

Carnegie Tri-County Municipal 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 need¹

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

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

² Ibid

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

Oklahoma Office of Rural Health Partnership

The Oklahoma Office of Rural Health makes this program available to all rural facilities in Oklahoma free of charge. The Oklahoma Office of Rural Health works closely with the hospital and community members to develop an economic impact of the local health sector, develop and analyze a local health services survey, and gather and analyze local health data. The community meetings are facilitated by a resource team that includes Corie 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 Carnegie Tri-County Municipal Hospital in 2016. 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

Carnegie Tri-County Municipal Hospital worked with the Oklahoma Office of Rural Health and Oklahoma Cooperative Extension Service to complete a CHNA during 2013. The following identifies each priority, implementation taken, and an evaluation or impact of the implementation.

Priority: Health Literacy

Service Implemented/Partnerships: Case manager

Description: The hospital has employed a case manager to provide patient and diagnosis specific education based on the needs for each patient. Care and information is tailored based on the need and understanding level of each patient. This is reflected in the detailed discharge information and educational materials that are sent home with patients to use as a reference guide. This is available to each patient at admission. In addition to social assessments, a physician at the hospital has published health-related topics in the Carnegie Herald to help with increasing the knowledge base of the local population.

Priority: Access to Food

Service Implemented/Partnerships: Food pantry and Senior Nutrition Referrals

Description: Hospital staff regularly make referrals to two local clothing and food closets through the United Methodist Church and the First Baptist Church. Referrals are also made to the Senior Nutrition Center as this is a secondary nutrition source that patients aged 50 years and over are urged to utilize. Since many staff members are keenly aware of these services and collaborations within the community, the total number of referrals are not tracked as regularly. Therefore, total impacts are not readily available.

Priority: Lack of Mental Health Providers

Service Implemented/Partnerships: Mental Health Referrals

Description: Referrals are made for patients with an EOD through the emergency department for screening and treatment. From there, patients then receive referrals for treatment at an inpatient facility or as an outpatient. Those numbers aren't as readily available as the number of EOD patients as the treatment varies per patient.

A survey question was included for respondents to indicate which community programs they were aware of the hospital offering. Physical therapy (3 responses) followed by emergency care and swing bed (2 responses each) were the most common responses. The full listing is included in the table below.

Community Programs Offered by Carnegie Tri-County Municipal Hospital

Response Category	No.	%
Physical therapy	3	23.1%
Emergency care	2	15.4%
Swing bed	2	15.4%
Mammogram	1	7.7%
Dietician	1	7.7%
Bone density	1	7.7%
Program to quit smoking	1	7.7%
Good service	1	7.7%
Need to have program to advocate healthy lifestyle changes with rewards	1	7.7%
Tot	13	100.0%

Carnegie Tri-County Municipal Hospital Medical Services Area Demographics

Figure 1 displays the Carnegie Tri-County Municipal Hospital medical services area. Carnegie Tri-County Municipal Hospital 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.

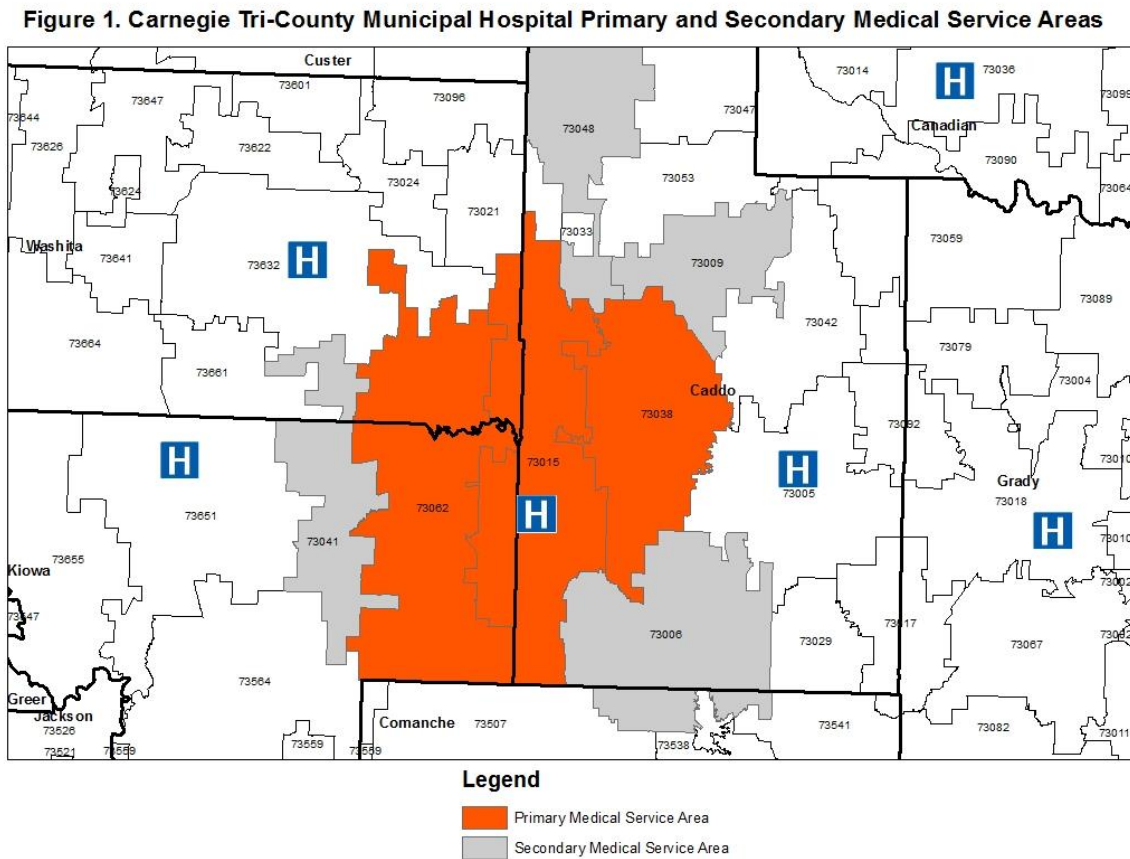


Figure 1. Carnegie Tri-County Municipal Hospital Medical Service Areas

City	County	Hospital	No. of Beds
Anadarko	Caddo	The Physicians' Hospital in Anadarko	25
<i>Carnegie</i>	<i>Caddo</i>	<i>Carnegie Tri-County Municipal Hospital</i>	<i>17</i>
El Reno	Canadian	Mercy Hospital El Reno, Inc.	48
Chickasha	Grady	Grady Memorial Hospital	99
Hobart	Kiowa	Elkview General Hospital	38
Cordell	Washita	Cordell Memorial Hospital	25

As delineated in Figure 1, the primary medical service area of Carnegie Tri-County Municipal Hospital includes the zip code areas of Carnegie, Mountain View, and Fort Cobb. The primary medical service area experienced a population decrease of 9.3 percent from the 2000 Census to the 2010 Census (Table 1). This same service area experienced an increase in population of 1.6 percent from the 2010 Census to the latest available, 2010-2014, American Community Survey.

The secondary medical services area is comprised of the zip code areas Hydro, Binger, Apache, and Gotebo. The secondary medical service area experienced a decrease in population of 5.2 percent from 2000 to 2010 followed by a population increase of 1.6 percent from 2010 to the 2010-2014 American Community Survey.

Table 1. Carnegie Tri-County Municipal Hospital Medical Service Areas Population

Population by Zip Code	2000 Population	2010 Population	2010-2014 Population	% Change 2000- 2010	% Change 2010-10-14
<i>Primary Medical Service Area</i>					
73015 Carnegie	3,157	2,877	2,854	-8.9%	-0.8%
73062 Mountain View	1,642	1,396	1,562	-15.0%	11.9%
73038 Fort Cobb	<u>2,153</u>	<u>2,032</u>	<u>1,987</u>	<u>-5.6%</u>	<u>-2.2%</u>
Total	6,952	6,305	6,403	-9.3%	1.6%
<i>Secondary Medical Service Area</i>					
73048 Hydro	2,101	2,020	2,007	-3.9%	-0.6%
73009 Binger	1,353	1,264	1,189	-6.6%	-5.9%
73006 Apache	3,862	3,718	4,014	-3.7%	8.0%
73041 Gotebo	<u>454</u>	<u>366</u>	<u>277</u>	<u>-19.4%</u>	<u>-24.3%</u>
Total	7,770	7,368	7,487	-5.2%	1.6%

SOURCE: Population data from the U.S. Bureau of Census, Decennial Census 2000, 2010 and American Community Survey 2010-2014(September 2016)

Table 2 displays the current existing medical services in the primary service area of the Carnegie Tri-County Municipal Hospital medical services area. Most of these services would be expected in a service area of Carnegie's size: three physician offices and clinics, one dental office, one nursing home, one home health provider, one EMS provider, and two pharmacies. The hospital provides swing bed, physical therapy, laboratory, radiology (CT, Ultrasound, and XRay), and 24 hour emergency services. A complete list of hospital services and community involvement activities can be found in Appendix A.

