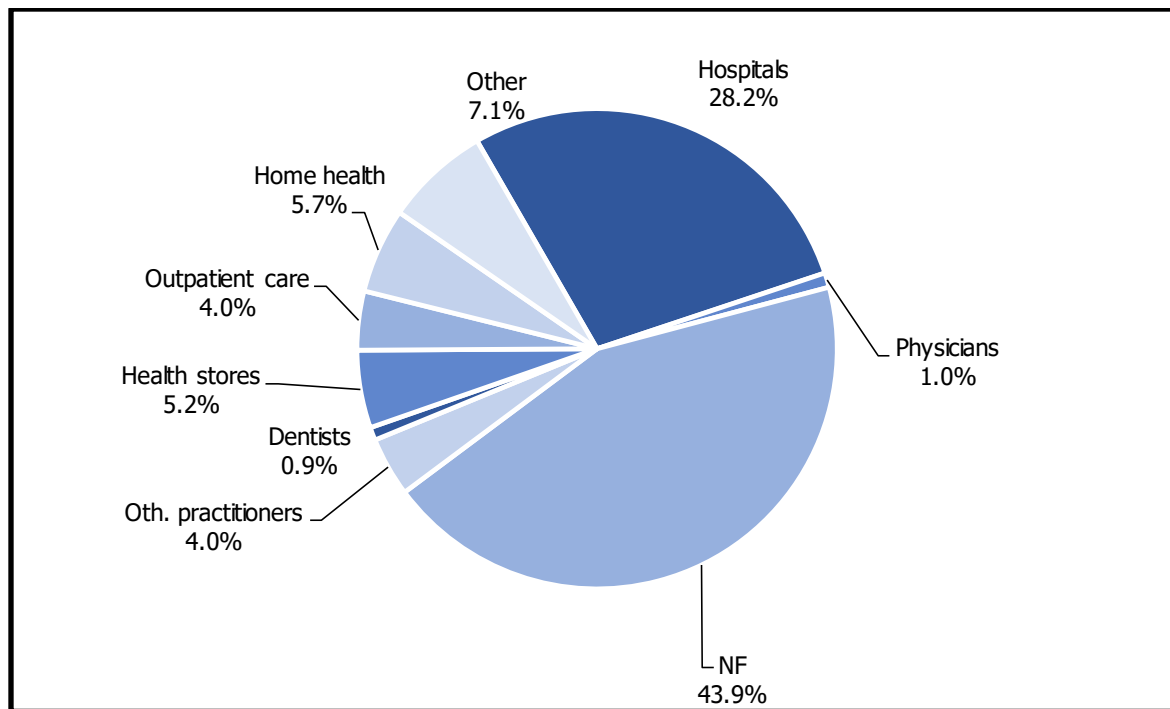
The Osborne County economy includes employment and income in 9 out of 13 individual health care industries. Nursing facilities lead the health care industries in terms of employment (Table 4 and Figure 3). Labor income per employee, including benefits, ranges widely by health care industry, from a high of over \$138,600 for physicians' offices to a low of about \$26,600 at health and personal care stores. The hospital industry is the second largest health care industry in the county and is one of the best paying, with wages and benefits averaging almost \$83,000. Overall, income in health care industries averages nearly \$51,000.

Table 4: Individual Osborne County Health Care Industries, 2021

Industry	Employment	Labor Income (\$1000)	Labor Income per Employee (\$)
Hospitals	69.6	5,752	82,665
Offices of Physicians	2.4	335	138,620
Nursing and Residential Care Facilities	108.3	4,097	37,816
Offices of Other Health Practitioners	9.8	459	46,635
Offices of Dentists	2.2	104	47,896
Health and Personal Care Stores	12.9	344	26,636
Medical and Diagnostic Laboratories	0.0	0	0
Outpatient Care Centers	9.8	445	45,430
Home Health Care Services	14.1	452	31,969
Residential Treatment Facilities	0.0	0	0
Veterinary Services	17.4	525	30,164
Other Ambulatory Health Care Services	0.0	0	0
Fitness and Recreational Sports Centers	0.0	0	0
Total	246.6	12,513	50,745

