

Memorial Hospital Community Health Needs Assessment Summary and Implementation Strategy



Oklahoma Office of Rural Health

OSU Center for Rural Health

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Table of Contents

Introduction.....	1
Oklahoma Office of Rural Health Partnership.....	2
Memorial Hospital Medical Services Area Demographics.....	2
Figure 1. Memorial Hospital Medical Service Areas.....	3
Table 1. Population of Memorial Hospital Medical Service Area.....	4
Table 2. Existing Medical Services in the Memorial Hospital Medical Services Area	5
Table 3. Percent of Total Population by Age Group for Memorial Hospital Medical Service Areas, Adair County and Oklahoma	6
Table 4. Percent of Total Population by Race and Ethnicity for Memorial Hospital Service Areas, Adair County and Oklahoma	7
Summary of Community Meetings.....	8
Economic Impact and Community Health Needs Assessment Overview, July 24, 2014 and September 30, 2014	8
Table 5. Memorial Hospital Medical Service Area Health Sector Impact on Employment and Income, and Retail Sales and Sales Tax	9
Community Survey Methodology and Results, April- July 24, 2014- December 2, 2014	10
Table 6. Zip Code of Residence.....	10
Table 7. Type of Specialist Visits	11
Figure 2. Summary of Hospital Usage and Satisfaction Rates	12
Table 8. Top Health Care Concerns in Community.....	13
Table 9. Additional services to be offered at Memorial Hospital	14
Health Data and Health Priority Identification, June 30, 2015	14
Table 10. Health Factors (Overall Rank 77)	16
Table 11. Health Outcomes (Overall Rank 56).....	17
Community Health Needs Implementation Strategy	18
Community Health Needs Assessment Marketing Plan	20
Appendix A- Hospital Services/Community Benefits	21
Appendix B Community Meeting Attendees.....	22
Appendix C- Survey Instrument	23
Appendix D- Meeting Materials, June 30, 2015	25

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 Memorial Hospital in 2014 and 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.

Memorial Hospital Medical Services Area Demographics

Figure 1 displays the Memorial Hospital medical services area. Memorial 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.

City	County	Hospital	No. of Beds
<i>Stilwell</i>	<i>Adair</i>	<i>Memorial Hospital</i>	<i>67</i>
Tahlequah	Cherokee	Tahlequah City Hospital	100
Sallisaw	Sequoyah	Sequoyah Memorial Hospital	41
Siloam Springs	Benton, AR	Siloam Springs Regional Hospital	73
Van Buren	Crawford, AR	Summit Medical Center	103
Fayetteville	Washington, AR	Physicians' Specialty Hospital	64
Fayetteville	Washington, AR	Washington Regional Medical Center at North Hills	366
Springdale	Washington, AR	Northwest Medical Center	222
Springdale	Washington, AR	Regency Hospital of Springdale	25

3

The secondary medical services area is comprised of the zip code areas Cookson, Proctor, Marble City, Evansville, AR, Lincoln, AR, Summers, AR, and Natural Dam, AR. The secondary medical service area experienced an increase in population of 22.7 percent from 1990 to 2000 followed by another increase of 17.8 percent from 2000 to 2010.

Table 1. Population of Memorial Hospital Medical Service Area

Population by Zip Code	1990 Census	2000 Census	2010 Census	% Change '90-'00	% Change '00-'10
<i>Primary Medical Service Area</i>					
74960 Stilwell	10,267	12,489	13,643	21.6%	9.2%
74471 Welling	3,149	1,531	1,800	-51.4%	17.6%
74931 Bunch	1,656	1,483	1,411	-10.4%	-4.9%
74964 Watts	2,156	2,636	2,834	22.3%	7.5%
74965 Westville	3,899	4,990	5,170	28.0%	3.6%
Total	21,127	23,129	24,858	9.5%	7.5%
<i>Secondary Medical Service Area</i>					
74427 Cookson	1,312	1,274	1,383	-2.9%	8.6%
74457 Proctor	443	190	608	-57.1%	220.0%
74945 Marble City	n/a	520	497	n/a	-4.4%
72729 Evansville, AR	380	350	280	-7.9%	-20.0%
72744 Lincoln, AR	3,129	4,541	5,343	45.1%	17.7%
72769 Summers, AR	1,013	942	1,162	-7.0%	23.4%
72948 Natural Dam, AR	497	492	518	-1.0%	5.3%
Total	6,774	8,309	9,791	22.7%	17.8%

SOURCE: Population data from the U.S. Bureau of Census, 1990, 2000 and 2010 (June 2014).

Table 2 displays the current existing medical services in the primary service area of the Memorial Hospital medical services area. Most of these services would be expected in a service area of Stilwell's size: 3 physician offices and clinics, 1 dental office, 1 optometrist office, 1 chiropractic office, 1 nursing home, 2 home health providers, 2 mental health providers, 1 county health department, and 2 pharmacies. Memorial Hospital is a 57 inpatient bed facility located in Adair County, Oklahoma. The hospital has 7 bassinets along with a 10 bed geri/psch unit. A few of the services offered by Memorial Hospital include general surgery, same day surgery, 24-hour emergency department, and psychiatry services covering the areas of general, adolescent, and geriatric. Memorial Hospital provides outpatient services such as women's health including

mammography and bone density, diagnostic services such as CT, MRI, and ultrasound, home health, sleep study, and a specialty clinic with cardiology, pediatrics, OB/GYN, and family practice. A complete list of hospital services and community involvement activities can be found in Appendix A.