**Table 2. Existing Medical Services in the Carnegie Tri-County Municipal Hospital
Medical Services Area**

Count	Service
1	Hospital: Carnegie Tri-County Municipal Hospital
3	Physician offices and clinics
1	Dental office
1	Nursing home
1	Home health provider
1	EMS provider
2	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 Caddo County in comparison to the state of Oklahoma. Overall, the over 65 age group accounts for a larger share of the population for both medical service areas and Caddo County according to the latest, 2010-2014 American Community Survey. This cohort accounted for 14 percent of the total population at the state level. In terms of the medical service areas, this age group accounted for 17.6 percent of the primary medical service area, 17.2 percent of the secondary medical service area, and 14.9 percent of the population of Caddo County. The 45-64 age group accounts for the largest share of the population in the primary (28.3%) and secondary (25.9%) service area and Caddo County (26.1%). This is compared to the state share of 25.4 percent of the total population.

Table 3. Percent of Total Population by Age Group for Carnegie Tri-County Municipal Hospital Medical Service Areas, Caddo County and Oklahoma

Age Groups	Primary Medical Service Area	Secondary Medical Service Area	Caddo County	Oklahoma
2010 Census				
0-14	19.8%	20.2%	20.8%	20.7%
15-19	6.3%	6.7%	7.0%	7.1%
20-24	4.7%	5.1%	5.9%	7.2%
25-44	20.5%	23.0%	25.3%	25.8%
45-64	29.1%	28.4%	26.3%	25.7%
65+	<u>19.7%</u>	<u>16.5%</u>	<u>14.7%</u>	<u>13.5%</u>
Totals	100.0%	100.0%	100.0%	100.0%
Total Population	6,305	7,368	29,600	3,751,351
10-14 ACS				
0-14	22.3%	18.7%	21.0%	20.6%
15-19	5.3%	7.0%	6.7%	6.8%
20-24	5.3%	7.2%	6.1%	7.4%
25-44	21.2%	24.0%	25.2%	25.8%
45-64	28.3%	25.9%	26.1%	25.4%
65+	<u>17.6%</u>	<u>17.2%</u>	<u>14.9%</u>	<u>14.0%</u>
Totals	100.0%	100.0%	100.0%	100.0%
Total Population	6,403	7,487	29,551	3,818,851

SOURCE: U.S. Census Bureau, Decennial Census data for 2010 and American Community Survey data for 2010-2014 (www.census.gov [September 2016]).

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 2010-2014 suggest that this population group has experienced an increase to 9.4 percent of the total population. This trend is

evident in Caddo County and both medical service areas. The share of the population identified as of Hispanic Origin accounted for 8.2 percent of the primary medical service area's population in 2010-2014 and 6.1 percent of the secondary medical service area during the same time period. The Hispanic Origin population accounted for 10.8 percent of the total population from 2010-2014 in Caddo County. An even more striking data point in both service areas and Caddo County is the large share of Native American population. In particular, this cohort accounts for 16.7 percent of the primary medical service area, 15.5 percent of the secondary and 23 percent of the total population of Caddo County. This is compared to the state rate of 7.2 percent.

Table 4. Percent of Total Population by Race and Ethnicity for Carnegie Tri-County Municipal Hospital Medical Service Areas, Caddo County and Oklahoma

Race/Ethnic Groups	Primary Medical Service Area	Secondary Medical Service Area	Caddo County	Oklahoma
2010 Census				
White	69.3%	76.3%	63.1%	72.2%
Black	0.8%	0.7%	2.8%	7.4%
Native American ¹	21.9%	16.4%	24.5%	8.6%
Other ²	2.6%	1.9%	3.6%	5.9%
Two or more Races ³	5.3%	4.7%	6.0%	5.9%
Hispanic Origin ⁴	7.5%	6.0%	10.1%	8.9%
Total Population	6,305	7,368	29,600	3,751,351
10-14 ACS				
White	71.7%	75.9%	62.6%	73.3%
Black	0.7%	0.8%	2.8%	7.3%
Native American ¹	16.7%	15.5%	23.0%	7.2%
Other ²	4.8%	1.4%	4.9%	4.5%
Two or more Races ³	6.1%	6.3%	6.6%	7.8%
Hispanic Origin ⁴	8.2%	6.1%	10.8%	9.4%
Total Population	5,450	7,487	29,551	3,818,851

SOURCE: U.S. Census Bureau, Decennial Census data for 2010 and American Community Survey data for 2010-2014 (www.census.gov [September 2016]).

¹ Native American includes American Indians and Alaska Natives.

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

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

⁴ 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

The CHNA meeting process was conducted as a collaboration with the Caddo County Health Department and The Physicians' Hospital in Anadarko. Carnegie Tri-County Municipal Hospital hosted three community meetings in Carnegie as part of the "data gathering phase." The fourth meeting, designated to prioritization of health concerns was held at a neutral location (Fort Cobb, OK) along with the community group from Anadarko to discuss as a county what are the top concerns and how can resources among both hospitals and public health, be leveraged to maximize the benefits for the residents. The community meetings were held between November 15, 2016 and December 15, 2016. The Oklahoma Office of Rural Health and Caddo County Health Department 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:

- Carnegie Tri-County Municipal Hospital representatives
- Retired individuals
- City mayor
- Local school leadership
- Representative from local tech center
- TSET Healthy Living representative
- Caddo County Health Department

Average attendance at the community meetings was 10-20 community members.

Community members were invited from positions and particular persons that the hospital steering committee felt had deep personal interest and time to attend and participate in the series of four meetings. A cross section representation of the community was contacted to get a feel for needs of all areas of the community. This includes community members with knowledge and insight of the needs of low-income and racially diverse populations. Significant efforts were made to reach these populations and those who work closely with these populations. Community members were invited using professional and personal emails, phone calls, word of mouth, letters to professional affiliates and ads in the local newspaper.

Economic Impact and Community Health Needs Assessment Overview, November 15, 2016

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 Caddo County, Oklahoma economy. 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 Carnegie Tri-County Municipal Hospital medical service area employs 148 FTE individuals. After applying a county-specific employment multiplier to each respective sector, there is a total employment impact of 185 FTE employees. The same methodology is applied to income. The local health sector has a direct income impact of over \$6.9 million. When the appropriate income multiplier is applied, the total income impact is over \$8.3 million. The last two columns examine the impact this has on the retail sector of the local community. Recent data suggest that just 21.3% of personal income in Caddo 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 \$1.7 million spent locally, generating \$17,684 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:

- Nutrition needs for children
 - Education for parents on what healthy meals look like- budgeting for healthy meals
- Immunizations- education for parents on the need for immunizations
- Education: head lice, hygiene prevention for children- for parents
- Mental health and substance abuse
 - Prescription drug abuse, meth
 - Suicide/Suicide attempts
- Stroke-heart attack signs- education for community
 - Patients are coming in too late
- Communication of patients' care with Indian Health Services and other facilities
- Utilization of ER for primary care needs
- Need for multiple levels of care- accessing resources for homeless- no near shelters- no transportation for those residents to shelters/resources

Table 5. Carnegie Tri-County Municipal Hospital Medical Service Area Health Sector Impact on Employment and Income, and Retail Sales and Sales Tax

Health Sectors	Employment			Income			Retail	1 Cent
	Direct	Multiplier	Impact	Direct	Multiplier	Impact	Sales	Sales Tax
Hospitals	50	1.36	68	\$1,976,815	1.22	\$2,404,641	\$512,189	\$5,122
Physicians, Dentists, & Other Medical Professionals	22	1.21	27	\$1,498,861	1.22	\$1,825,087	\$388,744	\$3,887
Nursing Homes & Home Health	68	1.19	81	\$3,164,181	1.18	\$3,722,135	\$792,815	\$7,928
Other Medical & Health Services & Pharmacies	<u>8</u>	1.24	<u>10</u>	<u>\$291,264</u>	1.20	<u>\$350,299</u>	<u>\$74,614</u>	<u>\$746</u>
Total	148		185	\$6,931,121		\$8,302,162	\$1,768,361	\$17,684

SOURCE: 2014 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 Caddo County taxable sales and income (21.3%) – from 2014 Sales Tax Data and 2014 Personal Income Estimates from the Bureau of Economic Analysis.

Health Data, November 30, 2016

A community meeting was held November 30, 2016, 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.

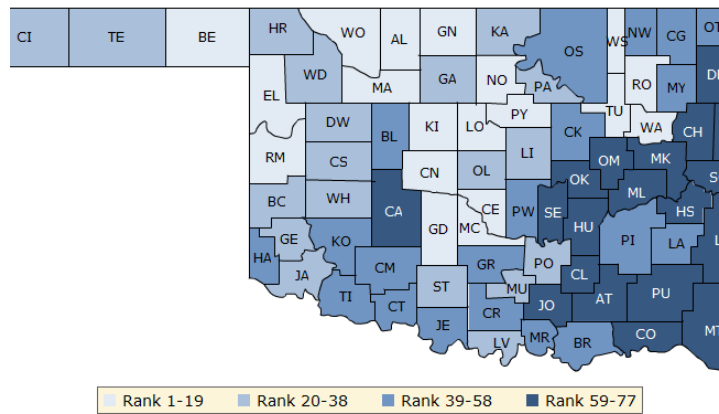
Health factors, considered tomorrow's health, are comprised of health behaviors (rank: 67), clinical care (rank: 63), social and economic factors (rank: 55), and physical environment (rank: 44). Caddo County's overall health factors rank is 62. Areas of concern include Caddo County's smoking rate, adult obesity rate, teen birth rate, the rate of uninsured, and primary care physicians. In terms of social and economic factors, the rate of residents who have education or training beyond a high school diploma, the unemployment rate, and share of children in poverty are all areas to take a deeper look. All health factors variables are presented in Table 6 along with Caddo 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 Caddo County ranks very poorly compared to the national benchmark).

