

# Cleveland Area Hospital Community Health Needs Assessment Summary and Implementation Strategy



Oklahoma Office of Rural Health

OSU Center for Rural Health

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## Introduction

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

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

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

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

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

- Describe how the hospital facility plans to meet the health need, or
- Identify the health need as one the hospital facility does not intend to meet and explain why the hospital facility does not intend to meet the health need<sup>1</sup>

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

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

<sup>2</sup> Ibid

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

### **Oklahoma Office of Rural Health Partnership**

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

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

This document discusses the steps taken to conduct a CHNA for Cleveland Area Hospital in 2015. It begins with a description of the hospital's medical service area, including a demographic analysis, and then summarizes each meeting that took place during the CHNA process. The report concludes by listing the recommendations that came out of the process and presenting the hospital's implementation strategy and marketing plan.

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

Cleveland Area Hospital worked with the Oklahoma Office and Oklahoma Cooperative Extension Service in 2012 to complete their first Community Health Needs Assessment. During that time, health concerns were identified by community members and then prioritized by community members in focus group-style meetings. The following identifies each priority, implementation taken, and an evaluation or impact of the implementation. This information was revisited and presented at the first Community Health Needs Assessment Meeting on August 5, 2015.

Priority: Obesity

Service Implemented/Partnerships: Weight Management Institute

This program was implemented by Cleveland Area Hospital. Participants completed a physical with their primary care physician and then met with a nurse (RN) program manager to discuss diet and exercise modifications. The initial pilot program included six total participants, including two teens. There were 207 referrals for the no cost program made in one year.

Priority: Mental Health

Service Implemented/Partnerships: Rural Mental/Behavioral Health Provider Network

This is a collaboration of area mental health providers. This collaboration created and continually updates a referral list for patients. Participants share services they provide and make a more streamlined approach to assisting patients.

Priority: Mental Health

Service Implemented/Partnerships: Cleveland Area Counseling

This collaboration created and continually updates a behavioral health resource referral list for area healthcare providers.

Priority: Health Education

Service Implemented/Partnerships: Cleveland Area Counseling- Body Image Presentation

Cleveland Area Hospital counseling department, the weight management institute, and the physical rehabilitation department designed the presentation for the middle school girls' athletics department. This was a one day presentation, and approximately 40 7<sup>th</sup> and 8<sup>th</sup> grade girls participated.

Priority: Health Education

Service Implemented/Partnerships: Doc Talks

This is a quarterly community education series organized by Cleveland Area Hospital that is free of charge to all area residents. Speakers have included hospital employees and local providers who have covered topics such as colon health, signs and symptoms of stroke, preventative health, and "How to talk to your Doc." To date, an average of 25 participants have attended each session.

## Priority: Mammography and Testing

Service Implemented/Partnerships: Mammography, MRI, DEXA Scan (Bone Density)

Mammography services were first offered in February 2013. To date, 1,595 patients have been served. MRI services were first offered in May 2011. To date, 721 patients have been served. DEXA Scan (Bone density) services were also first offered in May 2011. To date, 652 patients have been served. Cleveland Area Hospital partners with Oklahoma Project Women to provide breast health screenings to the uninsured.

Cleveland Area Hospital also participates in the Indian Electric Cooperative's health fair, the Pawnee health fair, the Cleveland Senior health fair, provides sports physicals for Cleveland schools and provides patient navigation services for patients.

## Awareness of Community Outreach

A question was included on the community survey (complete methodology detailed on page 17) to gauge survey respondents' awareness of current community programs offered by the hospital. Ninety-nine individuals or 32.5 percent of the total indicated they were aware of community programs. Survey respondents were then asked to list which programs they knew. The most commonly responded program was the Weight Management Institute. Senior life services, Senior Moments, and senior services collectively, was the second most common response. The table below outlines all programs listed by the survey respondents.

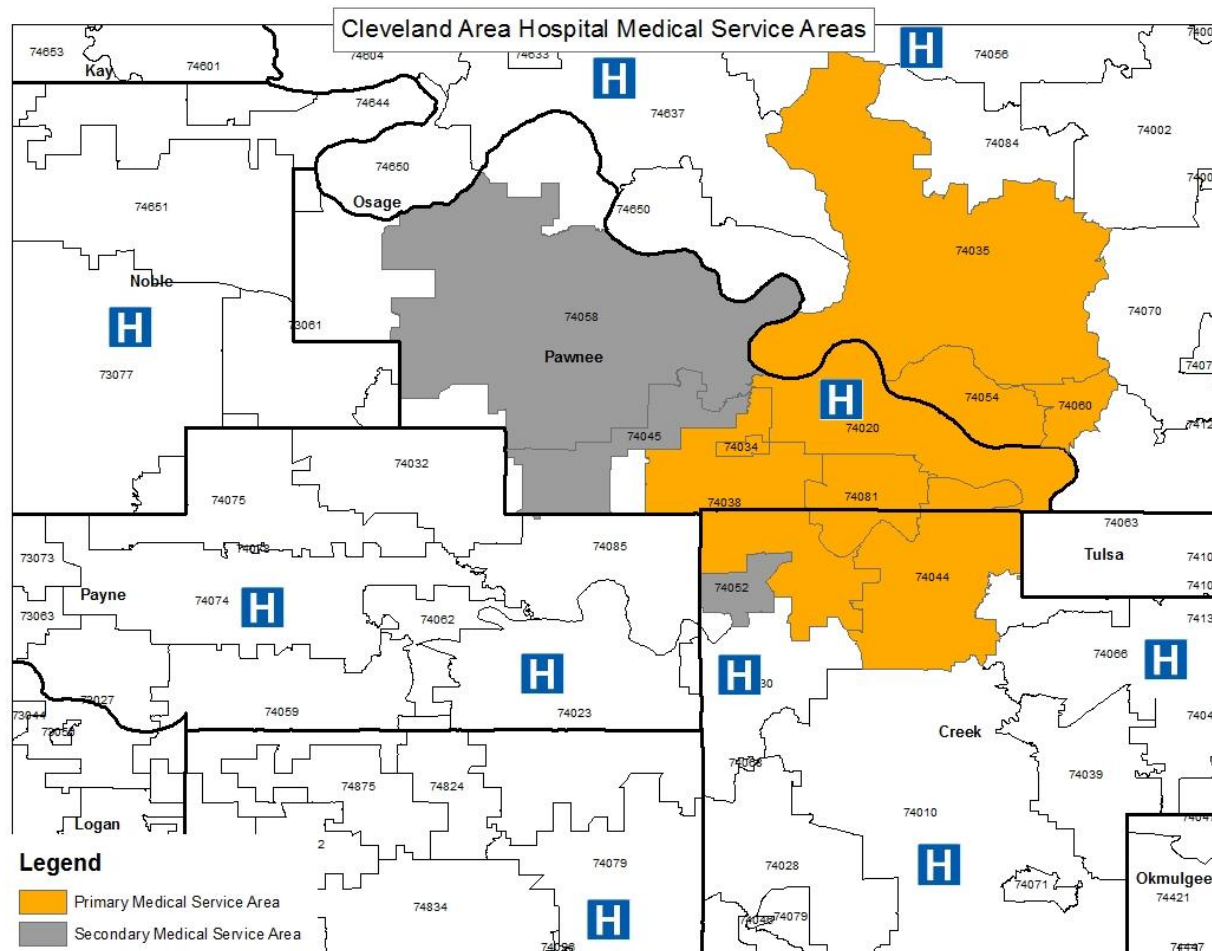
**Please list community programs:**

Response Category	No.	%
Weight Management Institute/Weight loss	32	28.8%
Senior life services/Senior Moments/Senior services	29	26.1%
Counseling/Mental health	8	7.2%
Diabetes management/Education	5	4.5%
Free clinic	4	3.6%
Mammography	4	3.6%
Physical therapy	4	3.6%
Doc Talks	3	2.7%
Women's health	2	1.8%
Fitness center	2	1.8%
Wound care	2	1.8%
Rehab	2	1.8%
Specialists	2	1.8%
School physicals	1	0.9%
Outreach to coaches at the school	1	0.9%
Breast cancer awareness	1	0.9%
Therapy group for Medicaid recipients	1	0.9%
Senior activity center	1	0.9%
Health and wellness	1	0.9%
Manna Café	1	0.9%
Healthy heart	1	0.9%
Social services advocate	1	0.9%
Home health	1	0.9%
Angel Tree	1	0.9%
Balance screens at assisted living facility	1	0.9%
Total	111	100.0%



## Cleveland Area Hospital Medical Services Area Demographics

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



**Figure 1. Cleveland Area Hospital Medical Service Areas**

City	County	Hospital	No. of Beds
Cleveland	Pawnee	Cleveland Area Hospital	14
Stillwater	Payne	Stillwater Medical Center	117
Cushing	Payne	Cushing Regional Hospital	99
Drumright	Creek	Drumright Regional Hospital	15
Bristow	Creek	Bristow Medical Center	30
Pawhuska	Osage	Pawhuska Hospital	25
Fairfax	Osage	Fairfax Memorial Hospital	15
Perry	Noble	Perry Memorial Hospital	26

As delineated in Figure 1, the primary medical service area of Cleveland Area Hospital includes the zip code area of Cleveland, Hallett, Jennings, Terlton, Mannford, Osage, Hominy,

Prue. The primary medical service area experienced a population increase of 0.8 percent from the 2000 Census to the 2010 Census (Table 1). This same service area was unchanged from the 2010 Census to the latest available, 2009-2013, American Community Survey.

The secondary medical services area is comprised of the zip code areas Pawnee, Maramec, and Oilton. The secondary medical service area experienced a decrease in population of 1.1 percent from 2000 to 2010 followed by a population increase of 1.7 percent from 2010 to the 2009-2013 American Community Survey.

**Table 1. Population of Cleveland Area Hospital Medical Service Area**

Population by Zip Code		2000 Population	2010 Population	2009-2013 Population	% Change 2000-2010	% Change 2010-09-13
<i>Primary Medical Service Area</i>						
74020	Cleveland	7,604	7,294	7,451	-4.1%	2.2%
74034	Hallett	250	150	188	-40.0%	25.3%
74038	Jennings	2,030	2,254	2,266	11.0%	0.5%
74081	Terlton	1,801	1,837	1,848	2.0%	0.6%
74044	Mannford	6,897	7,406	7,382	7.4%	-0.3%
74054	Osage	774	844	810	9.0%	-4.0%
74035	Hominy	4,860	4,565	4,273	-6.1%	-6.4%
74060	Prue	511	586	709	14.7%	21.0%
<b>Total</b>		<b>24,727</b>	<b>24,936</b>	<b>24,927</b>	<b>0.8%</b>	<b>0.0%</b>
<i>Secondary Medical Service Area</i>						
74058	Pawnee	4,156	4,259	4,024	2.5%	-5.5%
74045	Maramec	309	311	444	0.6%	42.8%
74052	Oilton	1,350	1,180	1,378	-12.6%	16.8%
<b>Total</b>		<b>5,815</b>	<b>5,750</b>	<b>5,846</b>	<b>-1.1%</b>	<b>1.7%</b>

SOURCE: Population data from the U.S. Bureau of Census, Decennial Census 2000, 2010 and American Community Survey 2009-2013 (July 2015)

Table 2 displays the current existing medical services in the primary service area of the Cleveland Area Hospital medical services area. Most of these services would be expected in a service area of Cleveland's size: seven physician offices, an Indian Health Services facility, six dental offices, four optometry offices, and three chiropractic offices. Cleveland Area Hospital is a 25 bed critical access hospital located in Pawnee County. The hospital provides acute and swing bed inpatient services, 24-hour emergency department, MRI, CT, DEXA Scan, EEG services, mammography, financial counseling, blood banking, and dietary counseling. A complete list of hospital services and community involvement activities can be found in Appendix A.