Table 2. Existing Medical Services in the Memorial Hospital Medical Services Area

Count	Service
1	Hospital: Memorial Hospital
3	Physician offices and clinics
2	Dental offices
1	Optometrist office
1	Chiropractic office
1	Nursing Home
2	Home health providers
2	Mental health providers
1	County health department
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 Adair County in comparison to the state of Oklahoma. The age group of 45-64 has experienced an overall increase from 2000 to 2010 for all geographies listed. In particular, this cohort accounted for 26.0 percent of the primary medical service area and 28.9 percent of the secondary medical service area in 2010. This is compared to the state rate of 25.7 percent. In terms of population over the age of 65, the secondary (16.1%) medical service area has a larger share compared to the state average (13.5%). This cohort only accounted for 12.7 percent of the primary medical service area.

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

Age Groups	Primary Medical Service Area	Secondary Medical Service Area	Adair County	Oklahoma
2000 Census				
0-14	24.6%	20.5%	24.9%	21.2%
15-19	7.8%	6.7%	8.1%	7.8%
20-24	6.2%	5.5%	6.1%	7.2%
25-44	27.6%	26.5%	27.2%	28.3%
45-64	21.9%	25.7%	21.6%	22.3%
65+	<u>11.9%</u>	<u>15.0%</u>	<u>12.1%</u>	<u>13.2%</u>
Totals	100.0%	100.0%	100.0%	100.0%
Total Population	23,129	8,309	21,038	3,450,654
2010 Census				
0-14	23.1%	20.1%	23.2%	20.7%
15-19	7.5%	7.1%	7.7%	7.1%
20-24	5.6%	4.7%	5.5%	7.2%
25-44	25.0%	23.1%	24.8%	25.8%
45-64	26.0%	28.9%	25.6%	25.7%
65+	<u>12.7%</u>	<u>16.1%</u>	<u>13.2%</u>	<u>13.5%</u>
Totals	100.0%	100.0%	100.0%	100.0%
Total Population	24,858	9,791	22,683	3,751,351

SOURCE: U.S. Census Bureau, Census data for 2000, and 2010 (www.census.gov [June 2014]).

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% of the total state population. This trend is somewhat evident in the Stilwell medical service area and Adair County. However, a more striking trend is the larger share of Native American population residing within Adair

County and the medical service areas. In particular, this cohort accounted for 43.3 percent of the population of the primary medical service area, and 10.7 percent of the secondary medical service area. These shares are compared to the state rate of 8.6 percent.

Table 4. Percent of Total Population by Race and Ethnicity for Memorial Hospital Service Areas, Adair County and Oklahoma

Race/Ethnic Groups	Primary Medical Service Area	Secondary Medical Service Area	Adair County	Oklahoma
2000 Census				
White	48.3%	84.6%	48.5%	74.1%
Black	0.2%	0.1%	0.2%	7.5%
Native American ¹	42.5%	10.3%	42.5%	7.7%
Other ²	1.3%	1.7%	1.2%	1.5%
Two or more Races ³	7.7%	3.3%	7.5%	4.1%
Hispanic Origin ⁴	3.0%	3.1%	3.1%	5.2%
Total Population	23,129	8,309	21,038	3,450,654
2010 Census				
White	43.0%	80.3%	43.0%	72.2%
Black	0.3%	0.3%	0.2%	7.4%
Native American ¹	43.3%	10.7%	43.3%	8.6%
Other ²	2.8%	4.5%	2.3%	5.9%
Two or more Races ³	10.7%	4.2%	10.5%	5.9%
Hispanic Origin ⁴	5.2%	4.1%	5.3%	8.9%
Total Population	24,858	9,791	22,683	3,751,351

SOURCE: U.S. Census Bureau, Census data for 2000 and 2010 (www.census.gov [June 2014]).

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

Memorial Hospital hosted four community meetings between July 24, 2014 and June 30, 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:

- Kiwanis Club members
- Local newspaper
- Local bankers
- Local business owners
- Retired individuals
- Adair County Health Department
- Local DHS provider

Average attendance at the community meetings was 15-20 community members. Three community meetings were incorporated as part of the local Kiwanis Club meeting. Community members were sought for their deep understanding and overall concern of their local community. Representatives from the public health sector and DHS were included to provide insight into what they see from a public health perspective of community needs.

Economic Impact and Community Health Needs Assessment Overview, July 24, 2014 and September 30, 2014

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 Adair County, Oklahoma economy. A representative from Memorial Hospital contacted health service entities in each of the sectors listed for the medical service area. Along with identifying each establishment, the hospital representative also gathered information on the number of FTE employees per establishment. 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 Memorial Hospital medical service area employs 504 FTE individuals. After applying a county-specific employment multiplier to each respective sector, there is a total employment impact of 654 FTE employees. The same methodology is applied to income. The local health sector has a direct income impact of nearly \$32 million. When the appropriate income multiplier is applied, the total income impact is over \$37.5 million. The last two columns examine the impact this has on the retail sector of the local community. Recent data suggest that just 11.8% of personal income in Adair 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 nearly \$4.4 million spent locally, generating \$44,335 on a 1% tax.

Table 5. Memorial 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	187	1.39	259	\$13,530,000	1.18	\$15,940,870	\$1,881,023	\$18,810
Physicians, Dentists, & Other Medical Professionals	167	1.28	214	\$11,904,033	1.19	\$14,134,896	\$1,667,918	\$16,679
Home Health & Nursing Homes	94	1.17	110	\$3,433,885	1.15	\$3,950,934	\$466,210	\$4,662
Other Medical & Health Services & Pharmacies	<u>56</u>	<u>1.26</u>	<u>71</u>	<u>\$3,045,624</u>	<u>1.16</u>	<u>\$3,545,348</u>	<u>\$418,351</u>	<u>\$4,184</u>
Total	504		654	\$31,913,542		\$37,572,049	\$4,433,502	\$44,335

SOURCE: 2012 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 Adair County retail sales and income (11.8%) – from 2013 County Sales Tax Data and 2012 Personal Income Estimates from the Bureau of Economic Analysis.