Table 6. Health Factors (Overall Rank 62)

Category (Rank)	Caddo County	Error Margin	Top U.S. Performers	Oklahoma
Health Behaviors (67)				
<i>Adult Smoking</i>	23%	22-23%	14%	20%
<i>Adult Obesity</i>	36%	31.42%	25%	32%
Food Environment Index	6.1		8.3	6.6
<i>Physical Inactivity</i>	37%	32-42%	20%	31%
Access to Exercise Opportunities	39%		91%	69%
Excessive Drinking	13%	13-13%	12%	13%
Alcohol-Impaired Driving Deaths	29%	22-36%	14%	31%
Sexually Transmitted Infections	384.1		134	479
<i>Teen Birth Rate</i>	72	66-79	19	52
Clinical Care (63)				
<i>Uninsured</i>	26%	23-28%	11%	21%
<i>Primary Care Physicians</i>	4,230:1		1,040:1	1,560:1
Dentists	4,890:1		1,340:1	1,760:1
Mental Health Providers	2,260:1		370:1	270:1
Preventable Hospital Stays	61	54-69	38	63
<i>Diabetic Screening</i>	70%	63-76%	90%	78%
<i>Mammography Screening</i>	50%	43-56%	71%	55%
Social & Economic Factors (55)				
High School Graduation	90%		93%	85%
<i>Some College</i>	46%	42-50%	72%	59%
<i>Unemployment</i>	5.5%		3.5%	4.5%
<i>Children in Poverty</i>	29%	22-35%	13%	22%
Income Inequality	4.7	4.2-5.2	3.7	4.6
Children in Single-Parent Household	35%	30-41%	21%	34%
Social Associations	15.5		22.1	11.7
Violent Crime Rate	374		59	468
<i>Injury Deaths</i>	121	103-139	51	88
Physical Environment (44)				
Air-Pollution- Particulate Matter	10.0		9.5	10.3
Drinking Water Violations	Yes		No	
Severe Housing Problems	13%	11-15%	9%	14%
Driving Alone to Work	84%	82-86%	71%	82%
Long Commute- Driving Alone	29%	36-31%	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. Caddo County's health is less favorable than all of the neighboring counties.



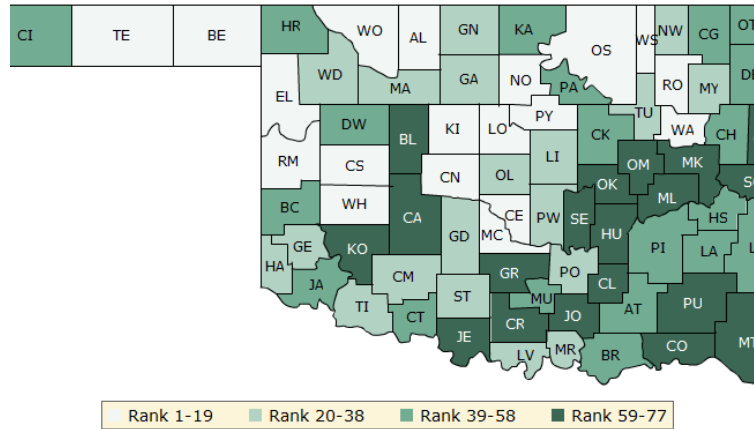
In terms of health outcomes, considered, today's health, Caddo County's ranking is 70th in the state. Health outcomes are comprised of two areas: length of life and quality of life. The variables for each of these sections are presented in Table 7.

Table 7. Health Outcomes (Overall Rank 70)

Category (Rank)	Caddo County	Error Margin	Top U.S. Performers	Oklahoma
Length of Life (76)				
Premature Death	13,600	12,100-15,100	5,200	9,200
Quality of Life (39)				
Poor or Fair Health	22%	22-23%	12%	19%
Poor Physical Health Days	4.8	4.7-4.9	2.9	4.3
Poor Mental Health Days	4.5	4.4-4.6	2.8	4.2
Low Birth Weight	7%	6-8%	6%	8%

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

The following figure shows county health outcomes rankings by shades. In terms of health outcomes, Caddo County is comparable to Kiowa and Blaine Counties, and is less favorable than the other 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:

- Mental health and substance abuse
 - Access to providers, services, beds
 - Prevention- resources to not have a crisis situation
- Mammography screenings
- Diabetic screenings
- Change the culture of exercise- create a culture of “want to exercise”
 - Not many low cost options

Community Survey Methodology and Results, November 15, 2016- December 7, 2016

A survey was designed to gauge hospital usage, satisfaction, and community health needs. The survey also included health status perception questions. The survey was intended to cover all of Caddo County with specific questions for the hospitals in Carnegie and Anadarko. The survey was available in both paper and web format. Surveys were also distributed at the first community meeting on November 15, 2016. Community members in attendance also received a follow-up email with a PDF copy of the survey and the electronic survey link. Hard copy surveys were made available at the hospital, Carnegie Tri-County Municipal Hospital, and the Caddo County Health Department. Surveys were also distributed at health department educational events, Anadarko City Hall, the Anadarko Library, the Anadarko Indian Health Services Clinic, and the Binger City Hall. Hospital representatives distributed surveys via mail and hand delivery to business leaders in the downtown area. A copy of the survey form can be found in Appendix E. Community members were asked to return their completed surveys to the Caddo County Health Department.

The survey ran from November 1 to November 30, 2016. A total of 331 surveys from Caddo County were completed. Of the surveys returned, 160 were electronic responses, and 171

were hard copy surveys. The survey results were presented at the December 7, 2016, community meeting.

Table 8 below shows the survey respondent representation by zip code. The largest share of respondents was from the Anadarko (73005) zip code with 107 responses or 32.3 percent of the total. Carnegie followed with 87 responses, and Apache and Fort Cobb each had 25.

Table 8. Zip Code of Residence

Response Category	No.	%
73005- Anadarko	107	32.3%
73015- Carnegie	87	26.3%
73006- Apache	25	7.6%
73038- Fort Cobb	25	7.6%
73029- Cyril	18	5.4%
73042- Gracemont	5	1.5%
73017- Cement	3	0.9%
73047- Hinton	2	0.6%
73009- Binger	2	0.6%
73062- Mountain View	2	0.6%
73092- Verden	1	0.3%
73505- Lawton	1	0.3%
73033- Eakly	1	0.3%
73048- Hydro	1	0.3%
73053- Lookeba	1	0.3%
73079- Pocasset	1	0.3%
73541- Fletcher	1	0.3%
73651- Hobart	1	0.3%
74015- Catoosa	1	0.3%
74108- Tulsa	1	0.3%
73010- Blanchard	1	0.3%
73008- Bethany	1	0.3%
73001- Albert	1	0.3%
No response	42	12.7%
Total	331	100.0%

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

Primary Care Physician Visits

- 26.0% of respondents had used a primary care physician in the Carnegie service area during the past 24 months
- 83.7% of those responded being satisfied
- Only 65 respondents or 19.6% believe there are enough primary care physicians practicing in Caddo County
- 69.2% of the respondents would consider seeing a midlevel provider for their healthcare needs
- 64.4% responded they were able to get an appointment, within 48 hours, with their primary care physician when they needed one

Specialist Visits

Summary highlights include:

- 43.5% of all respondents report some specialist visit in past 24 months
- Most common specialty visited are displayed in Table 9
- No specialist visits occurred in Carnegie

Table 9. Type of Specialist Visits

Type of Specialist	No.	Percent
<i>Top 5 Responses</i>		
Cardiologist <i>(0 visits in Carnegie)</i>	34	14.1%
Orthopedist/Orthopedic Surg. <i>(0 visits in Carnegie)</i>	34	14.1%
Oncologist <i>(0 visits in Carnegie)</i>	18	7.5%
OB/GYN <i>(0 visits in Carnegie)</i>	15	6.2%
Neurologist/Neurosurgeon <i>(0 visits in Carnegie)</i>	14	5.8%
All others <i>(0 visits in Carnegie)</i>	<u>126</u>	<u>52.3%</u>
Total	<u>241</u>	<u>100.0%</u>

Some respondents answered more than once.