Sources: IMPLAN proprietary data and Kansas Department of Labor (see Appendix A)

Figure 3: Employment in Health Care Industries in Osborne County, 2021



Connections between the health care sector and other industries in the county

In the previous section, we analyzed the **direct effects** of the health care sector on a county's economy—that is, we calculated the employment and income generated directly within the health care sector. But the health care sector also triggers additional spillover effects of two types:

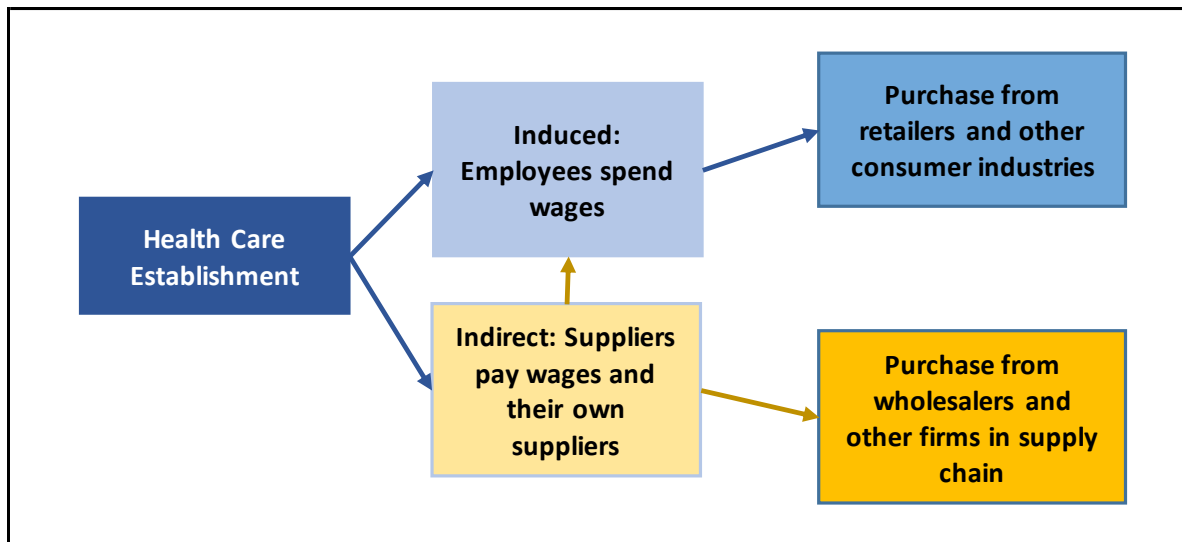
- **Indirect effects** work through the supply chain channel. Suppose, for example, a dental office contracts with a software developer in the county to organize and maintain its appointment records. The software firm uses the receipts from the dental office to pay its own employees. Hence the health care sector supports part of the employment in the software industry.
- **Induced effects** work through the employer payroll channel. For example, when the dental office pays its office administrator, the income of that administrator will be used to purchase food, pay rent, attend entertainment events and to pay electric bills. All these downstream industries benefit from interactions with health care employees.

Collectively, indirect and induced effects create **secondary effects** for the health care sector. Figure 4 illustrates the first layer of secondary feedback due to health care workers. Note that after employees make purchases from retailers, those retailers in

turn pay employees and make additional supply purchases. Similarly, the suppliers initially impacted in turn pay wages and purchase their own supplies. The direct effect of the health care sector initiates iterative rounds of job and income creation, spending and re-spending due to the interactions among firms, industries, households and governments.

The cumulative result of these feedback loops is known as the **multiplier effect**. As an example, an employment multiplier of 1.4 for the health care sector means that every direct job in the sector, an additional 0.4 jobs are supported elsewhere in the economy. Multipliers vary by industry, by the size of the economic region under consideration, and by the industrial diversity of the regional economy. Large and diversified economies typically show higher multipliers.