Community Survey Methodology and Results, April- July 24, 2014- December 2, 2014

A survey was designed to gauge hospital usage, satisfaction, and community health needs. The survey was available in both paper and web format. The paper surveys were distributed at the hospital and during the community meetings on July 24, 2014 and September 30, 2014. Community members present took surveys home and to their places of work for others to complete. The paper survey was also distributed at the local Kiwanis Club. The electronic survey link was emailed out to community members immediately following the July 24th meeting and placed on the hospital's website. A copy of the survey form and results can be found in Appendix C. Community members were asked to return their completed surveys to Memorial Hospital.

The survey ran from July 24, 2014 to October 3, 2014. A total of 83 surveys from the Memorial Hospital medical service area were completed. The survey results were presented at the December 2, 2014, community meeting.

Table 8 below shows the survey respondent representation by zip code. The largest share of respondents was from the Stilwell (74960) zip code with 56 responses or 67.5 percent of the total. Westville followed with 11 respondents, and Bunch had 6 survey respondents.

Table 6. Zip Code of Residence

Response Category	No.	%
74960- Stilwell	56	67.5%
74965- Westville	11	13.3%
74931- Bunch	6	7.2%
74471- Welling	2	2.4%
74955- Sallisaw	2	2.4%
74451- Park Hill	1	1.2%
74464- Tahlequah	1	1.2%
74964- Watts	1	1.2%
67204- Wichita, KS	1	1.2%
72761- Siloam Springs, AR	1	1.2%
No Response	1	1.2%
Total	83	100.0%

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

Primary Care Physician Visits

- 69.9% of respondents had used a primary care physician in the Stilwell service area during the past 24 months
- 89.7% of those responded being satisfied
- 35 respondents or 42.2% believe there are enough primary care physicians practicing in Stilwell
- 55.4% of the respondents would consider seeing a midlevel provider for their healthcare needs
- 65.1% responded they were able to get an appointment with their primary care physician when they needed one

Specialist Visits

Summary highlights include:

- 49.4% of all respondents report some specialist visit in past 24 months
- Most common specialty visited are displayed in Table 9
- Only 12.0% of specialist visits occurred in Stilwell

Table 7. Type of Specialist Visits

Type of Specialist	No.	Percent
<i>Top 5 Responses</i>		
Cardiologist (0 visits in Stilwell)	7	10.3%
Otolaryngologist (1 visit in Stilwell)	7	10.3%
Orthopedic Surgeon (0 visits in Stilwell)	5	7.4%
Rheumatologist (0 visits in Stilwell)	5	7.4%
Urologist (0 visits in Stilwell)	4	5.9%
All others (7 visits in Stilwell)	<u>40</u>	<u>58.8%</u>
Total	<u>68</u>	<u>100.0%</u>

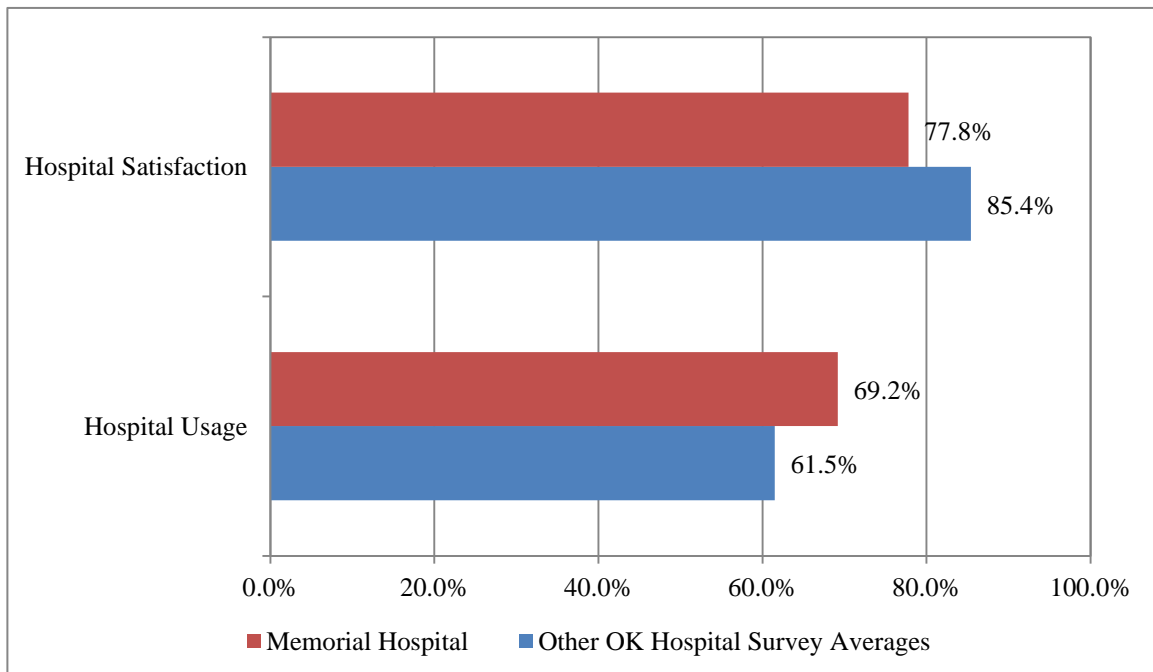
Some respondents answered more than once.

