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FEASIBILITY STUDY FOR RURAL HEALTH CLINIC IN ADAIR, OKLAHOMA

A Scholarly Project Submitted to the Graduate School in Partial Fulfillment of the Requirements for the Degree of Doctor of Nursing Practice

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December, 2016

FEASIBILITY STUDY FOR RURAL HEALTH CLINIC IN ADAIR, OKLAHOMA

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FEASIBILITY STUDY FOR RURAL HEALTH CLINIC IN ADAIR, OKLAHOMA

An Abstract of the Scholarly Project by Cindy Noble

The purpose of this study was to determine the feasibility of a rural health clinic in the Adair, Oklahoma area. A mixed-mode survey was sent to 2,890 households within a certain zip code for the Adair community and surrounding area. A link for the survey was also included so the survey could be accessed on line. The total number of surveys returned was 88. The respondents of the survey did show a willingness to use healthcare clinic if one were available in Adair, Oklahoma. The surveying also showed that the majority of the households had to drive greater than 10 miles to access healthcare, and would be interested in a clinic in Adair, Oklahoma.

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CHAPTER I

Introduction

The Oklahoma State Department of Health (2014) revealed that one in four Oklahoma adults reported not having a usual source of healthcare which makes Oklahoma 35th in the nation for lack of healthcare resources. In 2014, Oklahoma was ranked 48th in the nation for the number of primary health care providers per capita (United Health Foundation, 2014) and the need for primary care providers in Oklahoma is greater in the rural areas where 40% of the population is served by only 28% of primary care providers, which is a 12% provider shortage (Oklahoma Health Improvement Plan Workforce Data Committee and OSU-CHS, 2013). Many Oklahomans engage in lifestyles and behaviors that put them at a higher risk for chronic diseases than many urban populations and the rural population experiences several difficulties in accessing health care services which result in higher morbidity and mortality rates compared to their urban counterparts (Periyakoil, 2010).

This study was conducted to determine if there is a need for a rural health clinic in the Adair, Oklahoma area. The researcher worked with Craig General Hospital in the process of this study.

A feasibility study can be useful in identifying areas of concern around a design study that can be repaired before implementing the project on a larger scale (Moran, Bursan & Conrad, 2014). The purpose of this feasibility study was to obtain information to assess the feasibility of a rural health clinic in the Adair, Oklahoma community and surrounding areas. The feasibility study searched out answers to information needed to determine the need for a rural health clinic.

Objectives for the Study

The goal of the survey was to determine whether the community of Adair,

Oklahoma would support a rural health clinic. The survey determined:

- Type of health care a household currently used
- Type of insurance a household utilized, if any
- Distance traveled to receive healthcare
- Likelihood of using a rural health clinic located in Adair, Oklahoma

Due to low personal income levels, lack of access to health care, and inadequate community resources in the Adair, Oklahoma community and its surrounding area, it is important to determine the need for a rural health clinic. A feasibility study was done to assess the need for a rural health clinic in the Adair area.

According to Merwin, Snyder & Katz, (2011), lower financial resources available to support healthcare combined with barriers posed due to the lack of transportation, compounded by the distances from home to the healthcare facilities interfere with access to rural healthcare. The town of Adair, Oklahoma is located in a rural area divided between Mayes and Craig County. Approximately 15,000 residents live in the

surrounding area where 20% of the households are estimated to have income below the poverty level (Craig General Hospital, 2013). At this time there is no healthcare facility in the Adair area. The closest hospitals are in Pryor, Oklahoma at Integris Mayes County Medical Center, located 13 miles away and Craig General Hospital in Vinita, Oklahoma, located 18 miles away. The nearest medical clinic is Grand Lake Medical Park, 13 miles to the east of Adair. Due to the distance to these medical facilities and the fact that all travel is on secondary two lane roads, it is important that this population has accessibility to healthcare closer to home.