Figure 4: Secondary Effects of the Health Care Sector on Suppliers and Consumer Industries



This report makes use of two distinct types of multipliers, depending on the effects under consideration (see Tables 5 and 6). In economics literature, the two approaches are known as **contribution analysis** and **impact analysis**, each with its own multiplier. The multipliers have different uses: if we want to look at the economic impact of one health care industry in the current countywide economy, we use a **contribution multiplier**. This answers the question “what is...?” If we want to measure the hypothetical economic impact of expanding or contracting the health care industry on other economic sectors, we use the **impact multiplier**. Here we answer the question “what if...?”

For example, current employees of a hospital may use their wages to pay veterinarians, who in turn pay their own employees. The veterinary employees have already been tabulated as part of the direct employment and income in Tables 5 and 6, so it would

be double counting to include them as secondary effects as well. This would be a case for using a contribution multiplier versus an impact multiplier to get an accurate picture of the economic impact.

On the other hand, suppose that we want to estimate the potential effect of adding 20 new hospital employees. Now, in our example, the demand for veterinary care would increase in the county due to the spending of hospital employees. To measure this effect on the health care sector, we would include all feedbacks, because veterinarians can expand their businesses to accommodate the new employees and their pets. Here, we would use the impact multiplier.

Both types of multipliers generally range between 1.0 and 2.2, depending on the industry and county. Contribution multipliers are always slightly smaller than impact multipliers because they exclude interactions among health care industries. Both types of multipliers are included in Tables 5 and 6.

Tables 5 and 6 show direct effects, total effects (direct plus secondary) and multipliers for all Osborne County health care industries. Using contribution analysis, we estimate that the county's 247 health care jobs (direct employment contribution, Table 5) and \$12.5 million in direct labor income (Table 6) support an additional 58 jobs and nearly \$1.7 million in added income throughout the county. The additional jobs and income arise in industries such as business services, retail trade, wholesaling, restaurants and rentals that are connected to health care through supply chain and consumer expenditure linkages.

Focusing specifically on the Osborne County hospital industry, we find the 70 current hospital jobs sustain nearly 30 additional jobs outside of health care (employment contribution multiplier = 1.43 in Table 5). The formula is:

$$\text{Direct Employment Contribution} * \text{Employment Contribution Multiplier} = \text{Total Jobs}$$
$$\text{Total Jobs} - \text{Direct Employment Contribution} = \text{Net Additional Jobs}^1$$

Note that the hospital industry has the largest employment contribution multiplier of all health care industries in the county. That implies employees in the hospital have the greatest impact on "producing" outside jobs. The multiplier is large because the hospital pays high wages and because the hospital uses substantial goods and services from the community, such as utilities and business services.

Similarly, the \$5.8 million in hospital wages and benefits produce another \$884,000 in income within the county (income contribution multiplier = 1.15 in Table 6). The formula is:

¹ All multipliers in the report tables have been rounded to two decimal places. This may cause a slight discrepancy between the numbers in the report and calculations in the formulas.

$$\text{Direct Labor Income} * \text{Income Contribution Multiplier} = \text{Total Income}$$

$$\text{Total Income} - \text{Direct Labor Income} = \text{Net Additional Income}$$

The multiplier effect magnifies the benefits of expanding employment and wages in an industry, but it also compounds the consequences of closures or reduced staffing in industries such as hospitals, as the effects of reduced income and reduced demand for business inputs ripple throughout the county.

Table 5: Contributions of the Health Care Sector to Osborne County Employment, 2021

Industry	Direct Employment Contribution	Total Employment Contribution	Employment Contribution Multiplier excl. Health Care Feedbacks	Employment Impact Multiplier incl. Health Care Feedbacks
Hospitals	69.6	99.5	1.43	1.46
Offices of Physicians	2.4	3.3	1.36	1.41
Nursing and Residential Care Facilities	108.3	126.3	1.17	1.18
Offices of Other Health Practitioners	9.8	11.3	1.15	1.16
Offices of Dentists	2.2	2.5	1.15	1.17
Health and Personal Care Stores	12.9	15.0	1.17	1.18
Medical and Diagnostic Laboratories	0.0	0.0	0.00	0.00
Outpatient Care Centers	9.8	12.0	1.22	1.24
Home Health Care Services	14.1	16.0	1.13	1.14
Residential Treatment Facilities	0.0	0.0	0.00	0.00
Veterinary Services	17.4	18.7	1.08	1.09
Other Ambulatory Health Care Services	0.0	0.0	0.00	0.00
Fitness and Recreational Sports Centers	0.0	0.0	0.00	0.00
Total	246.6	304.5	1.24	