**Table 2. Existing Medical Services in the Cleveland Area Hospital Medical Services Area**

<b>Count</b>	<b>Service</b>
1	Hospital: Cleveland Area Hospital
7	Physician offices and clinics
1	Indian Health Services facility
6	Dental offices
4	Optometry offices
3	Chiropractic offices
3	Nursing homes
4	Home health and/or hospice providers
3	EMS providers
1	County Health Department: Pawnee County
1	Physical therapy provider
1	Durable medical equipment provider
6	Mental health/Behavioral health providers
1	Community service provider
4	Pharmacies

In addition to examining the total population trends of the medical service areas, it is important to understand the demographics of those populations. Table 3 displays trends in age groups for the primary and secondary medical service areas as well as Pawnee County in comparison to the state of Oklahoma. Overall, the over 65 age group has experienced an increase in population across most geographies from the 2010 Census to the latest, 2009-2013 American Community Survey. This cohort accounted for 13.8 percent of the total population at the state level. In terms of the medical service areas, this age group accounted for 16.8 percent of the primary medical service area, 16.3 percent of the secondary medical service area, and 16.9 percent of the population of Pawnee County. The 45-64 age group accounts for the largest share of the population in the primary (27.4%) and secondary (27.6%) service areas and Pawnee County (28.7%). This is compared to the state share of 25.5 percent of the total population.

**Table 3. Percent of Total Population by Age Group for Cleveland Area Hospital Medical Service Areas, Pawnee County and Oklahoma**

Age Groups	Primary Medical Service Area	Secondary Medical Service Area	Pawnee County	Oklahoma
<b>2010 Census</b>				
0-14	20.0%	20.8%	20.2%	20.7%
15-19	6.7%	7.4%	6.9%	7.1%
20-24	5.0%	5.0%	4.8%	7.2%
25-44	24.7%	22.4%	22.9%	25.8%
45-64	28.4%	27.8%	28.7%	25.7%
65+	<u>15.1%</u>	<u>16.7%</u>	<u>16.4%</u>	<u>13.5%</u>
Totals	100.0%	100.0%	100.0%	100.0%
Total Population	24,936	5,750	16,577	3,751,351
<b>09-13 ACS</b>				
0-14	19.3%	20.5%	20.1%	20.7%
15-19	6.3%	7.0%	6.9%	6.9%
20-24	5.4%	3.7%	4.8%	7.3%
25-44	24.8%	24.9%	22.6%	25.8%
45-64	27.4%	27.6%	28.7%	25.5%
65+	<u>16.8%</u>	<u>16.3%</u>	<u>16.9%</u>	<u>13.8%</u>
Totals	100.0%	100.0%	100.0%	100.0%
Total Population	24,927	5,846	16,592	3,785,742

SOURCE: U.S. Census Bureau, Decennial Census data for 2010 and American Community Survey data for 2009-2013 (www.census.gov [July 2015]).

Changes in racial and ethnic groups can impact the delivery of healthcare services, largely due to language barriers and dramatically different prevalence rates for specific diseases, such as diabetes. A noticeable trend in Oklahoma is the growth in the Hispanic origin population. In 2010, those of Hispanic origin accounted for 8.9 percent of the total state

population. The latest American Community Survey data of 2009-2013 suggest that this population group has experienced an increase to 9.1 percent of the total population. This trend is evident in Pawnee County and both medical service areas. The share of the population identified as of Hispanic Origin accounted for 2.1 percent of the primary medical service area's population in 2009-2013 and 3.5 percent of the secondary medical service area during the same time period. The Hispanic Origin population accounted for 2.3 percent of the total population from 2009-2013 in Pawnee County. A more notable trend in Pawnee County is the share of Native American population. This cohort accounted for 9.9 percent of the population in Pawnee County compared to 7.0 percent at the state level.

**Percent of Total Population by Race and Ethnicity for Cleveland Area Hospital Medical  
Service Areas, Pawnee County and Oklahoma**

Race/Ethnic Groups	Primary Medical Service Area	Secondary Medical Service Area	Pawnee County	Oklahoma
<b>2010 Census</b>				
White	80.3%	76.9%	80.6%	72.2%
Black	2.4%	19.4%	0.7%	7.4%
Native American <sup>1</sup>	10.1%	15.7%	11.6%	8.6%
Other <sup>2</sup>	1.1%	1.8%	0.9%	5.9%
Two or more Races <sup>3</sup>	6.2%	5.6%	6.2%	5.9%
Hispanic Origin <sup>4</sup>	2.4%	4.2%	2.0%	8.9%
Total Population	24,936	5,750	16,577	3,751,351
<b>09-13 ACS</b>				
White	79.4%	77.5%	80.4%	73.5%
Black	2.9%	1.3%	1.0%	7.2%
Native American <sup>1</sup>	8.7%	12.9%	9.9%	7.0%
Other <sup>2</sup>	1.0%	0.3%	0.8%	4.5%
Two or more Races <sup>3</sup>	8.0%	7.9%	8.0%	7.8%
Hispanic Origin <sup>4</sup>	2.1%	3.5%	2.3%	9.1%
Total Population	24,927	5,846	16,592	3,785,742

SOURCE: U.S. Census Bureau, Decennial Census data for 2010 and American Community Survey data for 2009-2013 (www.census.gov [July 2015]).

<sup>1</sup> Native American includes American Indians and Alaska Natives.

<sup>2</sup> Other is defined as Asian Americans, Native Hawaiians, Pacific Islanders and all others.

<sup>3</sup> Two or more races indicate a person is included in more than one race group.

<sup>4</sup> Hispanic population is not a race group but rather a description of ethnic origin; Hispanics are included in the five race groups.

## **Summary of Community Meetings**

Cleveland Area Hospital hosted four community meetings between August 5, 2015 and September 22, 2015. The Oklahoma Office of Rural Health facilitated these meetings. Summaries of the information presented at each meeting are included below in chronological order.

Community members in attendance at these meetings included:

- Cleveland Area Hospital representatives
- Pawnee County Health Department
- Oklahoma Turning Point
- Local physician's office
- Local electric cooperative
- Retired individuals
- Cleveland Chamber of Commerce

Average attendance at the community meetings was about 10 community members. Community members were made aware of the Community Health Needs Assessment meetings from flyers, newspaper ads, and Facebook. Individual invitations were made by in person visits, email and announcement during staff meetings, board meetings, and civic organization meetings such as Rotary. The hospital made significant efforts to reach a diverse and representative population of the medical service area and patients served including low income and racially diverse populations. Representatives from the public health sector were included to provide insight into what they see from a public health and underserved population perspective of community needs.

### **Economic Impact and Community Health Needs Assessment Overview, August 5, 2015**

A meeting was held to discuss the economic impact of the health sector and explain the process and need for the Community Health Needs Assessment. The economic impact of the health sector was reviewed at this meeting (and is summarized below).

Table 5 below summarizes the overall economic impact of the health sector on the Pawnee County, Oklahoma economy. A form requesting information was sent to all health care providers in the medical service area. Local providers were asked to share their employment levels and of those employees how many were physicians/optometrists/dentists/pharmacists/etc. When available, payroll information was also collected from the establishments. When payroll information was not available, payroll was estimated using state level averages from the Bureau of Labor Statistics.

The health sector in the Cleveland Area Hospital medical service area employs 792 FTE individuals. After applying a county-specific employment multiplier to each respective sector, there is a total employment impact of 948 FTE employees. The same methodology is applied to

income. The local health sector has a direct income impact of over \$43.3 million. When the appropriate income multiplier is applied, the total income impact is over \$49.8 million. The last two columns examine the impact this has on the retail sector of the local community. Recent data suggest that just 24.9% of personal income in Pawnee County will be spent on taxable goods and services locally. Therefore, if we just examine the impact made on retail from those employed in the health sector, this would account for over \$12.4 million spent locally, generating \$124,055 on a 1% tax. A copy of the meeting materials that were distributed can be found in Appendix C.

At the conclusion of the meeting, community members were asked to identify their top health concerns based on the demographic information presented and their local expertise. The following concerns were identified:

- Dialysis
- Eye clinic back at the hospital- local ophthalmologist (was available once a week)
- Help patients with daily living- transportation to doctor's appointments, assistance filling out papers/forms, visiting in homes, patient advocate
- Offer Weight Loss Institute again
- Physical condition of facility



**Table 5. Cleveland Area Hospital Medical Service Area Health Sector Impact on Employment and Income, and Retail Sales and Sales Tax**

Health Sectors	Employment			Income			Retail	1 Cent
	Employed	Multiplier	Impact	Income	Multiplier	Impact	Sales	Sales Tax
Hospitals	97	1.26	122	\$3,654,531	1.16	\$4,251,901	\$1,058,723	\$10,587
Physicians, Dentists, & Other Medical Professionals	234	1.23	288	\$16,355,785	1.16	\$19,020,115	\$4,736,009	\$47,360
Nursing Homes	214	1.14	244	\$8,685,744	1.13	\$9,855,913	\$2,454,122	\$24,541
Home Health	89	1.08	96	\$4,416,341	1.13	\$5,010,926	\$1,247,721	\$12,477
Other Medical & Health Services	111	1.27	141	\$5,687,724	1.14	\$6,481,776	\$1,613,962	\$16,140
Pharmacies	<u>47</u>	1.21	<u>57</u>	<u>\$4,550,256</u>	1.14	<u>\$5,200,620</u>	<u>\$1,294,954</u>	<u>\$12,950</u>
<b>Total</b>	<b>792</b>		<b>948</b>	<b>\$43,350,381</b>		<b>\$49,821,250</b>	<b>\$12,405,491</b>	<b>\$124,055</b>

SOURCE: 2013 IMPLAN database, Minnesota IMPLAN Group, Inc.; Local data for employment, employee compensation and proprietor's income; income estimated based on state average incomes if local data not available

\* Based on the ratio between Pawnee County retail sales and income (24.9%) – from 2014 County Sales Tax Data and 2013 Personal Income Estimates from the Bureau of Economic Analysis.