Hospital Usage and Satisfaction

Survey highlights include:

- 69.2% of survey respondents that have used hospital services in the past 24 months used services at Memorial Hospital
 - Cherokee Nation, WW Hastings Hospital in Tahlequah (9.0%), Tahlequah City Hospital (7.7%), and Mercy Ft. Smith (2.6%) followed
 - The most common response for using a hospital other than Memorial Hospital were physician referral (20.2%) and insurance reasons/Native American facility (20.0%)
 - The usage rate of 69.2% was higher than the state average of 61.5% for usage of other rural Oklahoma hospitals surveyed
- 77.8% of survey respondents were satisfied with the services received at Memorial Hospital
 - This is below the state average for other hospitals (85.4%)
- Most common services used at Memorial Hospital:
 - Physician services (20.3%)
 - Diagnostic imaging (20.3%)
 - Emergency room (19.5%)

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 no concerns/don't know (10.2%) followed by not enough specialists (6.8%) and poor customer service/lack of professionalism (4.5%). Table 8 displays all responses and the frequencies.

Table 8. Top Health Care Concerns in Community

Response Category	No.	%
No Concerns/ Don't Know	9	10.2%
Not enough specialists	6	6.8%
Poor customer service/Professionalism	4	4.5%
Long wait in waiting room to see physician	3	3.4%
Cost of care	2	2.3%
Too much turnover with physicians/Retain physicians	2	2.3%
Having enough providers for patient load	2	2.3%
Quality of care	2	2.3%
Availability of care	2	2.3%
Lack of doctors	1	1.1%
Routine med administration that might not work	1	1.1%
Improved Emergency Room services	1	1.1%
Difficult to get an appointment when needed	1	1.1%
Too many people in ER at once/Long wait	1	1.1%
Low income populations	1	1.1%
Unhealthy eating/Lifestyle	1	1.1%
Drug use	1	1.1%
Short staff	1	1.1%
Not enough knowledge	1	1.1%
Obesity	1	1.1%
Limitation of midlevel care services	1	1.1%
Well child visits have to be scheduled so far out due to appointment availability	1	1.1%
No response	43	48.9%
Total*	88	100.0%

*Some respondents answered more than once. Average number of responses equal 1.06

Survey respondents also had the opportunity to identify what additional services they would like to see offered at Memorial Hospital. The most common response was specialists (20.2 %). Within this category, orthopedist had 4 responses, specialists in general had 3, rheumatologist, urologist, and endocrinologist each had 2, and allergist, gastroenterologist,

pediatrician, cardiologist, and neurologist each had 1. No additional services/Don't know followed with 4.5 percent of the total responses. Table 9 displays the full listing of responses.

Table 9. Additional services to be offered at Memorial Hospital

Response Category	No.	%
More specialists: Orthopedist (4); Specialists in general (3); Rheumatologist (2); Urologist (2); Endocrinologist (2); Allergist (1); Gastroenterologist (1); Pediatrician (1); Cardiologist (1); Neurologist (1)	18	20.2%
No additional services/ Don't know	4	4.5%
Dietician/Meals for diabetics	3	3.4%
Does not use Memorial Hospital	2	2.2%
More jobs for Native Americans	1	1.1%
Drug and Alcohol counseling	1	1.1%
Mental health services	1	1.1%
More physicians in general	1	1.1%
More technology	1	1.1%
Children's clinics	1	1.1%
More independent physicians	1	1.1%
More ER physicians	1	1.1%
Better pay for employees	1	1.1%
Urgent care services	1	1.1%
Prenatal classes	1	1.1%
Intensive Care Unit	1	1.1%
Diabetic foot care	1	1.1%
No response	49	55.1%
Total*	89	100.0%

*Some respondents answered more than once. Average number of responses equal 1.07

Health Data and Health Priority Identification, June 30, 2015

A community meeting was held June 30, 2015, during the local Kiwanis meeting 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.

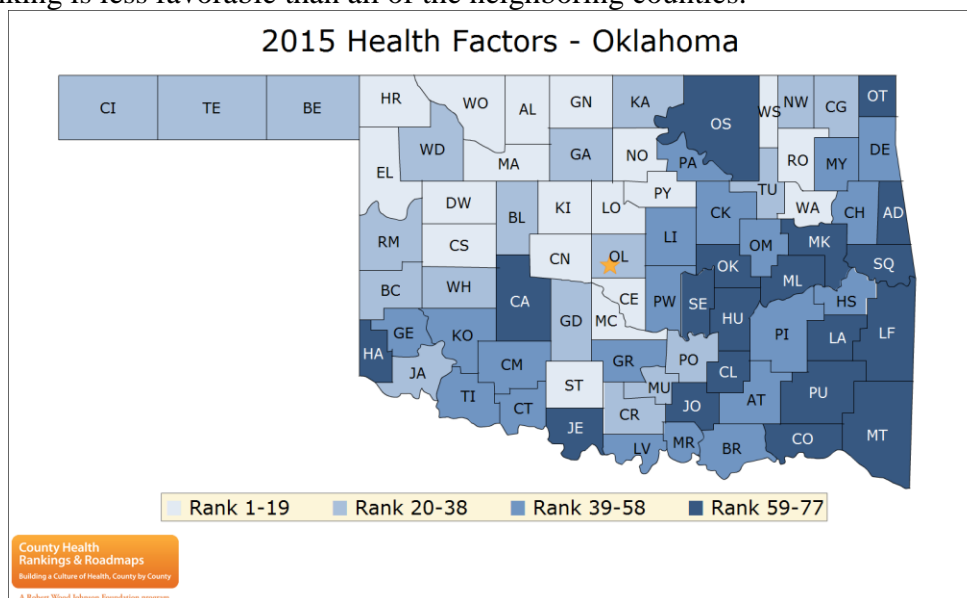
Health factors, considered tomorrow's health, are comprised of health behaviors (rank: 70), clinical care (rank: 77), social and economic factors (rank: 77), and physical environment (rank: 64). Adair County's overall health factors rank is 77. This suggests, in general, the health status of Adair County residents is less favorable to that of neighboring counties. Areas of concern include Adair County's smoking rate, adult obesity rate, and the county resident's access to exercise opportunities are all less desirable than the top U.S. performers. Also, the rate of uninsured individuals, the number of preventable hospital stays, diabetic screening of Medicare recipients, and mammography screening of Medicare recipients are all areas of concern in Adair County. All health factors variables are presented in Table 10 along with Adair 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 Adair County ranks very poorly compared to the national benchmark).