Sources: IMPLAN proprietary data and Kansas Department of Labor (see Appendix A)

Table 6: Contributions of the Health Care Sector to Osborne County Labor Income, 2021

Industry	Direct Labor Income Contribution (\$1000)	Total Labor Income Contribution (\$1000)	Income Contribution Multiplier excl. Health Care Feedbacks	Income Impact Multiplier incl. Health Care Feedbacks
Hospitals	5,752	6,636	1.15	1.17
Offices of Physicians	335	360	1.07	1.09
Nursing and Residential Care Facilities	4,097	4,598	1.12	1.14
Offices of Other Health Practitioners	459	500	1.09	1.10
Offices of Dentists	104	113	1.09	1.11
Health and Personal Care Stores	344	410	1.19	1.21
Medical and Diagnostic Laboratories	0	0	0.00	0.00
Outpatient Care Centers	445	505	1.13	1.15
Home Health Care Services	452	505	1.12	1.13
Residential Treatment Facilities	0	0	0.00	0.00
Veterinary Services	525	562	1.07	1.09
Other Ambulatory Health Care Services	0	0	0.00	0.00
Fitness and Recreational Sports Centers	0	0	0.00	0.00
Total	12,513	14,188	1.13	

Sources: IMPLAN proprietary data and Kansas Department of Labor (see Appendix A)

Note: Labor income includes employee benefits.

The effect of the health care sector on local sales tax collections

Counties and cities throughout Kansas have the option of imposing local sales taxes. Hence when consumers spend money in their local communities, they generate sales tax revenues for county and city government, supporting county and city services such as road maintenance, fire and police protection, sanitation and general administration. Table 7 shows estimates of the retail sales and sales tax revenue that the health care sector produces in Osborne County. Our estimates are conservative because they do not consider the impact of any taxable local purchases made by the health services businesses themselves.

Data from the Kansas Department of Revenue (KDOR) provides the foundation for our estimates. KDOR reports taxable retail sales by county, county-level local sales tax collections, and city-level tax collections. We calculate the ratio of taxable retail sales to county personal income, to create what is known as a **retail sales capture ratio**. Osborne County’s ratio is 26.17 percent. The labor income of health employees is part of overall personal income, so roughly 26.17 percent of health care worker’s income is spent on taxable goods and services in the county.

We estimate a local sales tax rate by adding together county and city receipts and then dividing it by retail sales. Note that the state and local sales tax bases were approximately the same in 2021, our target year. The average local sales tax rate for Osborne County is 1.83 percent. Our final calculation is based on the formula below:

$$\text{Total Labor Income} * \text{Retail Sales Capture Ratio} * \text{Local Sales Tax Rate} = \text{Estimated Sales Tax}^2$$

We estimate that local sales taxes due to the health care sector sum to \$67,900 annually (Table 7).

Table 7: Impact of the Health Care Sector on Local Sales Tax Revenue, 2021

Ratio of Taxable Sales to County Personal Income	26.17%		
Ratio of Local Sales Tax Revenue to Retail Sales	1.83%		
Industry	Total Labor Income (Health Care) (\$1000)	Retail Sales from Labor Income (\$1000)	Local Sales Tax Revenue (\$1000)
Hospitals	6,636	1,736	31.8
Offices of Physicians	360	94	1.7
Nursing and Residential Care Facilities	4,598	1,203	22.0
Offices of Other Health Practitioners	500	131	2.4
Offices of Dentists	113	30	0.5
Health and Personal Care Stores	410	107	2.0
Medical and Diagnostic Laboratories	0	0	0.0
Outpatient Care Centers	505	132	2.4
Home Health Care Services	505	132	2.4
Residential Treatment Facilities	0	0	0.0
Veterinary Services	562	147	2.7
Other Ambulatory Health Care Services	0	0	0.0
Fitness and Recreational Sports Centers	0	0	0.0
Total	14,188	3,713	67.9

Sources: Labor income based on proprietary income from IMPLAN and on data from Kansas Department of Labor. Sales tax data from Kansas Department of Revenue. Personal income from US Bureau of Economic Analysis. See Appendix A.