## **Health Data, August 18, 2015**

A community meeting was held August 18, 2015, to examine various sources of local health data. Various sources of health data were examined including data from the County Health Rankings and Roadmaps Program through the University of Wisconsin Population Health Institute, and the Robert Wood Johnson Foundation and the 2014 Oklahoma State of the State's Health Report compiled by the Oklahoma State Department of Health. The County Health Rankings program evaluates and ranks counties based on two distinct areas: Health Factors and Health Outcomes. Along with these two areas counties receive an overall rank within their state; therefore 1=best and 77=worst.

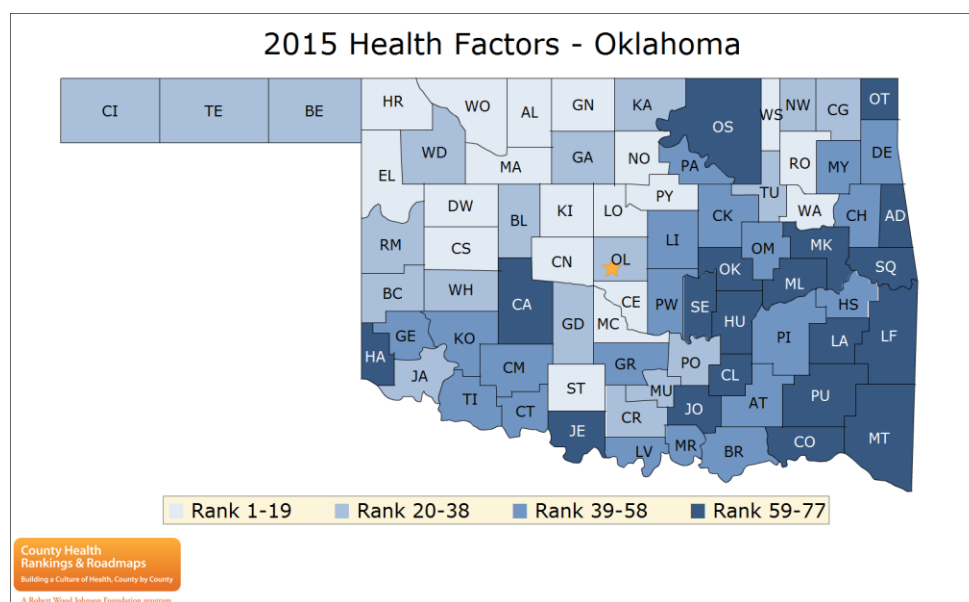
Health factors, considered tomorrow's health, are comprised of health behaviors (rank: 31), clinical care (rank: 33), social and economic factors (rank: 39), and physical environment (rank: 66). Pawnee County's overall health factors rank is 40. This suggests, in general, the health status of Pawnee County residents is somewhat comparable to that of neighboring counties. Areas of concern include Pawnee County's smoking rate, adult obesity rate, physical and inactivity are all less desirable than the top U.S. performers. Also, the rate of uninsured individuals, the primary care physician rate per population, and rate of mammography screening of Medicare patients are all areas of concern in Pawnee County. In terms of physical environment, the share of the county population exposed to water with a health related violation was higher than the top performers and Oklahoma. All health factors variables are presented in Table 6 along with Pawnee County specific data, the top U.S. performers, and the state average. The bold italicized categories are the areas identified by the County Health Rankings and Roadmaps as areas to explore (generally where Pawnee County ranks very poorly compared to the national benchmark).

**Table 6. Health Factors (Overall Rank 40)**

Category (Rank)	Pawnee County	Error Margin	Top U.S. Performers	Oklahoma
<b>Health Behaviors (31)</b>				
<i>Adult Smoking</i>	<b>25%</b>	<b>18-33%</b>	<b>14%</b>	<b>24%</b>
<i>Adult Obesity</i>	<b>35%</b>	<b>29-42%</b>	<b>25%</b>	<b>32%</b>
Food Environment Index	7.7		8.4	6.7
<i>Physical Inactivity</i>	<b>36%</b>	<b>29-43%</b>	<b>20%</b>	<b>30%</b>
Access to Exercise Opportunities	66%		92%	72%
Excessive Drinking			10%	13%
Alcohol-Impaired Driving Deaths	24%		14%	33%
Sexually Transmitted Infections	334		138	442
Teen Birth Rate	52	45-59	20	54
<b>Clinical Care (33)</b>				
<i>Uninsured</i>	<b>22%</b>	<b>20-24%</b>	<b>11%</b>	<b>21%</b>
<i>Primary Care Physicians</i>	<b>3,295:1</b>		<b>1,045:1</b>	<b>1,567:1</b>
Dentists	1,270:1		1,377:1	1,805:1
Mental Health Providers	751:1		386:1	285:1
Preventable Hospital Stays	69	57-81	41	71
Diabetic Screening	78%	67-88%	90%	78%
<i>Mammography Screening</i>	<b>48%</b>	<b>38-59%</b>	<b>71%</b>	<b>55%</b>
<b>Social &amp; Economic Factors (39)</b>				
High School Graduation	86%			78%
Some College	53%	47-59%	71%	58%
Unemployment	6.2%		4.0%	5.4%
Children in Poverty	24%	17-30%	13%	24%
Income Inequality	4.2	3.6-4.7	3.7	4.6
Children in Single-Parent Household	33%	27-39%	20%	24%
Social Associations	13.4		22.0	11.8
Violent Crime Rate	189		59	468
<i>Injury Deaths</i>	<b>158</b>	<b>131-185</b>	<b>50</b>	<b>86</b>
<b>Physical Environment (66)</b>				
Air-Pollution- Particulate Matter	10.1		9.5	10.3
<i>Drinking Water Violations</i>	<b>55%</b>		<b>0%</b>	<b>23%</b>
Severe Housing Problems	12%	9-14%	9%	14%
Driving Alone to Work	81%	80-83%	71%	82%
Long Commute- Driving Alone	49%	43-54%	15%	25%

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

The following figure depicts each county's rank by shade. Pawnee County's overall health factors ranking is less favorable than Payne and Noble Counties, and is more favorable than Osage County. Pawnee and Creek Counties have comparable rankings.



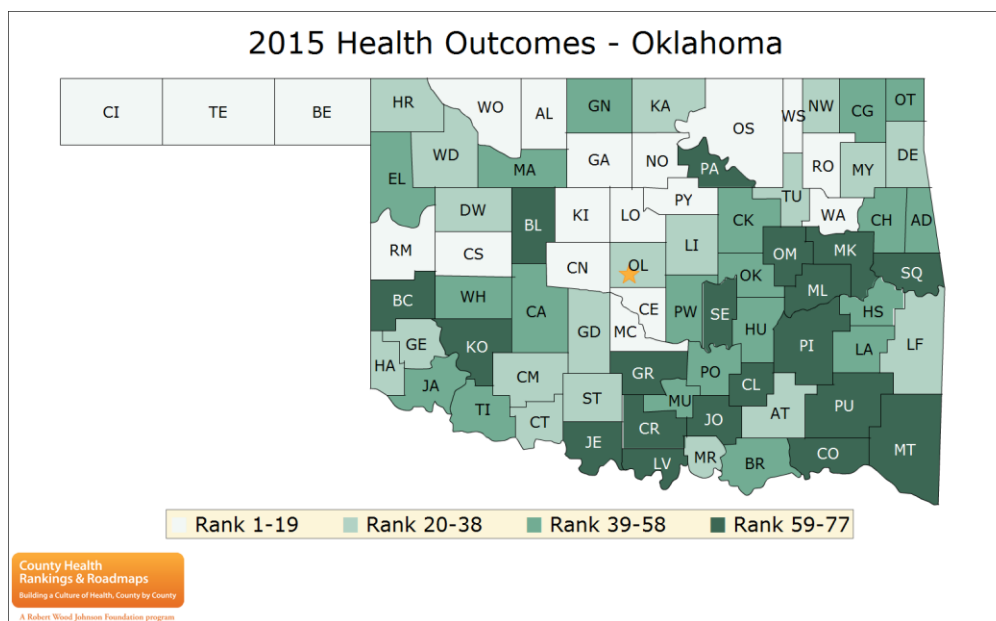
In terms of health outcomes, considered, today's health, Pawnee County's ranking is 64th in the state. Health outcomes are comprised of two areas: length of life and quality of life. The variables for each of these sections are presented in Table 7.

**Table 7. Health Outcomes (Overall Rank 64)**

Category (Rank)	Pawnee County	Error Margin	Top U.S. Performers	Oklahoma
<b>Length of Life (68)</b>				
Premature Death	12,428	10,397-14,458	5,200	9,121
<b>Quality of Life (36)</b>				
Poor or Fair Health	19%	14-26%	10%	19%
Poor Physical Health Days	5.2	3.4-7.0	2.5	4.3
Poor Mental Health Days	4.6	3.1-6.1	2.3	4.2
Low Birth Weight	7.2%	5.9-8.6%	5.9%	8.3%

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

The following figure shows county health outcomes rankings by shades. Pawnee County's ranking is less favorable than all of the surrounding counties. All meeting materials distributed at this meeting can be found in Appendix D.



At the conclusion of the meeting, community members were once asked to identify what health concerns stand out in the data the presented and their local expertise. The health concerns identified include:

- Surgery offered again: in terms of specialists, already offers cardiologist, urologist, visits for patients
  - Working with surgeon in Cushing
- Look into Healthy Community TSET funding- smoker, obesity, physical inactivity
  - OSU Prevention grant funds for Pawnee County- prescription drug abuse, underage drinking
  - Pawnee Nation offering services/diabetes education to greater community
- Prescription drug abuse

### **Community Survey Methodology and Results, June 26- September 15, 2015**

A survey was designed to gauge hospital usage, satisfaction, and community health needs. The survey was available in both paper and web format. The survey was made available at provider offices in Cleveland, Hominy and Pawnee. The survey was also distributed at the Pawnee County Health Department, senior centers in Cleveland, Hominy, Westport, Oilton, and Mannford as well as Baptist Village. Indian Electric Cooperative also had surveys available. Surveys were distributed at civic meetings such as Rotary, Chamber of Commerce, and auxiliary. The survey link was also posted on the hospital's Facebook page. Surveys were also distributed

at the first community meeting on August 5, 2015. Community members in attendance also received a follow-up email with a PDF copy of the survey and the electronic survey link. A copy of the survey form and results can be found in Appendix E. Community members were asked to return their completed surveys to Cleveland Area Hospital.

The survey ran from June 26, 2015 to August 19, 2015. A total of 305 surveys from the Cleveland Area Hospital medical service area were completed. Of the surveys returned, 207 were electronic responses, and 98 were hard copy surveys. The survey results were presented at the September 15, 2015, community meeting.

Table 8 below shows the survey respondent representation by zip code. The largest share of respondents was from the Cleveland (74020) zip code with 172 responses or 56.4 percent of the total. Hominy (10.5%) and Pawnee (10.2%) followed.