Table 10. Health Factors (Overall Rank 77)

Category (Rank)	Adair County	Error Margin	Top U.S. Performers	Oklahoma
Health Behaviors (70)				
<i>Adult Smoking</i>	30%	23-39%	14%	24%
<i>Adult Obesity</i>	35%	29-41%	25%	32%
Food Environment Index	6.8		8.4	6.7
<i>Physical Inactivity</i>	34%	28-40%	20%	30%
<i>Access to Exercise Opportunities</i>	32%		92%	72%
Excessive Drinking	11%	6-18%	10%	13%
Alcohol-Impaired Driving Deaths	30%		14%	33%
<i>Sexually Transmitted Infections</i>	619		138	442
<i>Teen Birth Rate</i>	72	61-71	20	54
Clinical Care (77)				
<i>Uninsured</i>	28%	26-30%	11%	21%
Primary Care Physicians	2,786:1		1,045:1	1,567:1
Dentists	4,439:1		1,377:1	1,805:1
Mental Health Providers	716:1		386:1	285:1
<i>Preventable Hospital Stays</i>	167	150-184	41	71
<i>Diabetic Screening</i>	51%	45-57%	90%	78%
<i>Mammography Screening</i>	48%	39-57%	71%	55%
Social & Economic Factors (77)				
<i>High School Graduation</i>	71%			78%
<i>Some College</i>	39%	35-44%	71%	58%
<i>Unemployment</i>	7.6%		4.0%	5.4%
<i>Children in Poverty</i>	41%	32-49%	13%	24%
Income Inequality	4.8	4.2-5.3	3.7	4.6
Children in Single-Parent Household	36%	31-41%	20%	24%
Social Associations	11.2		22.0	11.8
Violent Crime Rate	339		59	468
Injury Deaths	91	76-101	50	86
Physical Environment (64)				
Air-Pollution- Particulate Matter	11.0		9.5	10.3
<i>Drinking Water Violations</i>	20%		0%	23%
Severe Housing Problems	14%	12-17%	9%	14%
Driving Alone to Work	79%	76-81%	71%	82%
Long Commute- Driving Alone	33%	29-37%	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. Adair County's overall health factors ranking is less favorable than all of the neighboring counties.



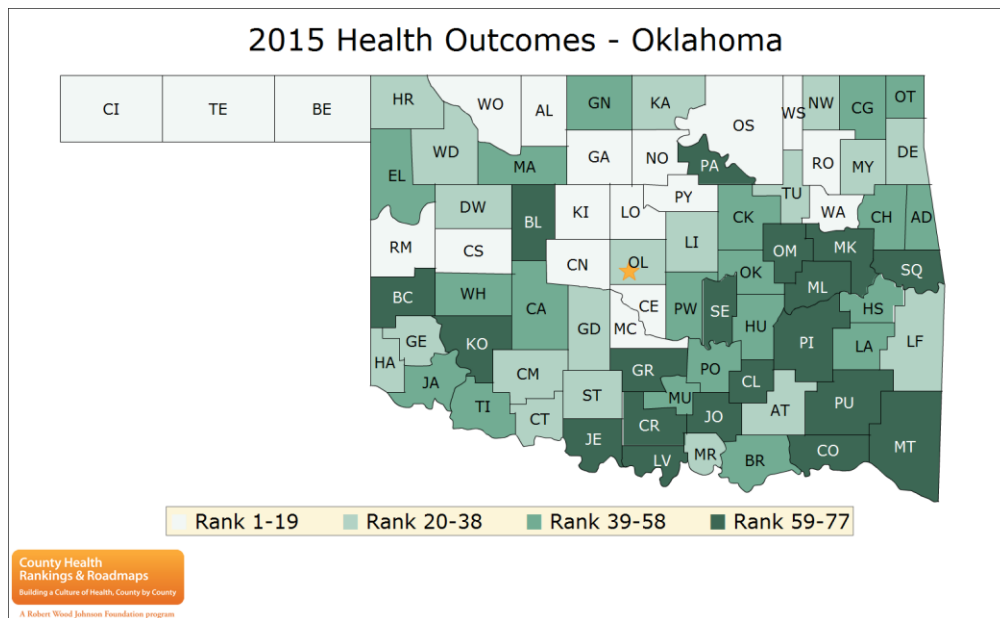
In terms of health outcomes, considered, today's health, Adair County's ranking is 56th in the state. Health outcomes are comprised of two areas: length of life and quality of life. The variables for each of these sections are presented in Table 11.

Table 11. Health Outcomes (Overall Rank 56)

Category (Rank)	Adair County	Error Margin	Top U.S. Performers	Oklahoma
Length of Life (61)				
Premature Death	11,503	9,809-13,198	5,200	9,121
Quality of Life (43)				
Poor or Fair Health	23%	17-30%	10%	19%
Poor Physical Health Days	4.6	3.3-5.9	2.5	4.3
Poor Mental Health Days	2.7	1.7-3.7	2.3	4.2
Low Birth Weight	8.4%	7.3-9.5%	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. Adair County's rank is more favorable than Sequoyah County's and comparable to Cherokee County. 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:

- High rate of diabetes- need for diabetes education
- Health education- healthy eating
- Access (both distance and financially) to healthy foods
- High rate of smoking
- Gap in healthcare coverage for single young adults with no children. It was noted that these individuals often do not qualify for any type of assistance because of their income for a single person.
- Lack of fitness opportunity in the form of a gym or YMCA
- Overall attitude towards health, sense of apathy, lack of ownership of one's health
- Some residents are hard to reach due to living in secluded areas

Community Health Needs Implementation Strategy

Following the June 30, 2015, meeting, the Oklahoma Office of Rural Health worked hospital representatives to identify current efforts to address priorities identified, potential collaborations within the community, and additional services to provide to better serve Adair

County residents. The following lists the concerns along with steps the hospital and community plan to take to remedy the situation.