Hospital Usage and Satisfaction

Survey highlights include:

- 29.1% of survey respondents that have used hospital services in the past 24 months used services at Carnegie Tri-County Municipal Hospital
 - o The Physicians' Hospital in Anadarko (22.5%) and Comanche County Memorial Hospital in Lawton followed Anadarko with 10.6 percent of the total
 - o The most common response for using a hospital other than Carnegie Tri-County Municipal Hospital or The Physicians' Hospital in Anadarko was availability of specialty care (including surgery, labor and delivery) (34.2%) followed by physician referral (26.3%)
- 80.3% of survey respondents were satisfied with the services received at Carnegie Tri-County Municipal Hospital
- Most common services used at Carnegie Tri-County Municipal Hospital:
 - o Emergency room (53.7%)
 - o Laboratory (30.5%)
 - o Diagnostic Imaging (25.3%)

Additional Services

Survey respondents were asked to list the additional services they would like to see offered at Carnegie Tri-County Municipal Hospital. Specialists, collectively, had the largest share of responses with 30.9 percent. No additional services/Receive good care/Don't know followed with 17.5 percent of the total. Table 10 displays all responses and the frequencies.

Table 10. What additional services would you like to see offered at Carnegie Tri-County Municipal Hospital?

Response Category	No.	%
Specialists: Cardiologist (10); OB/GYN (5); Dermatologist (3); Orthopedist (3); Ophthalmologist (2); Specialists in general (2); Pediatrician (2); Podiatrist (1); Nephrologist (1); Internal Medicine (1)	30	30.9%
No additional services/Satisfied with what is available/Don't know	17	17.5%
More providers	8	8.2%
Dialysis	7	7.2%
Urgent care/After hours care	6	6.2%
Diagnostic Imaging: (Mammography (3); MRI (2)	5	5.2%
Mental health/Counseling services/Drug addiction services/Telemedicine behavioral health	5	5.2%
Improved quality of care/Compassion for patient	4	4.1%
Rehab: Physical and Occupational Therapy	2	2.1%
Surgeries	2	2.1%
Flu shot clinic	1	1.0%
Shorter ER time	1	1.0%
Maternity	1	1.0%
Low/No cost preventative health screenings for low-income and uninsured	1	1.0%
Ear and eye care	1	1.0%
Dietician services	1	1.0%
New hospital	1	1.0%
Nuclear medicine	1	1.0%
Cardiac stress test	1	1.0%
Any billable service that physicians would support with referrals	1	1.0%
Everything	1	1.0%
Total	97	100.0%

Survey respondents were asked a variety of perception questions. One of the questions asked respondents to select the three things that cause them the most stress. Money/Finances (206 total responses), Work/Job (133 total responses), and Family Responsibilities (94 total responses) were the top three identified stressors. Survey respondents were then asked to identify the top three ways they manage their stress. Spend time with friends and family (143 total responses), Pray or go to church (115 total responses), and Exercise, walk or go for a bike ride (101 total responses) were the top three coping mechanisms.

Survey respondents were also asked to identify what they feel are the three biggest health problems facing Caddo County. Poverty (163 total responses), Obesity (102 total responses), and Diabetes (95 total responses) were the top three identified. Lastly, community members were asked to identify the top three traits or most important factors for a quality of life in a

“Healthy Community.” The top three responses were Good jobs and healthy economy (212 total responses), Healthy behaviors and lifestyles (109 total responses), and Access to healthcare (ex. Family doctor) (104 total responses) were the top three traits identified.

Primary Care Physician Demand Analysis, December 7, 2016

A demand analysis of primary care physicians was completed for the zip codes that comprise the Anadarko 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 11 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 Carnegie medical services area, a total of 11,182 annual visits would occur. This would suggest that the Carnegie medical services area would need 2.7 FTE primary care physicians to meet the needs of their existing population. Table 11 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 Carnegie, 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%	8,344	8,895	9,446	9,997	10,547	11,098	11,649
	10%	8,979	9,530	10,080	10,631	11,182	11,732	12,283
	15%	9,613	10,164	10,715	11,265	11,816	12,367	12,918
	20%	10,248	10,798	11,349	11,900	12,450	13,001	13,552
	25%	10,882	11,433	11,983	12,534	13,085	13,636	14,186
	30%	11,516	12,067	12,618	13,168	13,719	14,270	14,821
	35%	12,151	12,701	13,252	13,803	14,354	14,904	15,455
	40%	12,785	13,336	13,886	14,437	14,988	15,539	16,089
	45%	13,419	13,970	14,521	15,072	15,622	16,173	16,724
	50%	14,054	14,604	15,155	15,706	16,257	16,807	17,358

If 90% primary medical service area and 10 to 15% secondary medical service area, then the usage would be: 11,182 to 11,816 total primary care physician office visits in the Carnegie area for an estimated 2.7 to 2.8 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.

- Education for parents: head lice, hygiene, prevention for children education of when to not attend work/school (fever, health lice, etc.) fact sheet, information sheet, health night for parents (with door prizes), potential for nurses from hospital to work with school to provide in-services and information
- Need for school nurse
- Need for clinic follow up/collaboration with pharmacy and other providers
- Involve faith based community/churches as outlets

Community Health Needs Implementation Strategy

During the December 15, 2016, 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.

- Poverty- This topic was discussed as an overarching concern and struggle in the county as a whole. Further, this topic was discussed as a barrier to healthy behaviors such as tobacco use and outcomes such as obesity and diabetes.
 - The Caddo County Health Department has noted the need to improve literacy rates to impact education which is then highly correlated to income. The health department gives books to pediatric patients who visit and encourages them to read.
 - The Carnegie elementary school received a CATCH (Community Access to Child Health) which was implemented in the school. This covers the stoplight system of healthy foods, making certain children are moving during recess (even if they are in trouble, they are moving rather than just “sitting out.”) The next goal of the school is to add a walking track on the playground to encourage children to count steps and distance.
 - Obesity, tobacco use, diabetes were noted in the data as large factors and outcomes of the county; however, when developing an action plan, communities have to think outside of the box to address these issues and work in collaborations to address

them. This includes finding activities or ways to keep kids active and look at incorporating soft skills for children. This will overall be a culture change of the community.

- Mental health/Substance abuse- This topic was displayed in the data, came up as concerns in the survey, and it was heavily discussed in all of the community meetings. Further, it was noted that the lack of services, providers, and beds for crisis situations makes this concern difficult to address. It was also noted that screenings are completed in the county, but referrals are then difficult to make.
 - There are Mental Health First Aid trainers available in the county to provide training (both adult and youth). This is a great opportunity to create awareness and to catch issues before they become a crisis.
 - The elementary school in Carnegie does participate in Red Ribbon Week. The counselor also does a pride class 2 weeks per month to discuss substance abuse and also focus on career goals and planning for the future with the youth.
 - It was noted the need for implementation and expansion of telemedicine services to match providers up to the community.
 - Community members noted the need for greater training and education for parents. However, some of the ones in the most need are the most difficult to reach.
- Community outreach and collaboration- This priority is also an actionable step to address the previously mentioned priorities. Caddo County has many great programs; however, it isn't always clear which program is open to the entire community and overall just what is available.
 - It was noted that both hospitals are working together in the community to streamline their programs and sharing tips, tools, and innovation. For example, the hospital in Anadarko is working to address concerns in the emergency department by improving skills and efficiency which will then impact care. Both hospitals are working to standardize care.
 - Carnegie is going to host its first health fair in collaboration with the Chamber of Commerce and local businesses along with revamping the community 5K.
 - The hospital in Anadarko provides vital signs and school physicals along with the donation of school supplies to the local school.
 - It was noted that the community of Anadarko in collaboration with the Caddo County Health Department hosted a health fair with little attendance. Further, it was noted that a different

model might be more effective, such as doing more testing in the community (off-site) then inviting community members back to a “big event” to get their results and education of their numbers and management of their conditions.

- Caddo County has a long standing coalition that houses the TSET Healthy Living grant. This group meets monthly with a subgroup working to identify what is available in the county in terms of mental health. This coalition is a great venue to learn what all is going on and available in the county in terms of health.

Community Health Needs Assessment Marketing Plan

The hospital will make the Community Health Needs Assessment Summary and Implementation Strategy Plan available upon request at Carnegie Tri-County Municipal Hospital, and a copy will be available to be downloaded from the hospital’s website (www.carnegiehospital.org). 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

Service Provided by Carnegie Tri-County Municipal Hospital

OUTPATIENT

- X-Ray
- CT Scan
- Ultrasound
- DEXA Bone Density
- Laboratory
- Blood Administration
- Emergency Services
- Physical Therapy
- EKG
- Outpatient Nursing
- Sexual Assault Nurse Examiners

INPATIENT

- X-Ray
- CT Scan
- Ultrasound
- Laboratory
- Blood Administration
- Physical Therapy
- EKG
- Nutrition Services
- Cardiac Monitoring
- Drugs & Pharmaceuticals
- Swing Bed (Skilled Nursing and Skilled Therapy Beds)
- Isolation Beds
- Respiratory Therapy

PROFESSIONAL SERVICES

- Primary Care Clinics
- Emergency Room Providers

OTHER SERVICES

- Community CPR classes
- Public Forums & Community Education
- Dietary Services for Chamber of Commerce

Appendix B Community Meeting Attendees

Carnegie Community Health Needs Assessment
Meeting 1: CHNA Overview and Economic Impact Presentation
15-Nov-
16