**Table 8. Zip Code of Residence**

Response Category	No.	%
74020- Cleveland	172	56.4%
74035- Hominy	32	10.5%
74058- Pawnee	31	10.2%
74052- Oilton	11	3.6%
74038- Jennings	9	3.0%
74044- Mannford	8	2.6%
74081- Terlton	7	2.3%
74063- Sand Springs	6	2.0%
74034- Hallett	5	1.6%
74054- Osage	4	1.3%
74045- Maramec	2	0.7%
74085- Yale	2	0.7%
74048- Nowata	2	0.7%
74133- Tulsa	1	0.3%
74421- Beggs	1	0.3%
74920- Dewey	1	0.3%
74055- Owasso	1	0.3%
74066- Sapulpa	1	0.3%
74104- Tulsa	1	0.3%
74114- Tulsa	1	0.3%
74059- Perkins	1	0.3%
74047- Mounds	1	0.3%
74056- Pawhuska	1	0.3%
74021- Collinsville	1	0.3%
No Response	3	1.0%
Total	305	100.0%

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

***Primary Care Physician Visits***

- 52.8% of respondents had used a primary care physician in the Cleveland service area during the past 24 months
- 90.1% of those responded being satisfied
- Only 52 respondents or 17.0% believe there are enough primary care physicians practicing in Cleveland

- 66.2% of the respondents would consider seeing a midlevel provider for their healthcare needs
- 73.1% responded they were able to get an appointment with their primary care physician when they needed one

### ***Specialist Visits***

Summary highlights include:

- 61.3% of all respondents report some specialist visit in past 24 months
- Most common specialty visited are displayed in Table 9
- Only 5% of specialist visits occurred in Cleveland

**Table 9. Type of Specialist Visits**

Type of Specialist	No.	Percent
<b><i>Top 5 Responses</i></b>		
Orthopedist/Orthopedic Surg. (3 visits in Cleveland)	49	18.4%
Cardiologist (3 visits in Cleveland)	43	16.2%
Neurologist/Neurosurgeon (0 visits in Cleveland)	21	7.9%
Nephrologist (0 visits in Cleveland)	16	6.0%
OB/GYN (0 visits in Cleveland)	15	5.6%
All others (7 visits in Cleveland)	<u>122</u>	<u>45.9%</u>
<b>Total</b>	<u>266</u>	<u>100.0%</u>

Some respondents answered more than once.

### ***Hospital Usage and Satisfaction***

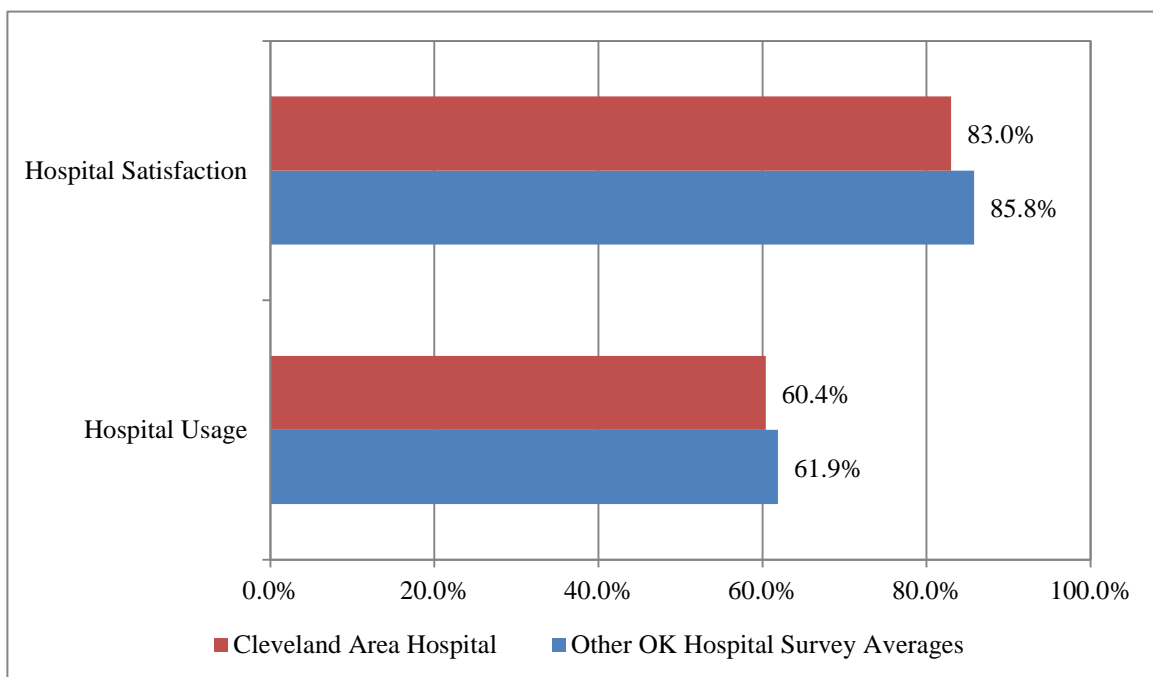
Survey highlights include:

- 71.1% of survey respondents that have used hospital services in the past 24 months used services at Cleveland Area Hospital
  - o Hillcrest Medical Center, all Tulsa locations (8.8%), St. John Health System, all locations (7.4%), and St. Francis Hospital, Tulsa (4.9%) followed



- The most common response for using a hospital other than Cleveland Area Hospital was availability of specialty care (including surgery) (32.6%) followed by physician referral (24.0%)
- The usage rate of 60.4% was lower than the state average of 61.9% for usage of other rural Oklahoma hospitals surveyed
- 83.0% of survey respondents were satisfied with the services received at Cleveland Area Hospital
  - This is below the state average for other hospitals (85.8%)
- Most common services used at Cleveland Area Hospital:
  - Emergency Room (29.1%)
  - Diagnostic Imaging (including mammography) (26.9%)
  - Laboratory (20.0%)

**Figure 2. Summary of Hospital Usage and Satisfaction Rates**



### ***Local Healthcare Concerns and Additional Services***

Survey respondents were asked what concerns them most about healthcare in their community. The most common response was the hospital situation/possibility of losing hospital/hospital management (11.3%). Lack of providers/retaining providers/qualified providers followed with 10.1 percent of the survey responses. Table 10 displays all responses and the frequencies.

**Table 10. Top Concerns in Cleveland Medical Service Area**

Response Category	No.	%
Hospital situation/Possibility of losing hospital/Hospital management	38	11.3%
Lack of providers/Retaining providers/Qualified providers	34	10.1%
No Concerns/ Receive good care/Don't Know	32	9.5%
Quality of care	30	8.9%
Long wait to see physician/Get an appointment	16	4.7%
Access to specialty care/Pediatric services/Lack of specialists	13	3.9%
Emergency care/Lack of emergency care/Lack of care in Pawnee	8	2.4%
Cost of care	7	2.1%
Level of care provided at hospital	7	2.1%
Need for surgeries/Surgical staff	5	1.5%
Rude staff/Lack of empathy for patients	5	1.5%
Insurance not accepted locally (Community Care, Tricare Prime)	4	1.2%
Reputation of facility	4	1.2%
Transferred to Tulsa/Travel to Tulsa for care	3	0.9%
Continuity of care	2	0.6%
Older equipment at hospital/Quality of equipment	2	0.6%
Cleaner facility/Quality of facility	2	0.6%
Time doctors spend with patients	2	0.6%
Distance to services	2	0.6%
Government impact on healthcare	2	0.6%
Not enough services	2	0.6%
Complacency of healthcare community	1	0.3%
Education for staying up to date on latest trends in healthcare	1	0.3%
Heart care	1	0.3%
Transportation	1	0.3%
Public service	1	0.3%
Not enough focus on care for young families	1	0.3%
Late and poor billing procedure	1	0.3%
Care for the elderly	1	0.3%
Healthcare for the poor	1	0.3%
Poverty	1	0.3%
More social services staff	1	0.3%
More organization at hospital	1	0.3%
No attending physician at hospital	1	0.3%
New patient appointments	1	0.3%
Age of facility	1	0.3%
Phones not always answered	1	0.3%
Patients using ER for nonemergencies	1	0.3%
Too many prescriptions	1	0.3%
No response	99	29.4%
Total	337	100.0%

Survey respondents also had the opportunity to identify what additional services they would like to see offered at Cleveland Area Hospital. The most common response was specialists (19.0%). Within this category, OB/GYN had 9 responses, orthopedist had 8

responses, and otolaryngologist had 7 responses to make up the top three specialties in that category. Table 11 displays the full listing of responses.

**Table 11. Additional Services Survey Respondents Would Like to See Offered at Cleveland Area Hospital**

Response Category	No.	%
Specialists: OB/GYN (9); Orthopedist (8); Otolaryngologist (7); More specialists in general (6); Cardiologist (6); Dermatologist (6); Pain Management (4); Podiatrist (4); Pediatrician (4); Nephrologist (2); Neurologist (2); Urologist (2); Ophthalmologist (2); Oncologist (2); Psychiatrist (1); Psychologist (1)	66	19.0%
No additional services/Satisfied with what is available/Don't know	50	14.4%
Dialysis	15	4.3%
Urgent care/After hours care	8	2.3%
Improved quality of care	7	2.0%
More Services/Anything that will benefit community	6	1.7%
More primary care physicians	6	1.7%
Surgeries/Expand surgical services/Expand operating room	4	1.2%
Cataract surgery/Improved ophthalmology services	3	0.9%
Quality leadership	2	0.6%
Weight Management	2	0.6%
Fitness facility	2	0.6%
Orthodontics	2	0.6%
MRI	2	0.6%
Mammography	2	0.6%
On-site daycare for employees	2	0.6%
More diagnostic testing/Faster lab results	2	0.6%
Affordable care/Accept insurance payment without co-pay/Flex rates in ER	2	0.6%
More awareness/Health Fair	2	0.6%
Sports medicine	1	0.3%
Accept more insurance (Community Care)	1	0.3%
Women's health	1	0.3%
Medication management	1	0.3%
Upgrade facilities	1	0.3%

**Table 11. Additional Services Survey Respondents Would Like to See Offered at Cleveland Area Hospital, Continued**

Response Category	No.	%
Cancer treatment	1	0.3%
Trauma care	1	0.3%
WC therapy	1	0.3%
Improved emergency services	1	0.3%
Cardio rehabilitation	1	0.3%
Physician covering emergency department	1	0.3%
Improve efficiency at hospital	1	0.3%
Patient advocate services for patients who need additional assistance outside of the clinical setting	1	0.3%
Dental services added to the free clinic	1	0.3%
Water therapy	1	0.3%
OPAT	1	0.3%
Anti-venom	1	0.3%
Patient education/Preventative health programs	1	0.3%
More services for Native Americans	1	0.3%
Sports medicine	1	0.3%
Diabetic counseling	1	0.3%
Free health programs	1	0.3%
Children's facility	1	0.3%
BMI measuring	1	0.3%
Whirlpool bathtub	1	0.3%
More long term care	1	0.3%
Group therapy	1	0.3%
Seen by primary care physician rather than hospitalist	1	0.3%
No response	134	38.6%
<b>Total*</b>	<b>347</b>	<b>100.0%</b>

### **Primary Care Physician Demand Analysis, September 15, 2015**

A demand analysis of primary care physicians was completed for the zip codes that comprise the Cleveland primary and secondary medical services areas. This analysis examined average primary care physician visit rates by gender and by age groups. Once age- and gender-specific coefficients were applied, total primary care physician visit numbers were calculated by service area. Table 12 displays potential primary care physician rates by shares of service area. For example, if 90% of residents in the primary medical services area and 10% of residents in the secondary medical services area utilize services of primary care physicians in the Cleveland medical services area, a total of 38,738 annual visits would occur. This would suggest that the

Cleveland medical services area would need 9.3 FTE primary care physicians to meet the needs of their existing population. Table 12 displays the estimated number of visits by share of medical services area.