² The capture ratio and the sales tax rate have been rounded to two decimal places. This may cause a small discrepancy between the numbers in the table and the results of the formula in the text.

Economic contributions summary

In summary, the health care sector in Osborne County generates significant employment and income for local residents and generous tax revenue for local governments. Health care businesses provide about 247 jobs and over \$12.5 million in labor income. When the multiplier effect is included, the contributions rise to about 305 jobs and over \$14 million in labor income in the county. The health care sector supports \$67,900 in local sales tax revenue.

The health care sector in the county may be constrained by the county's low level of income relative to the state, and by its high rate of uninsured people under age 65. Uninsured people affect hospital revenues, and the lack of insurance limits the ability of residents to access health care services.

The Effects of Health Care on Economic Development

So far, this report has focused on the effects of the health care sector on wages, income and taxes. However, the health care industry has numerous effects on regional economic development and labor force sustainability that are beyond the scope of a traditional economic contribution or impact analysis. One additional effect is the health care sector's role in improving worker productivity. Secondly, these effects attract and retain employees as well as businesses. And third, they stimulate in-migration and retention of retirees.

A substantial body of research supports the proposition that healthy, fulfilled employees are more productive at work, less prone to absenteeism and less likely to lose their jobs. This is known as the "happy-productive worker hypothesis," as described by Christensen (2017). Diseases such as asthma, cardiovascular disease and depression lead to missed workdays, and also impact productivity through "presenteeism," that is, when employees are operating at less than full capacity throughout their workday (Isham, Mair and Jackson 2021).

Chronic health conditions also can impact the productivity of a patient's informal caregivers, who deal with fatigue and competing time commitments. One study found that friends and relatives who care for people with advanced cancer outside of a professional health care setting experienced a 22.9 percent loss in workplace productivity (Mazanec et al. 2011). This study was limited to caregivers who are currently employed, but further studies suggest that a large portion of informal caregivers quit their jobs entirely to focus on providing care (Committee on Caregiving for Older Adults). This impact shows the benefits of health care access in a community, which not only lessens the responsibilities placed on informal caregivers, but also helps prevent chronic conditions.

Additionally, the health care industry fosters sustainable economic growth through the attraction and retention of businesses and the working-age population, especially in rural areas. This effect is visible in county level wage and employment data, as counties with a hospital see higher employment and wage levels in non-health care industries than similar counties with no hospital (Mandich and Dorfman 2017). Similarly, rural counties that have suffered hospital closure see lower employment and wage growth rates than rural counties that have no closures (Edmiston 2019), suggesting that access to local health care keeps and attracts non-health care businesses and employees, creating local jobs and raising local wages in all industries.

Access to a quality workforce is the number one factor influencing a business's decision of where to locate or expand, according to Site Selection's Business Climate Ranking (2022). Furthermore, quality-of-life is rated among the top 10 location factors, tied with business incentives offered by states, cities and counties. Workforce and quality of life

issues go hand-in-hand. Avery (2007) comments that “a general rule of thumb is that the greater the number of professionals who will be transferred or recruited from elsewhere, the more important quality of life factors will be.” Health care, in turn, comprises an important part of what analysts consider quality of life factors (US News & World Report, 2021). Millennial and Gen Z employees rank health care, including access to mental health services, as the top employer-offered benefits (Mearian 2022). Strong health care systems support the efforts of businesses to attract and retain a skilled and motivated workforce.