First Name	Last Name	Title	Organization
Dennie	Christian	Regional Partnership Consultant	Oklahoma State Department of Health
Vickie	Epperson	Retired RN	
Jonny	Hawkins	LPN/Business Owner	
Rosanna	Gomez	Admin Asst.	Carnegie Tri County Municipal Hospital
Doris	Brown	CEO	Carnegie Tri County Municipal Hospital Oklahoma State Department of Health
James	Fields	Health Educator	
Brandie	O'Connor	Regional Director	Caddo County Health Department
Ron	Langmacher	Retired	
Kela	Williams	Bookkeeper	Farmers' Coop
James	Powers	Mayor	Town of Carnegie
Lori	Graham	Principal	Carnegie Public Schools-Elementary
Cindy	Murphy	Coordinator	Caddo Kiowa Tech Center
Kaye	Weaver	Asst. Coordinator	TSET
Johnnie	Goergen	CNO Carnegie Hospital	Carnegie Tri County Municipal Hospital
Bekcy	Bowlin	Human Resources	Carnegie Tri County Municipal Hospital

Carnegie Community Health Needs Assessment

Meeting 2: Health Indicators and Outcomes

15-Nov-16

First Name	Last Name	Title	Organization
Aguilla	McElmore	RN	
Vickie	Epperson	Retired RN	
Jonny	Hawkins	LPN/Business Owner	
Rosanna	Gomez	Admin Asst.	Carnegie Tri County Municipal Hospital
Doris	Brown	CEO	Carnegie Tri County Municipal Hospital
Cindy	Murphy	Coordinator	Caddo Kiowa Tech Center
Brandie	O'Connor	Regional Director	Caddo County Health Department
Lori	Graham	Principal	Carnegie Public Schools- Elementary
James	Powers	Mayor	Town of Carnegie
Ron	Langmacher	Retired	
Kela	Williams	Bookkeeper	Farmers' Coop
Kaye	Weaver	Asst. Coordinator	TSET

Carnegie Community Health Needs Assessment

Meeting 3: Survey Results and Primary Care Physician Demand Analysis

7-Dec-16

First Name	Last Name	Title	Organization
Aguilla	McElmore	RN	
Vickie	Epperson	Retired RN	
Johnnie	Goergen	CNO	Carnegie Tri-County Municipal Hospital
Rosanna	Gomez	Admin Asst.	Carnegie Tri County Municipal Hospital
Doris	Brown	CEO	Carnegie Tri County Municipal Hospital
Cindy	Murphy	Coordinator	Caddo Kiowa Tech Center
Kaye	Weaver	Asst. Coordinator	TSET
Lori	Graham	Principal	Carnegie Public Schools- Elementary
James	Powers	Mayor	Town of Carnegie
Ron	Langmacher	Retired	
Brandie	O'Connor	Regional Director	Caddo County Health Department
Kela	Williams	Bookkeeper	Farmers' Coop

**Carnegie Community Health Needs Assessment
Meeting 4: Priority Identification and Discussion
15-Dec-
16**

First Name	Last Name	Title	Organization
Chris	Smith	ED Nurse Manager	The Physicians' Hospital in Anadarko
Theda	Keel	CEO/President	Wind Hollow Foundation
Stephanie	Webb	Pharmacy Manager Social Worker/ Risk Management	The Physicians' Hospital in Anadarko
Jenny	Morton	Mayor	Town of Carnegie
James	Powers	Asst. Coordinator	TSET
Kaye	Weaver	Ass. Program Coordinator	TSET
Donna	Pavilla	CEO	Carnegie Tri County Municipal Hospital
Doris	Brown	HR Generalist	Carnegie Tri County Municipal Hospital
Becky	Bowlin	Retired RN	Oklahoma Cooperative Extension Service
Vickie	Epperson	4H Educator	OSU
Brenda	Brantley	OSU CRH Program Manager	Carnegie Public Schools- Elementary
Nicole	Neilson	Principal	Caddo Kiowa Tech Center
Lori	Graham	Coordinator	Caddo County Health Department
Cindy	Murphy	Regional Director	
Brandie	O'Connor		

Appendix C- Meeting 1 Materials, November 15, 2016

The Economic and Demographic Analysis of Carnegie Tri-County Municipal Hospital Medical Service Area *As part of the Community Health Needs Assessment*

Economic Data

2014 Per Capita Income ¹	\$30,605 (69th highest in state)
Employment (August 2016, preliminary) ²	11,183 (-1.4% from 2015)
Unemployment (August 2016, preliminary) ²	659 (10.8% from 2015)
Unemployment rate (August 2016, preliminary) ²	5.6% (44th lowest in state)
2014 Poverty rate ³	23.5% (66th lowest in state)
2014 Child poverty rate ³	28.9% (58th lowest in state)
2014 Transfer Payments ¹	\$237,555,000 (26.5% of total personal income, 47th lowest in state)
2014 Medical Benefits as a share of Transfer Payments ¹	44.1% (49th lowest in state)

¹Bureau of Economic Analysis, Regional Data, 2014, ²Bureau of Labor Statistics 2014-2015, ³U.S. Census Bureau, Small Area Income and Poverty, 2014

Education Data

At Least High School Diploma ¹	84.1% (45th highest in state)
Some College ¹	43.2% (59th highest in state)
At Least Bachelor's Degree ¹	15.0% (53rd highest in state)
2012-2013 Free and Reduced Lunch Eligible ²	73.6% (62nd lowest in state)

¹U.S. Census Bureau, American Community Survey, 2010-2014, ²National Center for Education Statistics, 2012-2013.

Payer Source Data

2014 Uninsured Rate (under 65) ¹	24.6% (74th lowest in state)
2014 Uninsured Rate (under 19) ¹	13.4% (66th lowest in state)
2013 Medicare share of total population ²	19.3% (34th lowest in state)
2015 Medicaid share of total population ³	34.0% (60th lowest in state)

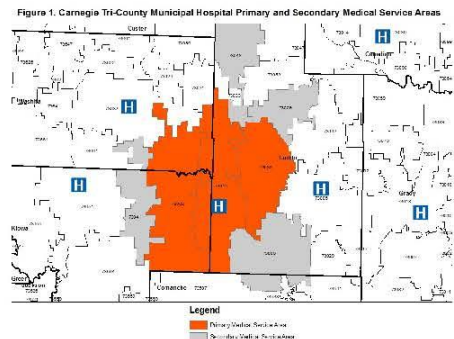
¹ U.S. Census Bureau, Small Area Health Insurance Estimates, 2014, ² Centers for Medicare & Medicaid Services, Medicare Aged and Disabled by State and County, 2013

³ Oklahoma Health Care Authority, Total Enrollment by County, 2015

Population (2010-2014)

Caddo County	29,551 (-0.2% from 2010)
Primary Medical Service Area	6,403 (1.6% from 2010)
Secondary Medical Service Area	7,487 (1.6% from 2010)
Oklahoma	3,818,851 (1.8% from 2010)

U.S. Census Bureau, 2010-2014 American Community Survey 2010 Decennial Census



Percent of Total Population by Age Group for Carnegie Tri-County Municipal Hospital Medical Service Areas, Caddo County and Oklahoma

Age Groups	Primary Medical Service Area	Secondary Medical Service Area	Caddo County	Oklahoma
10-14 ACS				
0-14	22.3%	18.7%	21.0%	20.6%
15-19	5.3%	7.0%	6.7%	6.8%
20-24	5.3%	7.2%	6.1%	7.4%
25-44	21.2%	24.0%	25.2%	25.8%
45-64	28.3%	25.9%	26.1%	25.4%
65+	17.6%	17.2%	14.9%	14.0%
Totals	100.0%	100.0%	100.0%	100.0%
Total Population	6,403	7,487	29,551	3,818,851

SOURCE: U.S. Census Bureau, 2010-2014 American Community Survey

Percent of Total Population by Race and Ethnicity for Carnegie Tri-County Municipal Hospital Medical Service Areas, Caddo County and Oklahoma

Race/Ethnic Groups	Primary Medical Service Area	Secondary Medical Service Area	Caddo County	Oklahoma
10-14 ACS				
White	71.7%	75.9%	62.6%	73.3%
Black	0.7%	0.8%	2.8%	7.3%
Native American ¹	16.7%	15.5%	23.0%	7.2%
Other ²	4.8%	1.4%	4.9%	4.5%
Two or more Races ³	6.1%	6.3%	6.6%	7.8%
Hispanic Origin ⁴	8.2%	6.1%	10.8%	9.4%
Total Population	5,450	7,487	29,551	3,818,851

SOURCE: U.S. Census Bureau, 2010-2014 American Community Survey

For additional information, please contact:
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This project is/was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number H54RH00058 and title: Medicare Rural Hospital Flexibility Grant Program for \$568,040, 0% financed with nongovernmental sources. This information of content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.