**Table 12. Primary Care Physician Office Visits Given Usage by Local Residents in the Cleveland, Oklahoma Medical Service Area**

		Usage by Residents of Primary Service Area						
		70%	75%	80%	85%	90%	95%	100%
Usage by Residents of Secondary Service Area	5%	29,854	31,951	34,048	36,145	38,241	40,338	42,435
	10%	30,351	32,448	34,545	36,641	<b>38,738</b>	40,835	42,932
	15%	30,848	32,945	35,041	37,138	<b>39,235</b>	41,332	43,429
	20%	31,344	33,441	35,538	37,635	39,732	41,829	43,926
	25%	31,841	33,938	36,035	38,132	40,229	42,326	44,423
	30%	32,338	34,435	36,532	38,629	40,726	42,823	44,920
	35%	32,835	34,932	37,029	39,126	41,223	43,320	45,417
	40%	33,332	35,429	37,526	39,623	41,720	43,817	45,914
	45%	33,829	35,926	38,023	40,120	42,217	44,314	46,410
	50%	34,326	36,423	38,520	40,617	42,714	44,810	46,907

If 90% primary medical service area and 10 to 15% secondary medical service area, then the usage would be: 38,738 to 39,235 total primary care physician office visits in the Cleveland area for an estimated 9.3 to 9.4 Total Primary Care Physicians.

(Based on 83.7 average weekly primary care physician visits with a 50 week year)

At the conclusion of the meeting, community members were once again asked what stood out to them from the survey results and physician demand analysis as health concerns. The concerns identified were:

- More primary care physicians

Increase continuity of care by seeing local providers

## Community Health Needs Implementation Strategy

During the September 22, 2015, meeting, hospital representatives and community members discussed how these concerns can be addressed. The following lists the concerns along with steps the hospital and community plan to take to remedy the situation.

- Outreach and education covering the importance of health screenings (mammography, pap), nutrition education, weight loss, prevention, health education in general, prescription drug assistance- This collective item was mentioned several times throughout the meeting as a need that encompasses previous concerns mentioned. Current outreach and education in the community include:
  - Doc talks- reach is mainly senior population,
  - Body image, provided to junior high girls through weight loss management and Cleveland counseling
  - Coaches clinic, education for health and exhaustion, physical strains and sprains, CPR certification, stretching to prevent, concussion education- target was public school coaches, trainers, and volunteers
  - School physicals for athletics, providers donate time and support staff
  - Drug testing for Cleveland schools, for extracurricular sports offered through the hospital
  - When discussing other outreach and methods to addressing the need for education, the following activities/programs were mentioned as existing resources:
    - Regular physician visits can also help
    - 
    - Health Department does have programming around nutrition, bullying, teen pregnancy,
      - CATCH program available for after school program, Health Dept. will provide training to volunteers, can be incorporated in the public schools
  - The following three items were mentioned as ideal ways to address and reach populations in need of health education:
    - Reaching out to students in the 6<sup>th</sup> grade cafeteria, for education, mentoring, start outreach at this age group
    - After school program to incorporate education and outreach
    - Look into mentoring program for employees, volunteers, and retirees in the community (similar to the Big Brothers/Big Sisters program)
- Diabetes- diabetes education, management, prevention- This items was identified through the health indicators and data. It was also mentioned as a need seen by local providers. Currently, the hospital does provide nutrition education available, but it was mentioned that there is a great need to have a registered educator who can assist with physical activity and diet. While discussing availability of an educator, it was mentioned that a non-clinical person become certified. It was also noted to look into collaboration opportunities with a larger entity to provide diabetes education/management.
- Transportation- for aged, disabled, and indigent, access to care and services outside of community, dialysis, specialty clinic- This item was mentioned as a barrier to care for many residents.

- Sooner Ride is available for community members, geropsych unit does pick up patients, some churches pick up patients for surgeries and possibly other appointments
  - Look into grant funding for transportation available in community or look to find a partnering entity (collaboration with churches was noted)
- Substance abuse/Mental health- This concern was noted as a need in the community as seen by providers. The hospital is part of and promotes the mental health network which is a collaboration of local mental health providers to create a more streamlined approach to treating patients. The hospital does provide drug testing for schools. One barrier that was mentioned was that there are residents needing help, but they are not seeking assistance. Mental health and counseling in schools was noted as a need in the community and to see what is currently available to public schools.
- More providers- This item was mentioned as a way to alleviate transportation issues by having additional providers in the community, residents wouldn't have to travel to Tulsa or other areas for physician visits. Next steps for further identifying the need would be to closely examine the number of patients each local provider currently sees. Also, it was mentioned in the community meeting that some residents could be leaving the community for care due to their insurance and HMO requirements.

## **Community Health Needs Assessment Marketing Plan**

The hospital will make the Community Health Needs Assessment Summary and Implementation Strategy Plan available upon request at Cleveland Area Hospital, and a copy will be available to be downloaded from the hospital's website ([www.clevelandareahospital.com](http://www.clevelandareahospital.com)). This document will also be available on the OSU Center for Rural Health blog site: (<http://osururalhealth.blogspot.com/p/chna.html>).

## Appendix A- Hospital Services/Community Benefits



### Overview of Hospital Services/Community Benefits

Cleveland Area Hospital is a 14-bed, critical access hospital located at 1401 West Pawnee Street in Cleveland, Oklahoma, approximately 35 miles northwest of Tulsa. The hospital is a non-profit organization owned and operated by the Cleveland Area Hospital Trust Authority, a civic association whose Board of Directors is composed of members of the local community. In addition to 24-hour Emergency Room services, the hospital also offers hospitalist services, 24-hour lab and x-ray services, physical therapy and rehabilitation, swing bed services, outpatient geriatric psychological therapy, therapeutic counseling, health screenings.

### HOSPITAL SERVICES

- ✚ Acute Inpatient Care
- ✚ Hospitalist Program
- ✚ 24-Hour Emergency Room Services
- ✚ 24-Hour Lab
- ✚ 24-Hour Radiology
- ✚ MRI: Magnetic Resonance Imaging
- ✚ CT Scan
- ✚ Ultrasound
- ✚ DEXA Scan: Bone Density
- ✚ Mammography
- ✚ EEG Services (provided in partnership with NeuroLinks Group of Tulsa)
- ✚ Financial Counseling
- ✚ Health Screenings
- ✚ Nursing Services: IV Treatments, etc.
- ✚ Blood banking
- ✚ Dietary Counseling: Classes for Diabetics
- ✚ Physical Therapy: Our rehabilitative services center is fully equipped with exercise & conditioning equipment, private treatment rooms, and individual programs.
- ✚ Occupational Therapy
- ✚ Speech Pathology
- ✚ Senior Life Services (Outpatient Geriatric Psychological Therapy)
- ✚ Swing Bed/Skilled Nursing Facility: Swing Bed services are for those who need longer-term rehabilitation and skilled nursing following an acute care hospital stay. Services include activity programs, social services, skilled nursing, therapy & rehabilitation, and physician-coordinated care.



## **SPECIALTY CLINICS**

■ **Cleveland Area Counseling:** Individual and private therapeutic counseling services by a by an experienced and confidential LCSW.

■ **Infusion and Nurse Care Clinic**

### **Community Activities:**

Rotary  
Health Fair  
Holiday Events  
Parades  
Adopt a Child/Family  
Local Festivals  
Chamber of Cleveland  
Scholarships provided  
Diabetic Classes  
Coaches Clinic  
Hospital Auxiliary  
Monthly Senior Center visits in 6 Locations  
Health Awareness Monthly Initiatives  
Partnership with area Vo-Tech for student clinicals

### **Internal Hospital Activities**

Activities Room  
Hospital website  
Hospital facebook  
Training for medical students, nursing students, etc.  
Memberships- professional, state and local (Oklahoma Hospital Association) OHA  
Governance- board of managers, advisory board  
Staff- birthday celebrations, holiday celebrations, health and awareness activities,  
Hospital Week, Nurses Appreciation Week.  
Advertisement- phone book, flyers, newspaper ads, community involvement

## Appendix B Community Meeting Attendees

### Meeting #1 Economic Impact and Process Overview

5-Aug-15

First

Name	Last Name	Title	Organization
Tammy	Lowery	Admin. Assistant	Cleveland Area Trust
Suellen	Moss	Asst. HR Director	Cleveland Area Trust
Brittany	Gray	Community Outreach	Cleveland Area Trust
Lisa	Dietz	Program Director	Sr. Life CAH
Donna	Rutherford	CP IEC Roundput	
Clara	Eulert	Member Relations	Indian Electric Coop
		Exec. Director Chamber of	Cleveland Chamber of
Mary	Johnson	Commerce	Commerce
Julie	Young		
Isabel	Osterhout		
Janet	Cornstalk		
Dan	Couleter		
Karen	Johnson		
Glen	Johnson		
Alene	Sparks		

### Meeting #2 Health Indicators and Outcomes

18-Aug-15

First

Name	Last Name	Title	Organization
		Exec. Director Chamber of	Cleveland Chamber of
Mary	Johnson	Commerce	Commerce
Edred	Benton	COO	Cleveland Area Hospital
Maggie	Jackson	Turning Point Consultant	OK State Dept. of Health
Eddie	Molder		
Clara	Eulert	Member Relations	Indian Electric Coop
Barbara	Spess	Board Member	Cleveland Area Hospital
Karen	Johnson	Retired	
Glen	Johnson	Retired	
Jill	Bozeman	Marketing	Cleveland Area Hospital

Cleveland Community Health Needs Assessment  
Meeting #3 Survey Results and Primary Care Physician Demand Analysis  
15-Sep-15

First Name	Last Name	Title	Organization
Clara	Eulert	Member Relations	Indian Electric Coop Pawnee County Health
Shelly	Long	RN	Dept.
Catherine	Carter	CMM Community Outreach and	Cleveland Area Hospital
Jill	Bozeman	Education	Cleveland Area Hospital
Dan	Coulter		
Glen	Johnson		
Vonita	Thomas		
Elgin	Thomas		
Hardy	Cornstock		
Janet	Cornstock		
Joy	Ennis		
Elaine	Williams		
Don	Williams		

Cleveland Community Health Needs Assessment  
Meeting #4 Health Concern Prioritization and Implementation  
22-Sep-15