- Health and Diabetes Education-
- These items were grouped together due to the focus of education. As noted from the hospital's CEO, there is a drastic need for diabetes education in the community, region, and state. The clinic at the hospital has a registered dietician who is available for consultation to patients. One of the struggles, as mentioned earlier, is an attitude of apathy towards one's health. Therefore, many patients who could benefit from the consultation, choose to either not see the dietician or not keep their appointment. The hospital also provides education and healthy lifestyle tips through the newspaper. The hospital would welcome the opportunity to partner with other local organizations such as the Adair County Health Department or Adair County Extension Office to provide education and outreach to local residents.
- Access (both distance and financially) to healthy foods
- The community of Stilwell does have a grocery store and several local farmers' markets and road-side stands selling locally grown products. The issue of financially accessing healthy foods could be the largest barrier. As mentioned previously, education is available from a local dietician on healthy eating which could help some learn how to eat healthy and find adequate substitutes at a lower cost.
- High rate of smoking
- The clinic at the hospital has previously employed certified individuals to meet with smokers in an attempt to alter their current habit. This program was not very successful. Currently, both the hospital and clinic offer smokers nicotine patches as well as counseling in an attempt to empower patients to stop smoking.
- Gap in healthcare coverage for single young adults with no children. It was noted that these individuals often do not qualify for any type of assistance because of their income for a single person.
- This concern is also shared by the hospital. However, until the Affordable Care Act is fully implemented, it will be difficult to determine the long-term impacts or solutions at a local level. Further, this concern is beyond the scope of services the hospital provides.
- Lack of fitness opportunity in the form of a gym or YMCA
- There are currently publicly available options, such as Carson Park (a well-lighted, paved public park with a walking area). There is a program available at the hospital, led by the hospital's physical therapist, Come Walk with Me that is available to the general public. They meet and walk each day at Carson Park. Also, several of the grade schools and middle schools make their weight rooms available to the general public. There are also several physical fitness instructors available in the community to lead and guide individuals in cardio and weight loss programs. Further, one of the local

schools has a pool that is open to the public, and one of the local hotels opens their pool up to the public for a nominal charge. Further, several of the grade schools have their track fields open for use by the public, especially after school hours.

- Overall attitude towards health, sense of apathy, lack of ownership of one's health
- This item was previously mentioned as a barrier to providing services and education.
- Some residents are hard to reach due to living in secluded areas- While this is a concern and an issue that hinders delivery of services, this is beyond the scope of services that the hospital provides. However, there are several K-8th grade school systems in the area where residents do come for their children. There are also local KATS transportation buses available to pick up residents for a nominal fee as a means of reaching individuals to bring them to services. Overall, there are struggles to reach community members, but with creative methods, it could be accomplished.

Community Health Needs Assessment Marketing Plan

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

Appendix A- Hospital Services/Community Benefits

Memorial Hospital Services and Community Involvement

General Surgery	Bone Density
Same Day Surgery	Ultrasounds services
Cardiology	CT
Anesthesia	MRI
Family Practice	Home Health
OB/GYN	Barium Swallow Studies
ENT	Sleep Study
Internal Medicine	2D echocardiograms
General Practice	Treadmill and Holter-monitor studies
Pediatrics	Physical therapy
Dietary Counseling	Respiratory therapy
Psychiatry- General, Geriatric, and	24-hour emergency department
Adolescent	Tele-radiology with radiologists available
Women's health	for immediate radiograph interpretation
Mammography	

Community Involvement

Health fairs
Hospital employees have adopted a section of SH 100W and pick up trash twice a year
Clinic provides student physicals at discounted rates
Discounted flu shots
Free blood pressure checks and glucose exams at the local Senior Citizens Center
Charity care program through hospital
Angel Tree program
Hospital prepares and provides nearly 80 Christmas dinner food baskets for the needy in the community
Sponsors a local blood drive
Donate to Indian Capital Technology Center's auction
Participates in Relay for Life (first place in donations for the previous 9 consecutive years)
Donate car seats for infants born at Memorial Hospital
Support local Chamber of Commerce
Support local Kiwanis Club

Appendix B Community Meeting Attendees

Memorial Hospital Community Health Needs Assessment

July 2014- June 2015

First Name	Last Name	Organization
Larry	Adair	Arvest Bank
Alan	Adams	Memorial Hospital
Zach	Auffed	Armstrong Bank
Liz	Brown	State of OK
Jim	Canson	Bank of Commerce
Dan	Collins	Carl Albert Tech Center
Becki	Farlay	Arvest Bank
Will	Fourkiller	State Rep
Geri	Gilstrap	Stilwell Schools
Debbie	Hooser	Ozarks Electric
Fran	Howe	retired
Gary	Jackson	Democrat Journal
Sharon	Jackson	OESC
Ralph	Keen	Attorney
Teresa	Keen	Tahlequah Public Schools
Annie	Kingcade	Arvest Bank
Bill	Langley	East Side Abstract Co
Kelly	Martin	Adair Co Health Dept
Jim	Panter	Bank of Commerce
Sue	Panter	Memorial Hospital
Kurt	Price	Arvest Bank
Tammy	Rector	OKDHS
Dan	Rightwire	Bank of Commerce
Stuart	Semple	Memorial Hospital
Robert	St. Pierce	CPA
Larry	Strauss	State Farm Insurance
Ronnie	Trentham	City of Stilwell
Jennifer	Walters	Adair Co Health Dept