The health care sector also plays a role in attracting and retaining retirees, who contribute to economic development through local spending and tax revenue. One study examining rural counties in Michigan found that presence of health care facilities and number of health care workers had a positive effect on net migration (those who move in minus those who leave) within the 70+ age group. This effect was found to be similar in magnitude to the effects of other amenities, such as educational and recreational institutions (Oehmke et al. 2007). A broader study across urban and rural counties throughout the United States found that increases in hospital beds, number of doctors and total health expenditures were all positively associated with increased in-migration in the 60-74 and 75+ years of age groups (Dorfman and Mandich 2016).

In summary, the health care sector provides economic benefits beyond those considered in traditional contribution and impact modeling. Health care access improves the productivity of the labor force, by treating and preventing conditions that would otherwise impact an individual’s work productivity and by reducing the amount of informal care required from non-health workers. Health care access plays a role in helping grow a community’s working age population, attracting and retaining businesses as well as drawing and retaining retirees. Because of these effects, a robust health care sector should be considered an important contributor to economic development.

Osborne County Summary

The health care sector in Osborne County provides significant jobs and income to the community. The health care sector in the county is composed of 9 out of 13 health care industries, each with unique impacts on the local economy. The industries range from a hospital to health and personal care stores.

The health care sector provides more than 247 jobs (10.5 percent of all jobs in the county) and more than \$12.5 million in labor income (12.2 percent of all income earned in the county). Wholesale and retail trade, services (other than health), and agriculture are the largest sectors in terms of the number of jobs in the county. Nursing facilities supply the largest number of jobs within the county's health care sector. Income from health care jobs averages almost \$51,000 per year.

The secondary effects of the health care sector are also significant. These are the ripple effects of having health care providers working and living locally in the county. These employees will need services from other economic sectors: restaurants, gas stations and the like. Using a contribution factor, we calculate that the hospital industry in Osborne County, with its 70 current hospital jobs, supports nearly 30 additional jobs outside of health care. Similarly, the \$5.7 million in hospital employee income produces another \$884,000 in income from additional jobs within the county.

In fact, the hospital industry in Osborne County has the largest contribution multiplier of all health care industries. That implies employees in the hospital have the greatest impact on "producing" outside jobs. Naturally as the number of jobs increases, so does the total income and sales tax revenue in the county.

In addition to providing jobs and income, the health care sector can provide substantial economic development benefits. A quality health care sector improves the well-being of the population, and that, in turn, improves business productivity. In addition, quality health care aids in the retention and attraction of businesses and retirees.

Appendix A: Data Sources and Methods

This appendix discusses: a) what data contributed to each data table in the report and b) how the data in the report were combined to form the tables. The data used in this project come from several sources and refer to calendar year 2021 unless otherwise noted. A list of data citations follows at the end of this appendix. The numbers in brackets indicate the tables for which the data citations were used.

If you have questions about the data or methods used to create any of the tables, please email Pat Oslund (poslund@ku.edu) for more information.

Table 1: County Demographic and Economic Characteristics. This table is a compendium of data from the U.S. Census Bureau and other sources. The Kansas Department of Health and Environment contributed data on active physicians by county, as published in IPSR's Kansas Statistical Abstract. The Kansas Hospital Association served as the primary source of hospitals by county, supplemented by data from the American Hospital Association.

Table 3: Structure of the County Economy. This table relies on the two main datasets used for this report: the IMPLAN Model proprietary county-level dataset as well as a special data extract from the Kansas Department of Labor.

The IMPLAN dataset covers all industries in a county including government. Employment numbers in the dataset include both wage and salary workers, and people who are self-employed. Labor income includes wages and salaries, self-employment income, and benefits. For small areas such as counties, data on employment and income is not always reported by state and federal agencies. IMPLAN estimates employment and income based on the best available data, but sometimes these estimates do not appear realistic (see Table 4 discussion). Note that we moved employment and income for hospitals owned by federal, state or local governments out of the IMPLAN government sector and into health care services. For all economic sectors except health care, IMPLAN provided our major source of data for employment and income.