First Name	Last Name	Title	Organization
Clara	Eulert	Member Relations	Indian Electric Coop
Catherine	Carter	CMM Community Outreach and	Cleveland Area Hospital
Jill	Bozeman	Education	Cleveland Area Hospital
Edred	Benton	COO	Cleveland Area Hospital
Maggie	Jackson	Public Health Consultant	OK Dept. of Health, Turning Point
Lee	Bayouth	HR	Cleveland Area Hospital
Linda	Anderson	CMA CST	Dr. Perry Evans
Janice	Evans	RN	Dr. Perry Evans
Dr. Perry	Evans, Jr.	D.O.	Dr. Perry Evans



## Appendix C- Meeting 1 Materials, August 5, 2015

### The Economic and Demographic Analysis of the Cleveland Area Hospital Medical Service Area

#### *As part of the Community Health Needs Assessment* Economic and Social Indicators for Pawnee County:

##### Economic Data

2013 Per Capita Income <sup>1</sup>	\$33,519 (52nd highest in state)
Employment (May 2015, preliminary) <sup>2</sup>	7,276 (4.3% from 2014)
Unemployment (May 2015, preliminary) <sup>2</sup>	426 (9.5% from 2014)
Unemployment rate (May 2015, preliminary) <sup>2</sup>	5.5% (56th lowest in state)
2013 Poverty rate <sup>3</sup>	15.4% (27th lowest in state)
2013 Child poverty rate <sup>3</sup>	23.6% (34th lowest in state)
2013 Transfer Payments <sup>1</sup>	\$150,560,000 (27.2% of total personal income, 49th lowest in state)
2013 Medical Benefits as a share of Transfer Payments <sup>1</sup>	42.5% (39th lowest in state)

<sup>1</sup>Bureau of Economic Analysis, Regional Data, 2013, <sup>2</sup>Bureau of Labor Statistics 2013-2014, <sup>3</sup>U.S. Census Bureau, Small Area Income and Poverty, 2013

##### Education Data

At Least High School Diploma <sup>1</sup>	87.4% (16th highest in state)
Some College <sup>1</sup>	45.1% (47th highest in state)
At Least Bachelor's Degree <sup>1</sup>	17.0% (41st highest in state)
2012-2013 Free and Reduced Lunch Eligible <sup>2</sup>	72.8% (58th lowest in state)

<sup>1</sup>U.S. Census Bureau, American Community Survey, 2009-2013, <sup>2</sup>National Center for Education Statistics, 2012-2013

##### Payer Source Data

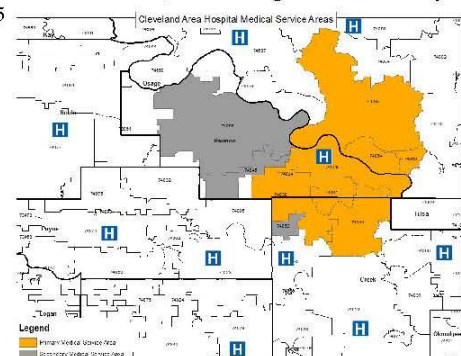
2013 Uninsured Rate (under 65) <sup>1</sup>	20.8% (32nd lowest in state)
2013 Uninsured Rate (under 19) <sup>1</sup>	12.1% (39th lowest in state)
2012 Medicare share of total population <sup>2</sup>	23.1% (55th lowest in state)
2014 Medicaid share of total population <sup>3</sup>	31.0% (44th lowest in state)

<sup>1</sup>U.S. Census Bureau, Small Area Health Insurance Estimates, 2012, <sup>2</sup>Centers for Medicare & Medicaid Services, Medicare Aged and Disabled by State and County, 2012, <sup>3</sup>Oklahoma Health Care Authority, Total Enrollment by County, 2015

##### Population (2009-2013)

Pawnee County	16,592 (0.9% from 2010)
Primary Medical Service Area	24,927 (0.0% from 2010)
Secondary Medical Service Area	5,846 (1.7% from 2010)
Oklahoma	3,785,742 (0.9% from 2010)

U.S. Census Bureau, 2009-2013 American Community Survey 2010 Decennial Census



**Percent of Total Population by Age Group for Cleveland Area Hospital Medical Service Areas, Pawnee County and Oklahoma**

Age Groups	Primary Medical Service Area	Secondary Medical Service Area	Pawnee County	Oklahoma
<b>09-13 ACS</b>				
0-14	19.3%	20.5%	20.1%	20.7%
15-19	6.3%	7.0%	6.9%	6.9%
20-24	5.4%	3.7%	4.8%	7.3%
25-44	24.8%	24.9%	22.6%	25.8%
45-64	27.4%	27.6%	28.7%	25.5%
65+	16.8%	16.3%	16.9%	13.8%
Totals	100.0%	100.0%	100.0%	100.0%
Total Population	24,927	5,846	16,592	3,785,742

SOURCE: U.S. Census Bureau, 2009-2013 American Community Survey

**Percent of Total Population by Race and Ethnicity for Cleveland Area Hospital Medical Service Areas, Pawnee County and Oklahoma**

Race/Ethnic Groups	Primary Medical Service Area	Secondary Medical Service Area	Pawnee County	Oklahoma
<b>09-13 ACS</b>				
White	79.4%	77.5%	80.4%	73.5%
Black	2.9%	1.3%	1.0%	7.2%
Native American	8.7%	12.9%	9.9%	7.0%
Other	1.0%	0.3%	0.8%	4.5%
Two or more Races	8.0%	7.9%	8.0%	7.8%
Hispanic Origin	2.1%	3.5%	2.3%	9.1%
Total Population	24,927	5,846	16,592	3,785,742

SOURCE: U.S. Census Bureau, 2009-2013 American Community Survey

For additional information, please contact:

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# Cleveland Area Hospital Economic Impact



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

Cleveland Area Hospital **directly** employs **97** people with an annual payroll of over **\$3.6 million** including benefits

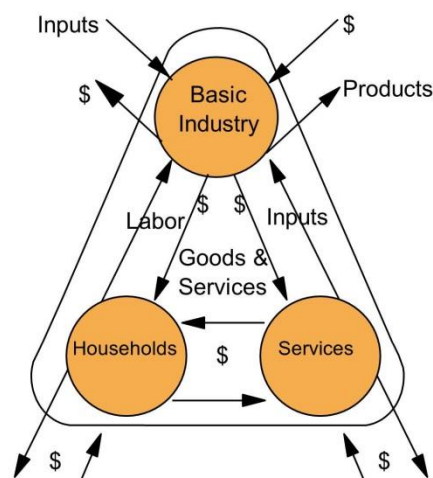
- These employees and income create an additional **25 jobs** and nearly **\$600,000** in income as they interact with other sectors of the local economy
- **Total impacts= 122 jobs and over \$4.2 million**
- Other segments of the healthcare sector (Doctors, Nurses, Pharmacies, etc.) provide another **695 jobs** and an additional **\$39.6 million** in wages
- Their interactions and transactions within the local economy create:
- **Total health sector impacts= 948 jobs and \$49.8 million (Including the hospital)**
- Over **\$12.4 million** in retail sales generated from income received by healthcare sector employees

## Healthcare and Your Local Economy:

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

## Consider what could be lost without the hospital:

- Pharmacies
- Physicians/Specialists
- Potential Retail Sales



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

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## Health Indicators and Outcomes for the Cleveland Area Hospital Medical Service Area

*As part of the Community Health Needs Assessment*

Table 1. Health Factors (Overall Rank 40)

Category (Rank)	Pawnee County	Error Margin	Top U.S. Performers	Oklahoma
<b>Health Behaviors (31)</b>				
<i>Adult Smoking</i>	25%	18-33%	14%	24%
<i>Adult Obesity</i>	35%	29-42%	25%	32%
Food Environment Index	7.7		8.4	6.7
<i>Physical Inactivity</i>	36%	29-43%	20%	30%
Access to Exercise Opportunities	66%		92%	72%
Excessive Drinking			10%	13%
Alcohol-Impaired Driving Deaths	24%		14%	33%
Sexually Transmitted Infections	334		138	442
Teen Birth Rate	52	45-59	20	54
<b>Clinical Care (33)</b>				
<i>Uninsured</i>	22%	20-24%	11%	21%
<i>Primary Care Physicians</i>	3,295:1		1,045:1	1,567:1
Dentists	1,270:1		1,377:1	1,805:1
Mental Health Providers	751:1		386:1	285:1
Preventable Hospital Stays	69	57-81	41	71
Diabetic Screening	78%	67-88%	90%	78%
<i>Mammography Screening</i>	48%	38-59%	71%	55%
<b>Social &amp; Economic Factors (39)</b>				
High School Graduation	86%			78%
Some College	53%	47-59%	71%	58%
Unemployment	6.2%		4.0%	5.4%
Children in Poverty	24%	17-30%	13%	24%
Income Inequality	4.2	3.6-4.7	3.7	4.6
Children in Single-Parent Household	33%	27-39%	20%	24%
Social Associations	13.4		22.0	11.8
Violent Crime Rate	189		59	468
<i>Injury Deaths</i>	158	131-185	50	86
<b>Physical Environment (66)</b>				
Air-Pollution- Particulate Matter	10.1		9.5	10.3
<i>Drinking Water Violations</i>	55%		0%	23%
Severe Housing Problems	12%	9-14%	9%	14%
Driving Alone to Work	81%	80-83%	71%	82%
Long Commute- Driving Alone	49%	43-54%	15%	25%

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



2015 Health Factors - Oklahoma

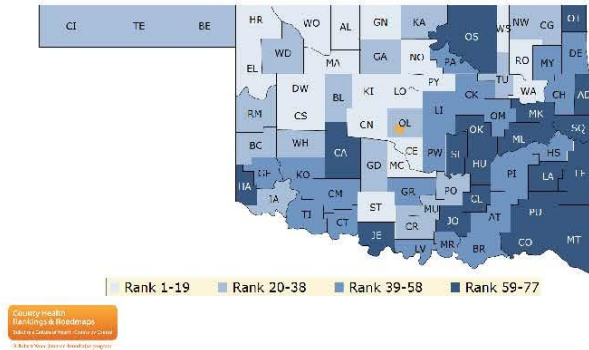
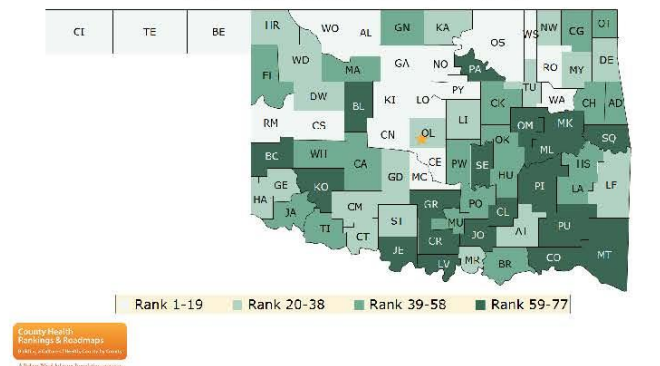


Table 2. Health Outcomes (Overall Rank 64)

Category (Rank)	Pawnee County	Error Margin	Top U.S. Performers	Oklahoma
Length of Life (68)				
Premature Death	12,428	10,397-14,458	5,200	9,121
Quality of Life (36)				
Poor or Fair Health	19%	14-26%	10%	19%
Poor Physical Health Days	5.2	3.4-7.0	2.5	4.3
Poor Mental Health Days	4.6	3.1-6.1	2.3	4.2
Low Birth Weight	7.2%	5.9-8.6%	5.9%	8.3%

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

2015 Health Outcomes - Oklahoma



For additional information, please contact  
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## PAWNEE COUNTY

### Mortality and Leading Causes of Death

- Pawnee County ranked 73<sup>rd</sup> in the state for total mortality (age-adjusted) with a rate that was 46% higher than national rate.
- Pawnee County had the highest rate of deaths due to unintentional injury, with a rate that is 243% higher than the national rate.
- The leading causes of death in Pawnee County were heart disease, cancer, and unintentional injury.