Carnegie Tri-County Municipal Hospital Economic Impact



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

Carnegie Tri-County Municipal Hospital **directly** employs **50** people with an annual payroll of over **\$1.9 million** including benefits

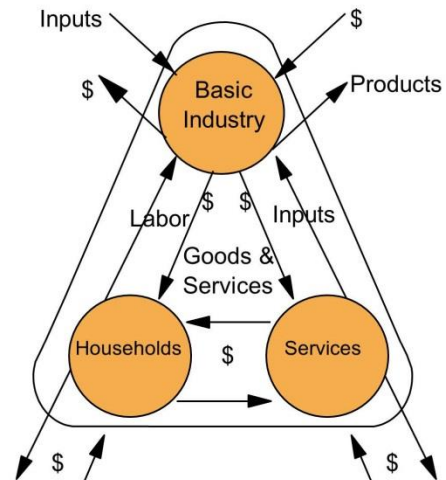
- These employees and income create an additional **18 jobs** and over **\$427,000** in income as they interact with other sectors of the local economy
- **Total impacts= 68 jobs and over \$2.4 million**
- Other segments of the healthcare sector (Doctors, Nurses, Pharmacies, etc.) provide another **98 jobs** and an additional **\$4.9 million** in wages
- Their interactions and transactions within the local economy create:
- **Total health sector impacts= 185 jobs and \$8.3 million (Including the hospital)**
- Nearly **\$1.8 million** in retail sales generated from the presence of the health sector

Healthcare and Your Local Economy:

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

Consider what could be lost without the hospital:

- Pharmacies
- 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 Caddo County
As part of the Community Health Needs Assessment

Table 1. Health Factors (Overall Rank 62)

Category (Rank)	Caddo County	Error Margin	Top U.S. Performers	Oklahoma
Health Behaviors (67)				
<i>Adult Smoking</i>	23%	22-23%	14%	20%
<i>Adult Obesity</i>	36%	31.42%	25%	32%
Food Environment Index	6.1		8.3	6.6
<i>Physical Inactivity</i>	37%	32-42%	20%	31%
Access to Exercise Opportunities	39%		91%	69%
Excessive Drinking	13%	13-13%	12%	13%
Alcohol-Impaired Driving Deaths	29%	22-36%	14%	31%
Sexually Transmitted Infections	384.1		134	479
<i>Teen Birth Rate</i>	72	66-79	19	52
Clinical Care (63)				
<i>Uninsured</i>	26%	23-28%	11%	21%
<i>Primary Care Physicians</i>	4,230:1		1,040:1	1,560:1
Dentists	4,890:1		1,340:1	1,760:1
Mental Health Providers	2,260:1		370:1	270:1
Preventable Hospital Stays	61	54-69	38	63
<i>Diabetic Screening</i>	70%	63-76%	90%	78%
<i>Mammography Screening</i>	50%	43-56%	71%	55%
Social & Economic Factors (55)				
High School Graduation	90%		93%	85%
<i>Some College</i>	46%	42-50%	72%	59%
<i>Unemployment</i>	5.5%		3.5%	4.5%
<i>Children in Poverty</i>	29%	22-35%	13%	22%
Income Inequality	4.7	4.2-5.2	3.7	4.6
Children in Single-Parent Household	35%	30-41%	21%	34%
Social Associations	15.5		22.1	11.7
Violent Crime Rate	374		59	468
<i>Injury Deaths</i>	121	103-139	51	88
Physical Environment (44)				
Air-Pollution- Particulate Matter	10.0		9.5	10.3
Drinking Water Violations	Yes		No	
Severe Housing Problems	13%	11-15%	9%	14%
Driving Alone to Work	84%	82-86%	71%	82%
Long Commute- Driving Alone	29%	36-31%	15%	25%

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

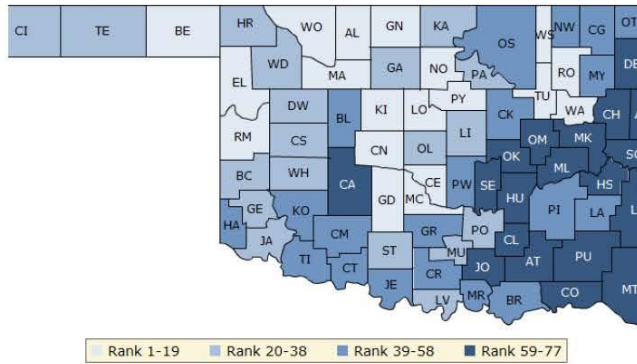
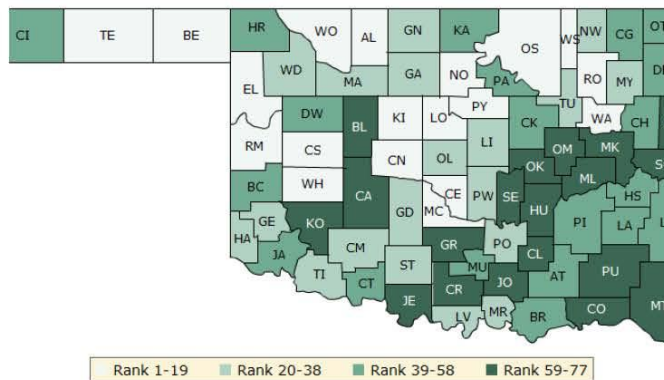


Table 2. Health Outcomes (Overall Rank 70)

Category (Rank)	Caddo County	Error Margin	Top U.S. Performers	Oklahoma
Length of Life (76)				
Premature Death	13,600	12,100-15,100	5,200	9,200
Quality of Life (39)				
Poor or Fair Health	22%	22-23%	12%	19%
Poor Physical Health Days	4.8	4.7-4.9	2.9	4.3
Poor Mental Health Days	4.5	4.4-4.6	2.8	4.2
Low Birth Weight	7%	6-8%	6%	8%

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



For additional information, please contact
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CADDO COUNTY

	PREVIOUS	CURRENT	GRADE
MORTALITY			
INFANT (RATE PER 1,000)	7.5	9.0	F
TOTAL (RATE PER 100,000)	1073.00	1031.70	F
LEADING CAUSES OF DEATH (RATE PER 100,000)			
HEART DISEASE	286.0	245.4	F
MALIGNANT NEOPLASM (CANCER)	228.2	229.3	F
CEREBROVASCULAR DISEASE (STROKE)	47.3	58.3	F
CHRONIC LOWER RESPIRATORY DISEASE	55.2	66.7	F
UNINTENTIONAL INJURY	94.5	87.6	F
DIABETES	52.1	40.0	F
INFLUENZA/PNEUMONIA	22.4	18.8	D
ALZHEIMER'S DISEASE	27.9	22.8	C
NEPHRITIS (KIDNEY DISEASE)	27.1	18.9	D
SUICIDES	10.1	21.3	F
DISEASE RATES			
DIABETES PREVALENCE	11.4%	11.8%	D
CURRENT ASTHMA PREVALENCE	8.5%	9.0%	C
CANCER INCIDENCE (RATE PER 100,000)	528.9	476.1	D
RISK FACTORS & BEHAVIORS			
MINIMAL FRUIT CONSUMPTION	NA	52.5%	F
MINIMAL VEGETABLE CONSUMPTION	NA	28.5%	F
NO PHYSICAL ACTIVITY	33.3%	30.4%	F
CURRENT SMOKING PREVALENCE	28.1%	25.1%	F
OBESITY	32.2%	33.4%	F
IMMUNIZATIONS < 3 YEARS	69.3%	76.5%	B
SENIORS INFLUENZA VACCINATION	65.4%	70.8%	A
SENIORS PNEUMONIA VACCINATION	76.3%	78.5%	A
LIMITED ACTIVITY DAYS	15.4%	16.7%	C
POOR MENTAL HEALTH DAYS	24.9%	23.3%	C
POOR PHYSICAL HEALTH DAYS	21.4%	22.0%	C
GOOD OR BETTER HEALTH RATING	76.1%	77.4%	F
TEEN FERTILITY (RATE PER 1,000)	31.2	32.9	F
FIRST TRIMESTER PRENATAL CARE	51.6%	56.7%	F
LOW BIRTH WEIGHT	8.4%	8.1%	C
ADULT DENTAL VISITS	50.4%	51.9%	F
USUAL SOURCE OF CARE	76.9%	77.1%	C
OCCUPATIONAL FATALITIES (RATE PER 100,000 WORKERS)	*	*	
PREVENTABLE HOSPITALIZATIONS (RATE PER 100,000)	2108.4	2261.0	F
SOCIOECONOMIC FACTORS			
NO INSURANCE COVERAGE	24.1%	20.1%	D
POVERTY	21.3%	20.4%	D

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

Mortality and Leading Causes of Death

- Caddo County ranked 64th in the state for total mortality (age-adjusted).
- Heart disease, cancer and unintentional injury were the leading causes of death in Caddo County.
- Caddo County ranked 18th in the state for deaths due to Alzheimer's disease.
- Caddo County led the state in deaths due to cancer.

Disease Rates

- Caddo County ranked 32nd in the state for both cancer incidence and diabetes disease prevalence.