The Kansas Department of Labor (KDOL) provided us with a special extract of county-level employment and wage data. We used the KDOL dataset primarily for health care industries. For these industries, we aggregated the included employment and wage data to match the IMPLAN definition of industries, added self-employment information from IMPLAN and added an estimate of benefits. We then applied appropriate statistical measures to keep detailed employer data confidential.

Table 4: Individual County Health Care Industries. Data for individual health care industries incorporate both IMPLAN and KDOL data. As mentioned above, data from KDOL was combined with IMPLAN and then fuzzed in order to protect confidentiality. In

some cases, the IMPLAN estimates of self-employment were unrealistic. For example, we found a small county with about 40 self-employed people working in physicians' offices, each earning about \$2,000 per year. In cases with unrealistic data, we looked at IMPLAN data from the previous year and almost always found that the previous estimate was zero. We also verified that no wage and salary employees appeared in the KDOL data. Finally, we reset the estimates to zero.

Another data problem we encountered was that for two counties that actually have a hospital, both IMPLAN and KDOL showed zero employees. In one case we used data from a previous year. In another case we used estimates of employment that appeared on the hospital's web site.

Tables 5 and 6: Contributions of the Health Care Sector. These tables show direct and total employment and income. In general, we used a formula: Total Effects = Direct Effects * Multiplier. Multipliers were provided by the IMPLAN model, and are specific to the industry, the county, and the type of effect (employment or income).

Table 7: Impact of the Health Care Sector on Local Sales Tax Revenue. This table makes use of the ratio of local sales tax revenue to county personal income. Local sales tax revenue was provided by the Kansas Department of Revenue. It includes both county and city levies. County-level personal income comes from the U.S. Bureau of Economic Analysis.

Data citations

- American Hospital Association. AHA Hospital Lookup. <https://www.aha.org/aha-hospital-lookup> [1]
- IMPLAN Model. 2022. 2021 data and models for Kansas and Kansas counties. <https://www.IMPLAN.com> [3, 4, 5, 6, 7]
- Kansas Department of Labor. Special labor market extract for 2021. [3, 4, 5, 6, 7]
- Kansas Department of Revenue. State Sales Tax Collections by County-2021. <https://www.ksrevenue.gov/prsalesreports.html#state> [7]
- Kansas Department of Revenue. State Use Tax Collections by County-2021. <https://www.ksrevenue.gov/prsalesreports.html#usecoll> [7]
- Kansas Department of Revenue. City/County Local Sales Tax Distributions Calendar Year – 2021. <https://www.ksrevenue.gov/prsalesreports.html#annlocalsales> [7]
- Kansas Department of Revenue. CY 2021 City/County Use Tax Distribution by Month. <https://www.ksrevenue.gov/prsalesreports.html#localuse> [7]
- Kansas Hospital Association, Hospital-Specific Data. 2022. "KHA STAT." Updated 4/20/2022. <https://www.kha-net.org/DataProductsandServices/STAT/> [1]
- KU Institute for Policy & Social Research (IPSR). 2022. *Kansas Statistical Abstract Enhanced Online Edition*. September 5, 2022. "Persons per Physician in Kansas, by County, 2021." <https://ipsr.ku.edu/ksdata/ksah/vital/doctors.pdf> [1]
- U.S. Bureau of Economic Analysis. Regional GDP & Personal Income, Personal Income and Employment by County and Metropolitan Area, Table CAINC1. <https://www.bea.gov/itable/regional-gdp-and-personal-income> [7]
- U.S. Census Bureau, 2000 Census. [https://data.census.gov/table?q=United+States&q=010XX00US_040XX00US20,20\\$0500000&y=2000&d=DEC+Summary+File+1&tid=DECENNIALSF12000.P001](https://data.census.gov/table?q=United+States&q=010XX00US_040XX00US20,20$0500000&y=2000&d=DEC+Summary+File+1&tid=DECENNIALSF12000.P001) [1]
- U.S. Census Bureau, American Community Survey (ACS). 2017-2021 American Community Survey. <https://www.census.gov/acs/www/data/data-tables-and-tools/subject-tables/> [1]
- U.S. Census Bureau, Population Estimates. 2021 Population Estimates. <https://www.census.gov/programs-surveys/popest/data/tables.html> [1]
- U.S. Census Bureau, Small Area Health Insurance Estimates (SAHIE). 2020 Small Area Health Insurance Estimates. https://www.census.gov/data-tools/demo/sahie/#/?map_yearSelector=2020&tableYears=2021,2020 [1]
- U.S. Department of Agriculture. 2020. "2013 Rural-Urban Continuum Codes." Updated 12/10/2020. <https://www.ers.usda.gov/data-products/rural-urban-continuum-codes/> [1]