Craig General Hospital

Craig General Hospital (CGH) is committed to improving the health of the Vinita community and the surrounding area. Craig General Hospital began admitting patients in 1963. At that time the hospital was in service with 32 beds and 70 employees and contributed around \$150,000 annually to payroll. Now, the hospital is licensed for 62 beds and employs more than 285 people with a \$7-million-dollar payroll (Craig General Hospital, 2015).

Craig General Hospital is operated by a public trust authority, the Craig County Hospital Authority, whose board is appointed by the county commissioners. The hospital is a self-sustaining, not-for-profit facility. Being aware of the importance of having quality health care convenient and close to home, Craig General Hospital opened three rural health clinics in the surrounding communities of Welch, Langley and Monkey Island (Craig General Hospital, 2015).

The mission of Craig General Hospital is to create an environment where healing can occur and wellness is promoted. The hospital strives to be a place where local people want to work, providers want to practice, and most importantly, where patients want to go for their health care needs (Craig General Hospital, 2015).

The hospital offers inpatient services which include:

- Acute care
- Surgery
- Geriatric psychiatric care
- Birthing Center
- Physical Therapy Rehabilitation

Craig General Hospital has many specialties that are offered from visiting healthcare providers which include cardiology, electrophysiology, otolaryngology, orthopedics, podiatry, urology gastroenterology, neurological surgery, ophthalmology and pulmonology.

Characteristics of Grand Lake Medical Park

Grand Lake Medical Park consists of three rural health clinics. Each of the rural health clinics is staffed by nurse practitioners (NPs) or physician assistants (PAs) along with office personnel, licensed practical nurses and medical assistants. The services offered at these clinics range from same day urgent care needs to regular primary care practice. Each clinic has a laboratory/radiology tech on site to assist with laboratory and x-ray. Each clinic has laboratory and x-ray capabilities along a with licensed physical therapist and physical therapy assistants. The clinics offer the service of a licensed

psychologist who travels between clinics to see patients in each clinic. The clinic on Monkey Island also houses a gym and an Open MRI. The Langley and Monkey Island clinic are open from 7:30 am to 7:30 pm Monday through Friday. These clinics have a dedicated staff of workers to take care of local medical needs (Craig General Hospital, 2016).

Characteristics of Adair, Mayes County, Oklahoma

In the heart of Mayes County in Northeast Oklahoma sits the town of Adair.

According to the United States Census Bureau in 2013 the town of Adair has a population of 817. The median household income is \$37,500 a year according to the American Fact Finder provided by the U.S. Census Bureau (U.S. Census Bureau, 2014). Information from the Oklahoma State Department of Health's OK2SHARE vital statistics states that Mayes County has a poverty rate of 25% for people under the age of 18, which is 8% higher than the state rate. 12.8 % of Mayes County, 9,521 people, is covered by Medicaid, 37% higher than the rest of Oklahoma, according to the Oklahoma Health Care Authority Provider Fast Facts. There are only 37 health care providers that accept Medicaid in Mayes County. These statistics show a clear need for health care providers in the Adair area.

Running through the town of Adair is Oklahoma State Highway 69, which runs north and south. This is a two lane highway that many large, over-the-road trucks travel on their way in and out of the state. There is also Oklahoma Highway 28, which runs east and west. This is a two lane rural highway that connects to the Will Rogers Turnpike on the west end and Grand Lake on the east end. The total average of daily truck traffic

through this region is thought to be up to over one thousand trucks daily (<u>www.city-</u>data.com, 2015).

The Adair Public School system encompasses students from the Adair community and the surrounding rural areas. According to the Adair City Data of Adair Public School Enrollment, the Adair High School has an enrollment of 285 students, the middle school has an enrollment of 243 students, and the Bernita Hughes Elementary school has an enrollment of 492 students (Adair City Data, 2015).