Risk Factors, Behaviors and Socioeconomic Factors

- 1 in 5 people in Caddo County lived in poverty (20%) and 1 in 5 adults did not have health insurance (20%).
- Caddo County had the highest rate of seniors pneumonia vaccination in the state (78.5%) and was among the top 10 counties for seniors influenza vaccination (70.8%) earning it an "A" for both indicators when compared to national rates.
- Caddo County received low grades for numerous indicators, including fruit/vegetable consumption, no physical activity, smoking and obesity prevalence, self-health rating, teen fertility, 1st trimester prenatal care, and adult dental visits.
- Less than 60% of Caddo County mothers received first trimester prenatal care.
- 1 in 6 adults reported 3+ days with limited activity in the past month (17%).
- Approximately 1 in 4 adults reported 4+ days of poor physical health (22%) and 4+ days of poor mental health (24%) in the previous month.

Changes from Previous the Year

- The rate of deaths due to stroke increased 23% from the previous year.
- The percent of adult smokers declined 11%.
- Adults without health care coverage declined 17%.
- The rate of deaths due to diabetes decreased 23%.

Appendix E- Survey Form and Meeting 3 Materials, December 7, 2016

Caddo County 2016 Themes and Strengths

Please return completed survey by November 18, 2016 to the Caddo County Health Department

This survey is a collaborative effort between Caddo County Health Department, Caddo County Interagency Coalition, Indian Health Services, The Physicians' Hospital in Anadarko and Carnegie Tri-County Municipal Hospital. The goal of this survey is to identify needs and then strategies to improve the health and overall quality of life of Caddo County residents.

Completion of this survey is voluntary, and all responses will be anonymous.

1. How healthy would you rate your community?
 Healthy Neutral Unhealthy

2. How satisfied are you with the quality of life in Caddo County?
 Satisfied Neutral Dissatisfied

3. Are you able to get medical care and medication when needed?

	Yes	No
General Medical Care	<input type="checkbox"/>	<input type="checkbox"/>
Teeth	<input type="checkbox"/>	<input type="checkbox"/>
Eyes	<input type="checkbox"/>	<input type="checkbox"/>
Mental Health Services	<input type="checkbox"/>	<input type="checkbox"/>
Medication	<input type="checkbox"/>	<input type="checkbox"/>

4. How do you pay for your health care? Mark all that apply

<input type="checkbox"/> Cash (no insurance)	<input type="checkbox"/> Medicaid
<input type="checkbox"/> Indian Health Services	<input type="checkbox"/> TRICARE
<input type="checkbox"/> Medicare	<input type="checkbox"/> Private Health Insurance
<input type="checkbox"/> Insure Oklahoma	<input type="checkbox"/> Employer Provided Health Insurance
<input type="checkbox"/> Free Health Clinic	<input type="checkbox"/> Obama Care
<input type="checkbox"/> Veteran Administration	

5. Do you have a primary care physician (family doctor) for most of your routine health care?
 Yes (*Go to Q7*) No (*Skip to Q6*) Don't know (*Skip to Q7*)

6. Why do you not have a primary care (family) physician?

7. Has your household been to a primary care (family) doctor in the Anadarko area?
 Yes (*Go to Q8*) No (*Skip to Q10*) Don't know (*Skip to Q10*)

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

9. Why were you satisfied/dissatisfied with care received in the Anadarko area?

Continue on reverse side...

10. Has your household been to a primary care (family) doctor in the Carnegie area?
 Yes (*Go to Q11*) No (*Skip to Q13*) Don't know (*Skip to Q13*)
11. How satisfied was your household with the quality of care received in the Carnegie area?
 Satisfied Dissatisfied Don't know
12. Why were you satisfied/dissatisfied with care received in the Carnegie area?
-

13. Has your household used the services of a hospital in the past 24 months?
 Yes (*Go to Q14*) No (*Skip to Q22*) Don't know (*Skip to Q22*)
14. At which hospital(s) were services received? (*please check/list all that apply*)
 The Physicians' Hospital in Anadarko (*Skip to Q16*) Other (*Please specify Hospital and City, then go to Q15*)
 Carnegie Tri-County Municipal Hospital (*Skip to Q19*)
-

If you responded in Q14 that your household received care at a hospital other than The Physicians' Hospital in Anadarko or Carnegie Tri-County Municipal Hospital, why did you or your family member choose that hospital?

15. (*Please answer then skip to Q22*)
- | | |
|---|---|
| <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 Q14 that your household received care at The Physicians' Hospital in Anadarko, what hospital service(s) were used?

- | | |
|---|---|
| <input type="checkbox"/> Diagnostic imaging (X-ray, CT, Ultrasound) | <input type="checkbox"/> Skilled nursing (swing bed) |
| <input type="checkbox"/> Laboratory | <input type="checkbox"/> Emergency room (ER) |
| <input type="checkbox"/> Outpatient services | <input type="checkbox"/> Outpatient surgery |
| <input type="checkbox"/> Physician services | <input type="checkbox"/> Other (<i>Please list below</i>) |
| <input type="checkbox"/> Hospital inpatient | |
-

17. How satisfied was your household with the services you received at The Physicians' Hospital in Anadarko?
 Satisfied Dissatisfied Don't know

18. Why were you satisfied/dissatisfied with services received at The Physicians' Hospital in Anadarko?
-

Continue on reverse side...

If you responded in Q14 that your household received care at Carnegie Tri-County Municipal Hospital, what hospital service(s) were used?

19. Diagnostic imaging (X-ray, CT, Ultrasound) Skilled nursing (swing bed)
 Laboratory Emergency room (ER)
 Outpatient services Other (*Please list below*)
 Physician services
 Hospital inpatient
-
-

20. How satisfied was your household with the services you received at Carnegie Tri-County Municipal Hospital?
 Satisfied Dissatisfied Don't know

21. Why were you satisfied/dissatisfied with services received at Carnegie Tri-County Municipal Hospital?

22. Has your household been to a specialist in the past 24 months?
 Yes No (*Skip to Q26*) Don't know (*Skip to Q26*)

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

Type of Specialist	City

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

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

26. Do you think there are enough primary care (family) doctors practicing in Caddo County?
 Yes No Don't know

27. Would you consider seeing a nurse practitioner or physician assistant for your routine healthcare needs?
 Yes No Don't know

28. Are you able to get an appointment with your primary care physician when you need one?
 Yes No Don't know

Continue on reverse side...

What additional health services would you like to see offered at The Physicians' Hospital in Anadarko or Carnegie Tri-County Municipal Hospital?

The Physicians' Hospital in Anadarko: _____

Carnegie Tri-County Municipal Hospital: _____

30. Are you aware of any community programs offered by the hospital? Please list any services that you are aware each The Physicians' Hospital in Anadarko:

Carnegie Tri-County Municipal Hospital: _____

31. Mark your level of agreement with the following statements as they apply in Caddo County.

	Agree	Disagree
There are jobs available in the community	<input type="checkbox"/>	<input type="checkbox"/>
There are opportunities for advancement	<input type="checkbox"/>	<input type="checkbox"/>
Jobs pay enough to live on	<input type="checkbox"/>	<input type="checkbox"/>
I have access to fresh fruit and vegetables	<input type="checkbox"/>	<input type="checkbox"/>

32. Mark your level of agreement with the following statements as they apply in Caddo County.

	Agree	Disagree
The community is a safe place to live	<input type="checkbox"/>	<input type="checkbox"/>
Neighbors know, trust, and look out for one another	<input type="checkbox"/>	<input type="checkbox"/>
There are support networks for individuals and families (For example, church or family readiness group.)	<input type="checkbox"/>	<input type="checkbox"/>

Continue on reverse side...

33. Mark your level of agreement with the following statements as they apply in Caddo County.

	Agree	Disagree
Community is a good place to raise children	<input type="checkbox"/>	<input type="checkbox"/>
There are opportunities for children to be active	<input type="checkbox"/>	<input type="checkbox"/>
There is access to safe and affordable child care	<input type="checkbox"/>	<input type="checkbox"/>
I am satisfied with the school system	<input type="checkbox"/>	<input type="checkbox"/>
There are networks to support parents	<input type="checkbox"/>	<input type="checkbox"/>
This is a community to grow old in	<input type="checkbox"/>	<input type="checkbox"/>
There are opportunities for older adults to be active	<input type="checkbox"/>	<input type="checkbox"/>
There are services for older adults	<input type="checkbox"/>	<input type="checkbox"/>
There are networks of support for the elderly living alone	<input type="checkbox"/>	<input type="checkbox"/>

34. Are you aware of the following laws?

- Oklahoma Child Passenger Safety Law (Car Seat Law)
- Social Host Law (Adults can be fined or cited for serving alcohol to minors)

35. What are the 3 things that cause you the most stress? Please mark only 3.

- | | |
|--|---|
| <input type="checkbox"/> Money/Finances | <input type="checkbox"/> School |
| <input type="checkbox"/> Work/Job | <input type="checkbox"/> Discrimination |
| <input type="checkbox"/> Family Responsibilities | <input type="checkbox"/> Poor or Unstable Housing |
| <input type="checkbox"/> Mental or Physical Health Conditions | <input type="checkbox"/> Substance Abuse |
| <input type="checkbox"/> Parenting/Children | <input type="checkbox"/> Lack of Transportation |
| <input type="checkbox"/> Major Life Event | <input type="checkbox"/> Abuse |
| <input type="checkbox"/> Relationship Difficulties (Friends, Spouse, etc.) | <input type="checkbox"/> Lack of Safety/Crime |
| <input type="checkbox"/> Unemployment | <input type="checkbox"/> Other <i>(Please list below)</i> |

Continue on reverse side...