### Disease Rates

- Nearly 1 in 7 adults (13.4%) had diabetes, which ranked Pawnee County 70<sup>th</sup> in the state.

### Risk Factors, Behaviors and Socioeconomic Factors

- Pawnee County was ranked among the best counties with a senior pneumonia vaccination rate of 78%.
- Pawnee County was ranked among the top 10 counties for the percentage of adults who had a usual source of healthcare (82%).
- Nearly 1 in 6 people in Pawnee County lived in poverty (16%).
- 1 in 5 adults reported 3+ days of limited activity in the past month (20%).
- Approximately 1 in 4 adults reported 4+ days of poor physical health (25%) and 4+ days of poor mental health (24%) in the previous month.

### Changes from Previous Year

- The rate of deaths due to stroke improved 18% from the previous year.
- The asthma prevalence rate improved 7% and the cancer incidence rate improved 16%.
- The rate of uninsured adults improved by 20%.
- The percent of adults adult smokers decreased by 11%.

	PREVIOUS	CURRENT	GRADE
<b>MORTALITY</b>			
INFANT (RATE PER 1,000)	*	7.1	D
TOTAL (RATE PER 100,000)	935.3	1088.5	F
<b>LEADING CAUSES OF DEATH</b> (RATE PER 100,000)			
HEART DISEASE	246.5	259.3	F
MALIGNANT NEOPLASM (CANCER)	204.7	221.0	F
CEREBROVASCULAR DISEASE (STROKE)	53.0	61.0	D
CHRONIC LOWER RESPIRATORY DISEASE	51.5	71.4	F
UNINTENTIONAL INJURY	86.6	130.7	F
DIABETES	27.3	21.1	C
INFLUENZA/PNEUMONIA	21.0	12.5	B
ALZHEIMER'S DISEASE	36.9	26.5	C
NEPHRITIS (KIDNEY DISEASE)	*	11.3	B
SUICIDES	22.6	19.5	F
<b>DISEASE RATES</b>			
DIABETES PREVALENCE	12.9%	13.4%	F
CURRENT ASTHMA PREVALENCE	8.6%	9.2%	C
CANCER INCIDENCE (RATE PER 100,000)	593.3	497.8	D
<b>RISK FACTORS &amp; BEHAVIORS</b>			
MINIMAL FRUIT CONSUMPTION	NA	52.3%	F
MINIMAL VEGETABLE CONSUMPTION	NA	27.0%	D
NO PHYSICAL ACTIVITY	33.6%	30.7%	F
CURRENT SMOKING PREVALENCE	27.0%	24.0%	D
OBESITY	32.1%	33.2%	F
IMMUNIZATIONS < 3 YEARS	70.1%	81.3%	A
SENIORS INFLUENZA VACCINATION	64.3%	69.7%	A
SENIORS PNEUMONIA VACCINATION	75.8%	78.0%	A
LIMITED ACTIVITY DAYS	18.6%	20.2%	D
POOR MENTAL HEALTH DAYS	25.4%	23.8%	C
POOR PHYSICAL HEALTH DAYS	24.4%	25.1%	D
GOOD OR BETTER HEALTH RATING	76.4%	77.6%	F
TEEN FERTILITY (RATE PER 1,000)	28.2	25.0	F
FIRST TRIMESTER PRENATAL CARE	60.1%	62.5%	F
LOW BIRTH WEIGHT	7.7%	7.5%	B
ADULT DENTAL VISITS	51.9%	53.5%	F
USUAL SOURCE OF CARE	81.4	81.8%	B
OCCUPATIONAL FATALITIES (RATE PER 100,000 WORKERS)	*	13.8	F
PREVENTABLE HOSPITALIZATIONS (RATE PER 100,000)	1884.6	2057.2	F
<b>SOCIOECONOMIC FACTORS</b>			
NO INSURANCE COVERAGE	18.6%	14.8%	C
POVERTY	15.8%	16.2%	C

\* Denotes <5 events in mortality fields and <5 or <50 in the sample population for BRFSS data, which result in unstable rates.

## Appendix E- Survey Form and Meeting 3 Materials, September 15, 2015

### Cleveland Area Hospital Local Health Services Survey

Please return completed survey by August 19, 2015



The zip code of my residence is: \_\_\_\_\_

What is your current age: \_\_\_\_\_ What is your gender: \_\_\_\_\_

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

---

If you responded in Q2 that your household received care at a hospital other than Cleveland Area Hospital, why

3. did you or your family member choose that hospital? (*Please answer then skip to Q7*)
- |   |   |
|---|---|
| <input type="checkbox"/> Physician referral               | <input type="checkbox"/> Quality of care/Lack of confidence |
| <input type="checkbox"/> Closer, more convenient location | <input type="checkbox"/> Availability of specialty care     |
| <input type="checkbox"/> Insurance reasons                | <input type="checkbox"/> Other ( <i>Please list below</i> ) |

---

If you responded in Q2 that your household received care at Cleveland Area Hospital, what hospital service(s)

4. were used?
- |  |  |
|--|--|
| <input type="checkbox"/> Diagnostic imaging (X-ray, CT, MRI, Bone Scan, Mammography, Ultrasound) | <input type="checkbox"/> Hospital Inpatient                        |
| <input type="checkbox"/> Laboratory  | <input type="checkbox"/> Physical, speech, or occupational therapy |
| <input type="checkbox"/> Surgery   | <input type="checkbox"/> Skilled nursing (swing bed)               |
| <input type="checkbox"/> Therapeutic counseling  | <input type="checkbox"/> Wound care                                |
| <input type="checkbox"/> Outpatient infusion/Shots/Dressing changes                              | <input type="checkbox"/> Senior life counseling                    |
| <input type="checkbox"/> Physician clinic  | <input type="checkbox"/> Emergency room (ER)                       |
|  | <input type="checkbox"/> Other ( <i>Please list below</i> )        |

- 
5. How satisfied was your household with the services you received at Cleveland Area Hospital?  
☐ Satisfied      ☐ Dissatisfied      ☐ Don't know

6. Why were you satisfied/dissatisfied with services received at Cleveland Area Hospital?
- 

7. Has your household been to a specialist in the past 24 months?  
☐ Yes      ☐ No (*Skip to Q11*)      ☐ Don't know (*Skip to Q11*)

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

- 8.
- | Type of Specialist | City |
|--------------------|------|
|                    |      |
|                    |      |
|                    |      |
|                    |      |

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

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





11. Do you use a primary care (family doctor) for most of your routine health care?

- ☐ Yes (*Skip to Q13*)      ☐ No (*Go to Q12*)      ☐ Don't know (*Skip to Q13*)

12. If no, then what kind of medical provider do you use for routine care?

- ☐ Tribal Health Center      ☐ Emergency Room/Hospital  
☐ Income Based Health Center      ☐ Specialist  
☐ Mid-Level Clinic (Nurse Practitioner or PA)      ☐ Other (*Please list below*)  
☐ Health Department
- 

13. Has your household been to a primary care (family) doctor in the Cleveland area?

- ☐ Yes (*Go to Q14*)      ☐ No (*Skip to Q16*)      ☐ Don't know (*Skip to Q16*)

14. How satisfied was your household with the quality of care received in the Cleveland area?

- ☐ Satisfied      ☐ Dissatisfied      ☐ Don't know

15. Why were you satisfied/dissatisfied with the care received in the Cleveland area?

---

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

- ☐ Yes      ☐ No      ☐ Don't know

17. Would you consider seeing a nurse practitioner or physician assistant for your routine healthcare needs?

- ☐ Yes      ☐ No      ☐ Don't know

18. Are you able to get an appointment with your primary care (family) doctor when you need one?

- ☐ Yes      ☐ No      ☐ Don't know

19. What concerns you most about health care in the Cleveland area?

---

20. What other services would you like to see offered at Cleveland Area Hospital?

---

21. Are you aware of any community programs offered by the hospital?

- ☐ Yes      ☐ No      ☐ Don't know

*Please list the community program(s)*

---

22. How are you currently informed of community events? (*Please check all that apply with the outlet*)

- | <u>Outlet</u>  | <u>Source</u> |
|--|---------------|
| <input type="checkbox"/> Newspaper                           | _____         |
| <input type="checkbox"/> Radio                               | _____         |
| <input type="checkbox"/> Email                               | _____         |
| <input type="checkbox"/> Website                             | _____         |
| <input type="checkbox"/> Social Media (Facebook and Twitter) | _____         |
| <input type="checkbox"/> Other                               | _____         |

23. How would you prefer to be notified of community events?

*(Please rank your choices with 1=most preferred and 5=least preferred)*

- \_\_\_\_ Newspaper      \_\_\_\_ Email      \_\_\_\_ Social Media  
\_\_\_\_ Radio      \_\_\_\_ Website

**Please mail completed survey to:**

Cleveland Area Hospital  
1401 W. Pawnee St.  
Cleveland, OK 74020

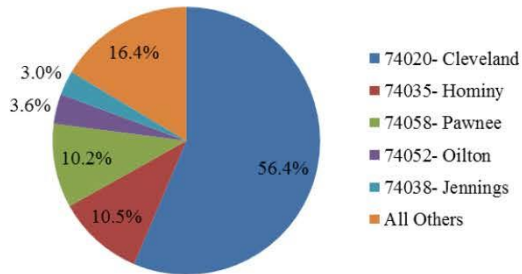
**Or, return to hospital administration**



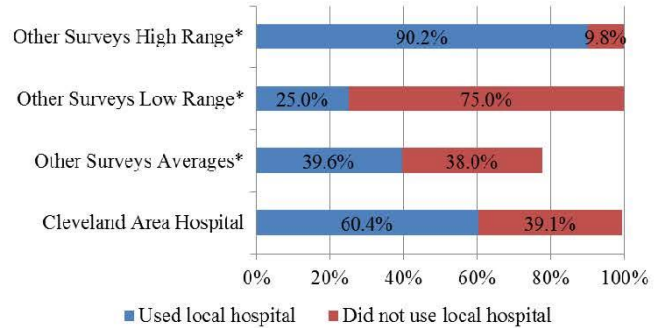
## Cleveland Area Hospital Community Survey Results