References

- Avery, Susan. 2007. "What is Quality of Life?" *Area Development*. Dec/Jan 2007.
<https://www.areadevelopment.com/laboreducation/dec06/qualityoflife.shtml>.
- Christensen, Marit. 2017. "Healthy Individuals in Healthy Organizations: The Happy Productive Worker Hypothesis." In *The Positive Side of Occupational Health Psychology*, edited by Marit Christensen, Per Øystein Saksvik and Maria Karanika-Murray, 155-169. Springer, Cham.
https://doi.org/10.1007/978-3-319-66781-2_13
- Clouse, Candi. 2019. "How IMPLAN Works." IMPLAN. Last modified April 26, 2022.
<https://support.implan.com/hc/en-us/articles/360038285254-How-IMPLAN-Works>
- Committee on Family Caregiving for Older Adults. 2016. "Economic Impact of Family Caregiving." In *Families Caring for an Aging America*, edited by Richard Shulz and Jill Eden, 123-158. Washington (DC): National Academies Press (US) <https://www.ncbi.nlm.nih.gov/books/NBK396402/>
- Dorfman, Jeffrey, and Anne Mandich. 2016. "Senior Migration: Spatial Considerations of Amenity and Health Access Drivers." *Journal of Regional Science* 56 no. 1(August): 96-133.
<https://doi.org/10.1111/jors.12209>
- Edmiston, Kelly. 2019. "Rural Hospital Closures and Growth in Employment and Wages." July 2019. Kansas City, MO: Kansas City Federal Reserve.
https://www.researchgate.net/publication/335192551_Rural_Hospital_Closures_and_Growth_in_Employment_and_Wages
- Isham, Amy, Simon Mair, and Tim Jackson. 2021. "Worker wellbeing and productivity in advanced economies: Re-examining the link." *Ecological Economics* 184.
<https://doi.org/10.1016/j.ecolecon.2021.106989>
- Maerian, Lucas. "What Gen Z and Millennials Want from Employers." *Computerworld*. May 23, 2022.
<https://www.computerworld.com/article/3661170/what-gen-z-and-millennials-want-from-employers.html>
- Mandich, Anne and Jeffrey Dorfman. 2017. "The Wage and Job Impacts of Hospitals on Local Labor Markets." *Economic Development Quarterly* 31 no. 2(April): 139-148.
<https://journals.sagepub.com/doi/abs/10.1177/0891242417691609>
- Mazanec, Susan, Barbara Daly, Sara Douglas and Amy Lipson. 2011. "Work productivity and health of informal caregivers of persons with advanced cancer." *Research in Nursing & Health* 34: 483-495.
- Oehmke, James F., Satoshi Tsukamoto and Lori A. Post. 2007. "Can Health Care Services Attract Retirees And Contribute to the Economic Sustainability of Rural Places?" *Northeastern Agricultural and Resource Economics Association Agricultural and Resource Economics Review*, 36 no. 1(April): 1-12. <https://doi.org/10.22004/ag.econ.10155>
- Site Selection. 2022. "Virginia Claims Top State Business Climate for 2022" [Press Release].
<https://siteselection.com/press/releases/221101.html>
- U.S. Department of Agriculture. 2020. "2013 Rural-Urban Continuum Codes." Updated 12/10/2020.
<https://www.ers.usda.gov/data-products/rural-urban-continuum-codes/>.
- U.S. News & World Report. 2021. "Best States 2021." <https://www.usnews.com/media/best-states/overall-rankings-2021.pdf>