35. What are the 3 most common ways you manage your stress? Please mark only 3.

- | | |
|---|---|
| <input type="checkbox"/> Exercise, walk or go for a bike ride | <input type="checkbox"/> Drink alcohol |
| <input type="checkbox"/> Spend time with family or friends | <input type="checkbox"/> Go for a drive |
| <input type="checkbox"/> Read | <input type="checkbox"/> Play a video game or surf the internet |
| <input type="checkbox"/> Watch television or movies | <input type="checkbox"/> Get a massage or spa treatment |
| <input type="checkbox"/> Listen to music | <input type="checkbox"/> Nothing |
| <input type="checkbox"/> Clean or do chores | <input type="checkbox"/> Shop |
| <input type="checkbox"/> Spend time doing a hobby | <input type="checkbox"/> Play sports |
| <input type="checkbox"/> Pray or go to church | <input type="checkbox"/> Smoke/Vape/Dip/Chew |
| <input type="checkbox"/> Eat | <input type="checkbox"/> See a mental health professional |
| <input type="checkbox"/> Nap | <input type="checkbox"/> Gamble |
| <input type="checkbox"/> Meditation | <input type="checkbox"/> Other <i>(Please list below)</i> |
-

36. What do you think are the 3 biggest health problems in Caddo County? Please mark only 3.

- | | |
|---|---|
| <input type="checkbox"/> Poverty | <input type="checkbox"/> Sexually transmitted diseases/infections (STI/STD) |
| <input type="checkbox"/> Aging problems (arthritis, hearing loss, etc.) | <input type="checkbox"/> Motor vehicle crash injuries |
| <input type="checkbox"/> Mental health problems | <input type="checkbox"/> Respiration/Lung disease |
| <input type="checkbox"/> Housing that is adequate, safe and affordable | <input type="checkbox"/> Rape/Sexual assault |
| <input type="checkbox"/> Heart disease and stroke | <input type="checkbox"/> Infectious diseases (hepatitis, TB) |
| <input type="checkbox"/> Cancers | <input type="checkbox"/> Suicide |
| <input type="checkbox"/> Domestic violence | <input type="checkbox"/> Homicide |
| <input type="checkbox"/> Child abuse/Neglect | <input type="checkbox"/> Firearm-Related injuries |
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> Infant death |
| <input type="checkbox"/> High blood pressure | <input type="checkbox"/> HIV/AIDS |
| <input type="checkbox"/> Dental problems | <input type="checkbox"/> Obesity |
| <input type="checkbox"/> Teenage pregnancy | <input type="checkbox"/> Other <i>(Please list below)</i> |
-

37. What do you think are the 3 most important factors for a quality of life in a "Healthy Community"? Please mark only 3.

- | | |
|---|--|
| <input type="checkbox"/> Good jobs and healthy economy | <input type="checkbox"/> Religious or spiritual values |
| <input type="checkbox"/> Access to healthcare (ex. Family doctor) | <input type="checkbox"/> Parks and recreation |
| <input type="checkbox"/> Healthy behaviors and lifestyles | <input type="checkbox"/> Arts and cultural events |
| <input type="checkbox"/> Affordable housing | <input type="checkbox"/> Low adult death and disease rates |
| <input type="checkbox"/> Strong family life | <input type="checkbox"/> Excellent race relations |
| <input type="checkbox"/> Low crime/safe neighborhoods | <input type="checkbox"/> Low levels of child abuse |
| <input type="checkbox"/> Good schools | <input type="checkbox"/> Low infant deaths |
| <input type="checkbox"/> Good place to raise children | <input type="checkbox"/> Other <i>(Please list below)</i> |
| <input type="checkbox"/> Clean environment | |
-

Continue on reverse side...

38. What is your zip code? _____

39. What is your gender? _____

40. What ethnic group do you most identify with?

- | | |
|---|---|
| <input type="checkbox"/> African American/Black | <input type="checkbox"/> Hispanic/Latino |
| <input type="checkbox"/> White/Caucasian | <input type="checkbox"/> American Indian/Alaskan Native |
| <input type="checkbox"/> Asian/Pacific Islander | <input type="checkbox"/> Other <i>(Please list below)</i> |
-

41. What is the highest level of school that you have completed?

- | | |
|---|--|
| <input type="checkbox"/> Primary school | <input type="checkbox"/> 2-year college degree |
| <input type="checkbox"/> Some high school, but no diploma | <input type="checkbox"/> 4-year college degree |
| <input type="checkbox"/> High school diploma (or GED) | <input type="checkbox"/> Graduate-level degree |
| <input type="checkbox"/> Some college, but no degree | <input type="checkbox"/> None of the above |

42. 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 | |

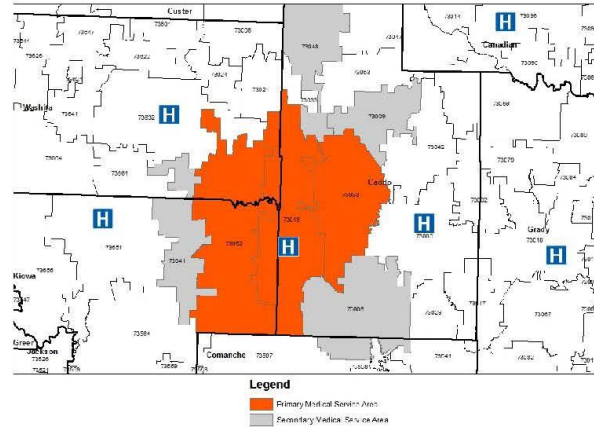
Primary Care Physician Demand Analysis for the Carnegie Medical Service Area

As part of the Community Health Needs Assessment

Table 1. Carnegie Tri-County Municipal Hospital Medical Service Areas

Zip Code	City	2010-2014 ACS Population
<i>Primary Medical Service Area</i>		
73038	Fort Cobb	1,987
73015	Carnegie	2,854
73062	Mountain View	1,562
Totals		<u>6,403</u>
<i>Secondary Medical Service Area</i>		
73006	Apache	4,014
73009	Binger	1,189
73048	Hydro	2,007
73041	Gotebo	277
Totals		<u>7,487</u>

Figure 1. Carnegie Tri-County Municipal Hospital Primary and Secondary Medical Service Areas



SOURCE: Population data from the U.S. Bureau of Census, 2010-2014 American Community Survey

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

Age	PRIMARY MEDICAL SERVICE AREA						
	Male			Female			Total Visits
	10-14 Population	Visit Rate ^[3]	Visits	10-14 Population	Visit Rate ^[3]	Visits	
Under 15	806	2.5	2,015	623	2.3	1,433	3,448
15-24	397	1.2	476	282	2.1	592	1,069
25-44	732	1.5	1,098	623	3.1	1,931	3,029
45-64	917	2.9	2,659	897	3.7	3,319	5,978
65-74	305	5.1	1,556	384	5.6	2,150	3,706
75+	196	6.9	1,352	241	6.6	1,591	2,943
Total	3,353		9,157	3,050		11,016	20,173

Primary Medical Service Area - Local Primary Care Physician office visits per year: 11,014



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

SECONDARY MEDICAL SERVICE AREA							
Age	Male			Female			Total Visits
	10-14 Population	Visit Rate ^[3]	Visits	10-14 Population	Visit Rate ^[3]	Visits	
Under 15	717	2.5	1,793	686	2.3	1,578	3,370
15-24	623	1.2	748	438	2.1	920	1,667
25-44	891	1.5	1,337	907	3.1	2,812	4,148
45-64	987	2.9	2,862	952	3.7	3,522	6,385
65-74	352	5.1	1,795	356	5.6	1,994	3,789
75+	209	6.9	1,442	369	6.6	2,435	3,878
Total	3,779		9,976	3,708		13,261	23,237

Secondary Medical Service Area - Local Primary Care Physician office visits per year: 12,687

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 Carnegie, 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%	8,344	8,895	9,446	9,997	10,547	11,098	11,649
	10%	8,979	9,530	10,080	10,631	11,182	11,732	12,283
	15%	9,613	10,164	10,715	11,265	11,816	12,367	12,918
	20%	10,248	10,798	11,349	11,900	12,450	13,001	13,552
	25%	10,882	11,433	11,983	12,534	13,085	13,636	14,186
	30%	11,516	12,067	12,618	13,168	13,719	14,270	14,821
	35%	12,151	12,701	13,252	13,803	14,354	14,904	15,455
	40%	12,785	13,336	13,886	14,437	14,988	15,539	16,089
	45%	13,419	13,970	14,521	15,072	15,622	16,173	16,724
	50%	14,054	14,604	15,155	15,706	16,257	16,807	17,358

If 90% primary medical service area and 10 to 15% secondary medical service area, then the usage would be: 11,182 to 11,816 total primary care physician office visits in the Carnegie area for an estimated 2.7 to 2.8 Total Primary Care Physicians.

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

For additional information, please contact
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