*As part of the Community Health Needs Assessment*

### Zip Code of Residence



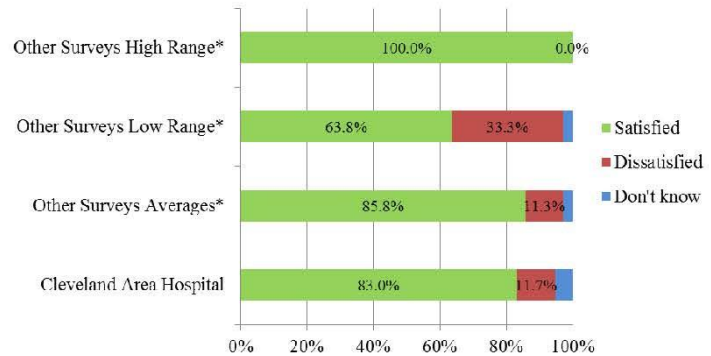
### Hospital Utilization Comparison



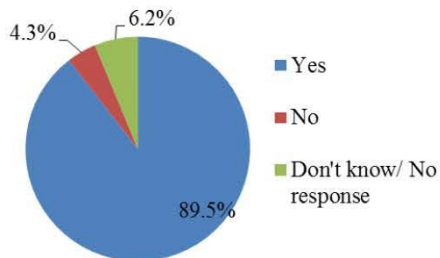
### Type of Specialist Visits

Specialist	No.	Percent
<b>Top 5 Responses</b>		
Orthopedist/Orthopedic Surg. (3 visits in Cleveland)	49	18.4%
Cardiologist (3 visits in Cleveland)	43	16.2%
Neurologist/Neurosurgeon (0 visits in Cleveland)	21	7.9%
Nephrologist (0 visits in Cleveland)	16	6.0%
OB/GYN (0 visits in Cleveland)	15	5.6%
All others (7 visits in Cleveland)	122	45.9%
Total	266	100.0%

### Satisfaction with Cleveland Area Hospital



### Use Family Doctor for Routine Health Care



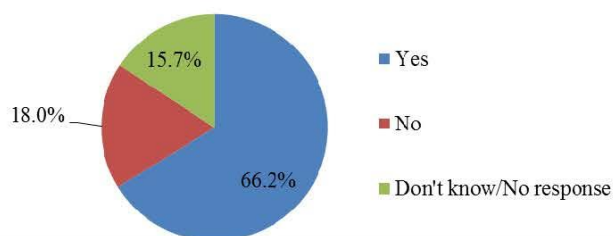
### Satisfaction with Cleveland Area Primary Care Doctor



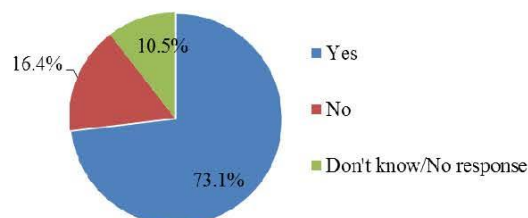
**Do you think there are enough primary care doctors practicing in the Cleveland area?**



**Would you see a midlevel provider for routine healthcare needs?**



**Are you able to get an appointment with your primary care doctor when needed?**



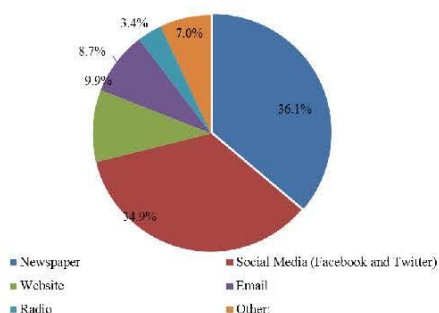
#### Healthcare concerns- Top 3 Responses

Concern	No.	Percent
Hospital situation/Possibility of losing hospital/Hospital management	38	11.3%
Lack of providers/Retaining providers/Qualified providers	34	10.1%
No concerns/Receive good care/Don't know	32	9.5%
All others	233	69.1%
Total	337	100.0%

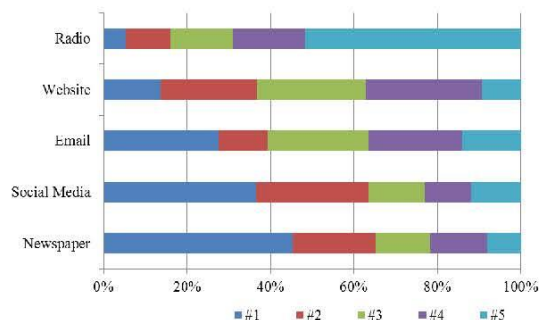
#### Additional Services to Offer- Top 3 Responses

Services	No.	Percent
Specialists: OB/GYN (9); Orthopedist (8); Otolaryngologist (7); More specialists in general (6); Cardiologist (6); Dermatologist (6); Pain Management (4); Podiatrist (4); Pediatrician (4); Nephrologist (2); Neurologist (2); Urologist (2); Ophthalmologist (2); Oncologist (2); Psychiatrist (1); Psychologist (1)	66	19.0%
No additional services/Satisfied with what is available/Don't know	50	14.4%
Dialysis	15	4.3%
All others	216	62.3%
Total	347	100.0%

#### Outlets Used for Information about Community Events



#### Preference of Notification of Community Events



For additional information, please contact  
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 Corie Kaiser, Director, [corie.kaiser@okstate.edu](mailto:corie.kaiser@okstate.edu)  
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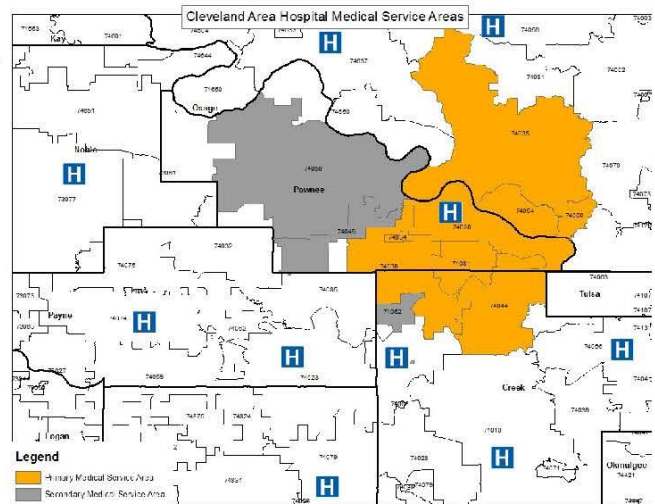


# Primary Care Physician Demand Analysis for the Cleveland Medical Service Area

*As part of the Community Health Needs Assessment*

**Table 1. Cleveland Area Hospital Medical Service Areas**

Zip Code	City	2009-2013 ACS Population
<i>Primary Medical Service Area</i>		
74020	Cleveland	7,451
74034	Hallett	188
74038	Jennings	2,266
74081	Terlton	1,848
74044	Mannford	7,382
74054	Osage	810
74035	Hominy	4,273
74060	Prue	709
	<b>Totals</b>	<b><u>24,927</u></b>
<i>Secondary Medical Service Area</i>		
74058	Pawnee	4,024
74045	Maramec	444
74052	Oilton	1,378
	<b>Totals</b>	<b><u>5,846</u></b>



SOURCE: Population data from the U.S. Bureau of Census, 2009-2013 American Community Survey

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

PRIMARY MEDICAL SERVICE AREA							
Age	Male			Female			Total Visits
	09-13 Population	Visit Rate <sup>[3]</sup>	Visits	09-13 Population	Visit Rate <sup>[3]</sup>	Visits	
Under 15	2,534	2.5	6,335	2,270	2.3	5,221	11,556
15-24	1,626	1.2	1,951	1,306	2.1	2,743	4,694
25-44	3,477	1.5	5,216	2,694	3.1	8,351	13,567
45-64	3,596	2.9	10,428	3,237	3.7	11,977	22,405
65-74	1,328	5.1	6,773	1,245	5.6	6,972	13,745
75+	<u>637</u>	6.9	<u>4,395</u>	<u>977</u>	6.6	<u>6,448</u>	<u>10,844</u>
<b>Total</b>	<b>13,198</b>		<b>35,098</b>	<b>11,729</b>		<b>41,712</b>	<b>76,810</b>

*Primary Medical Service Area - Local Primary Care Physician office visits per year: 41,938*



**Table 2b. Annual Primary Care Physician Office Visits Generated in the Cleveland, Oklahoma, Medical Service Areas**

SECONDARY MEDICAL SERVICE AREA							
Age	Male			Female			Total Visits
	09-13 Population	Visit Rate <sup>[3]</sup>	Visits	09-13 Population	Visit Rate <sup>[3]</sup>	Visits	
Under 15	558	2.5	1,395	641	2.3	1,474	2,869
15-24	291	1.2	349	333	2.1	699	1,049
25-44	778	1.5	1,167	679	3.1	2,105	3,272
45-64	789	2.9	2,288	822	3.7	3,041	5,330
65-74	233	5.1	1,188	323	5.6	1,809	2,997
75+	<u>172</u>	6.9	<u>1,187</u>	<u>227</u>	6.6	<u>1,498</u>	<u>2,685</u>
<b>Total</b>	<b>2,821</b>		<b>7,574</b>	<b>3,025</b>		<b>10,627</b>	<b>18,201</b>

*Secondary Medical Service Area - Local Primary Care Physician office visits per year: 9,938*

Source: U. S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center of Health Statistics, "National Ambulatory Medical Care Survey: 2012 Summary.

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

Usage by Residents of Primary Service Area								
Usage by Residents of Secondary Service Area		70%	75%	80%	85%	90%	95%	100%
	5%	29,854	31,951	34,048	36,145	38,241	40,338	42,435
	10%	30,351	32,448	34,545	36,641	<b>38,738</b>	40,835	42,932
	15%	30,848	32,945	35,041	37,138	<b>39,235</b>	41,332	43,429
	20%	31,344	33,441	35,538	37,635	39,732	41,829	43,926
	25%	31,841	33,938	36,035	38,132	40,229	42,326	44,423
	30%	32,338	34,435	36,532	38,629	40,726	42,823	44,920
	35%	32,835	34,932	37,029	39,126	41,223	43,320	45,417
	40%	33,332	35,429	37,526	39,623	41,720	43,817	45,914
	45%	33,829	35,926	38,023	40,120	42,217	44,314	46,410
	50%	34,326	36,423	38,520	40,617	42,714	44,810	46,907

If 90% primary medical service area and 10 to 15% secondary medical service area, then the usage would be: 38,738 to 39,235 total primary care physician office visits in the Cleveland area for an estimated 9.3 to 9.4 Total Primary Care Physicians.

(Based on 83.7 average weekly primary care physician visits with a 50 week year)

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