Appendix C- Survey Instrument

Memorial Hospital Local Health Services Survey

Please return completed survey by October 3, 2014

The zip code of my residence is: _____

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*)
☐ Memorial 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 Memorial Hospital, why did

3. you or your family member choose that hospital? (Please answer then skip to Q7)
☐ Physician referral ☐ Quality of care/Lack of confidence
☐ Closer, more convenient location ☐ Availability of specialty care
☐ Insurance reasons ☐ Other (*Please list below*)

If you responded in Q2 that your household received care at Memorial Hospital, what hospital service(s) were used?

4. ☐ Diagnostic imaging (X-ray, CT, Ultrasound) ☐ Hospital Inpatient
☐ Laboratory ☐ Skilled nursing (swing bed)
☐ Outpatient infusion/Shots ☐ Emergency room (ER)
☐ Physician services ☐ Other (*Please list below*)
☐ Physical or speech therapy

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

6. Why were you satisfied/dissatisfied with services received at Memorial Hospital?

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

7.

Type of Specialist	City

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

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

Continue on reverse side...



10. Do you use a primary care (family doctor) for most of your routine health care?
☐ Yes *(Skip to Q12)* ☐ No *(Go to Q11)* ☐ Don't know *(Skip to Q12)*

11. 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

12. Has your household been to a primary care (family) doctor in the Stilwell area?
☐ Yes *(Go to Q13)* ☐ No *(Skip to Q15)* ☐ Don't know *(Skip to Q13)*

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

14. Why were you satisfied/dissatisfied with the care received in the Stilwell area?

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

16. Would you consider seeing a midlevel provider (nurse practitioner or PA) for your routine healthcare needs?
☐ Yes ☐ No ☐ Don't know

17. Are you able to get an appointment with your primary care (family) doctor when you need one?
☐ Yes ☐ No ☐ Don't know

18. What concerns you most about health care in the Stilwell area?

19. What other services would you like to see offered at Memorial Hospital?

20. Over the past 12 months, has your household used the services of the Adair County Health Department?
☐ Yes ☐ No ☐ Don't know

21. 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	_____

22. 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:
Memorial Hospital
1401 W Locust St. #102
Stilwell, OK 74960

Or, return to hospital administration



Health Indicators and Outcomes for the Memorial Hospital Medical Service Area

As part of the Community Health Needs Assessment

Table 1. Health Factors (Overall Rank 77)

Category (Rank)	Adair County	Error Margin	Top U.S. Performers	Oklahoma
Health Behaviors (70)				
<i>Adult Smoking</i>	30%	23-39%	14%	24%
<i>Adult Obesity</i>	35%	29-41%	25%	32%
Food Environment Index	6.8		8.4	6.7
<i>Physical Inactivity</i>	34%	28-40%	20%	30%
<i>Access to Exercise Opportunities</i>	32%		92%	72%
Excessive Drinking	11%	6-18%	10%	13%
Alcohol-Impaired Driving Deaths	30%		14%	33%
<i>Sexually Transmitted Infections</i>	619		138	442
<i>Teen Birth Rate</i>	72	61-71	20	54
Clinical Care (77)				
<i>Uninsured</i>	28%	26-30%	11%	21%
Primary Care Physicians	2,786:1		1,045:1	1,567:1
Dentists	4,439:1		1,377:1	1,805:1
Mental Health Providers	716:1		386:1	285:1
<i>Preventable Hospital Stays</i>	167	150-184	41	71
<i>Diabetic Screening</i>	51%	45-57%	90%	78%
<i>Mammography Screening</i>	48%	39-57%	71%	55%
Social & Economic Factors (77)				
<i>High School Graduation</i>	71%			78%
<i>Some College</i>	39%	35-44%	71%	58%
<i>Unemployment</i>	7.6%		4.0%	5.4%
<i>Children in Poverty</i>	41%	32-49%	13%	24%
Income Inequality	4.8	4.2-5.3	3.7	4.6
Children in Single-Parent Household	36%	31-41%	20%	24%
Social Associations	11.2		22.0	11.8
Violent Crime Rate	339		59	468
Injury Deaths	91	76-101	50	86
Physical Environment (64)				
Air-Pollution- Particulate Matter	11.0		9.5	10.3
<i>Drinking Water Violations</i>	20%		0%	23%
Severe Housing Problems	14%	12-17%	9%	14%
Driving Alone to Work	79%	76-81%	71%	82%
Long Commute- Driving Alone	33%	29-37%	15%	25%

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

2015 Health Factors - Oklahoma

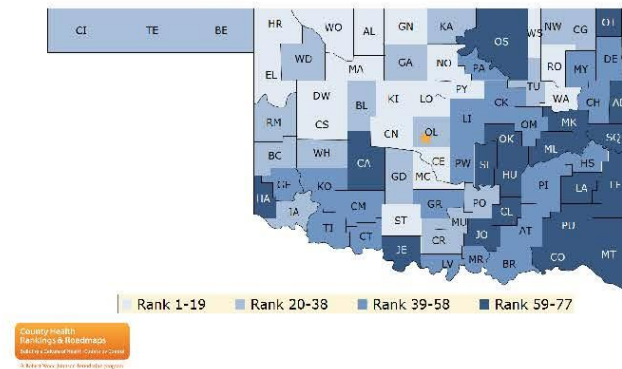
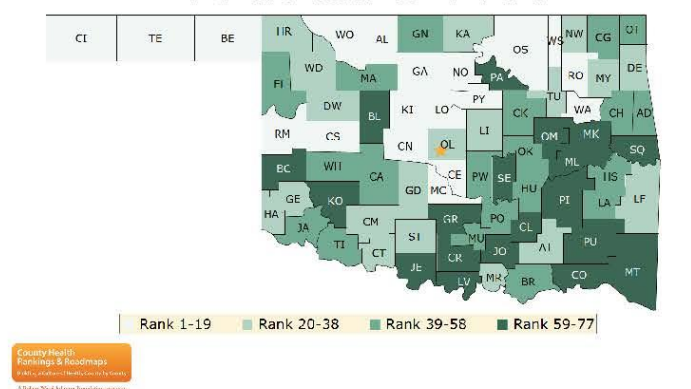


Table 2. Health Outcomes (Overall Rank 56)

Category (Rank)	Adair County	Error Margin	Top U.S. Performers	Oklahoma
Length of Life (61)				
Premature Death	11,503	9,809-13,198	5,200	9,121
Quality of Life (43)				
Poor or Fair Health	23%	17-30%	10%	19%
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Low Birth Weight	8.4%	7.3-9.5%	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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 Oklahoma Office of Rural Health
 Phone: 405.840.6500



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ADAIR COUNTY

Mortality and Leading Causes of Death

- Adair County's suicide rate was the 2nd lowest in the state.
- Adair County ranked near the bottom (72nd) in stroke deaths.
- Adair County ranked 62nd in total mortality (age-adjusted).
- Death from nephritis and influenza/pneumonia were relatively uncommon in Adair County.
- Heart disease was the leading cause of death in Adair County, followed by cancer and unintentional injury.

Disease Rates

- Adair County's diabetes disease prevalence rate was one of the worst in Oklahoma and 40% higher than that of the nation.

Risk Factors, Behaviors and Socioeconomic Factors

- Approximately 1 in 4 of the adults in Adair County was a current smoker (28%). This rate was one of the highest in the state and was 44% higher than that of the nation.
- Approximately 1 in 3 of adults was obese (35%). This was 28% higher than the nation's obesity rate.
- 1 in 5 adults in Adair County did not have health insurance.
- Adair County ranked among the bottom ten counties for several health indicators including adults with a usual source of healthcare, mothers seeking first trimester prenatal care, adult dental visits, fruit/vegetable consumption, and senior influenza vaccinations.
- Approximately 1 in 5 people in Adair County lived in poverty (22%).
- 1 in 5 adults reported 3+ days with limited activity in the past month (20%).
- Approximately 1 in 4 adults reported 4+ days of poor physical health (27%) and 4+ days of poor mental health (24%) in the previous month.

Changes from the Previous Year

- The rate of deaths due to nephritis decreased by 66%.
- The cancer mortality rate decreased 12%.
- Deaths attributed to suicide decreased 17%.
- The teen fertility rate decreased by 55%.

	PREVIOUS	CURRENT	GRADE
MORTALITY			
INFANT (RATE PER 1,000)	5.2	12.6	F
TOTAL (RATE PER 100,000)	1102.4	1024.1	F
LEADING CAUSES OF DEATH (RATE PER 100,000)			
HEART DISEASE	273.2	236.3	F
MALIGNANT NEOPLASM (CANCER)	246.6	218.2	F
CEREBROVASCULAR DISEASE (STROKE)	45.6	61.7	F
CHRONIC LOWER RESPIRATORY DISEASE	71.2	63.8	F
UNINTENTIONAL INJURY	62.4	70.2	F
DIABETES	92.7	52.9	F
INFLUENZA/PNEUMONIA	11.4	19.1	D
ALZHEIMER'S DISEASE	26.4	29.8	D
NEPHRITIS (KIDNEY DISEASE)	31.4	10.8	B
SUICIDES	11.3	9.4	B
DISEASE RATES			
DIABETES PREVALENCE	13.2%	13.6%	F
CURRENT ASTHMA PREVALENCE	9.3%	9.9%	D
CANCER INCIDENCE (RATE PER 100,000)	482.4	482.2	D
RISK FACTORS & BEHAVIORS			
MINIMAL FRUIT CONSUMPTION	NA	55.5%	F
MINIMAL VEGETABLE CONSUMPTION	NA	30.3%	F
NO PHYSICAL ACTIVITY	35.6%	32.6%	F
CURRENT SMOKING PREVALENCE	31.5%	28.3%	F
OBESITY	34.1%	35.3%	F
IMMUNIZATIONS < 3 YEARS	79.3%	76.6%	B
SENIORS INFLUENZA VACCINATION	61.7%	67.2%	B
SENIORS PNEUMONIA VACCINATION	73.0%	75.2%	A
LIMITED ACTIVITY DAYS	18.1%	19.7%	D
POOR MENTAL HEALTH DAYS	25.4%	23.8%	C
POOR PHYSICAL HEALTH DAYS	25.9%	26.6%	F
GOOD OR BETTER HEALTH RATING	72.8%	74.2%	F
TEEN FERTILITY (RATE PER 1,000)	43.5	24.8	F
FIRST TRIMESTER PRENATAL CARE	51.0%	57.1%	F
LOW BIRTH WEIGHT	8.2%	8.6%	C
ADULT DENTAL VISITS	46.2%	47.6%	F
USUAL SOURCE OF CARE	73.5%	73.6%	D
OCCUPATIONAL FATALITIES (RATE PER 100,000 WORKERS)	*	*	
PREVENTABLE HOSPITALIZATIONS (RATE PER 100,000)	3241.3	2911.6	F
SOCIOECONOMIC FACTORS			
NO INSURANCE COVERAGE	23.6%	19.5%	C
POVERTY	22.9%	22.2%	F

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