Significance of the Problem

A rural health care clinic in the Adair area would provide convenient health care close to home while also being able to take care of the health needs in the community. Due to the large Medicaid population and the lack of providers, new Medicaid providers would provide continuity of care for patients that may have used Urgent Care or a hospital emergency department in the past. As well as providing healthcare, the clinics would also offer laboratory and x ray services which would be more convenient than driving to another larger healthcare facility for testing.

As with most small towns, a rural health clinic in the area will be a positive contribution to the community. Initiating new business in the community will create additional revenue for the community, increasing traffic to the town and possibly affecting business in a positive manner.

The most significant reason for having a healthcare clinic in this area would be to provide care for those without a current primary care provider. Many area providers no longer take Medicaid, so having a rural health clinic that accepts Medicaid would give

individuals a safe, competent clinic to receive care. The potential long-term benefit is improvement in quality of care (Ortiz, Meemon, Tang, Wan, & Paek, 2011).

Chapter II

Review of Literature

Introduction

In 2010, Congress stressed its commitment to health equity by elevating the National Center on Minority Health and Health Disparities (NCMHD) to the National Institute on Minority Health and Health Disparities (NIMHD) (National Institute of Health [NIH], 2010). This organization leads the planning, review, coordination, and evaluation of the National Institute of Health's minority and health disparities research activities (NIH, 2010). The priorities of the NIH include basic research focused on health disparities experienced by minorities, the rural and urban poor, and other medically underserved populations (NIH, 2010). Access to quality healthcare is an enduring problem for rural populations. Financial, sociocultural, and structural qualities of the rural environment create barriers to healthcare (Graves, 2009). The NIH is aware of the growing problem of health disparities which caused a growth of health issues for the poor and rural communities of the nation. The NIH thought a large part of the problem was due to a shortage of racial and ethnic minority health professionals, discrimination, and inequities in income, education, and access to health care (NIH, 2010). Many rural residents experience difficulties in accessing health care services. These disadvantages

result in higher morbidity and mortality rates compared to those of their urban counterparts (Periyakoil, 2010).

Rural Health Professional Shortage Area

A health professional shortage area (HPSA) is defined as a geographic area, population group, or health care facility that has been designated by the federal government as having a shortage of health professionals (Health Resources and Services Administration [HRSA], 2015). The federal government designated Mayes County in rural Northeastern Oklahoma as such a shortage area. The HRSA guidelines state that the population to provider ratio must be greater than 3,000 patients to one primary care provider (HRSA, 2015). In Mayes County where Adair, Oklahoma is located, the ratio would be greater than 4,000 patients per one primary care provider.

The Rural Health Clinic Services Act of 1977 (Public Law 95-210) was enacted to address an inadequate supply of physicians serving Medicare patients in rural areas and to increase the use of non-physician practitioners such as nurse practitioners and physician assistants in rural areas. According to the Department of Health and Human Services Centers for Medicare and Medicaid Services (2016), approximately 4,000 rural health clinics nationwide provide access to primary care services in rural areas. For a clinic to be designated as a rural health clinic, according to the Department of Health and Human Services (2016), the clinic must be:

- Located in a non-urbanized area as defined by the United States Census Bureau
- In an area currently designated by the HRSA as a:
 - 1. Primary Care Geographic HPSA

- 2. Primary Care Population Group HPSA
- Medically Underserved Area under Section 330(b)(3) of the Public Health Service Act; or
- Governor-designated and Secretary of Health and Human Services certified shortage area under Section 6213(c) of the Omnibus Budget Reconciliation Act (OBRA) of 1989.

According to the Department of Health and Human Services (2016), a Rural Health Clinic must:

- Employee a nurse practitioner or a physician's assistant
- Have a nurse practitioner or physician's assistant working at the clinic 50% of the time
- Directly furnish routine diagnostic and laboratory services
- Have arrangements with one or more hospitals to provide medically necessary services that are not available at the clinic
- Have available drugs and biologicals necessary for the treatment of emergencies
- Furnish laboratory testing such as urine dip stick, hemoglobin and hematocrit,
 blood sugar, stool samples for occult blood, pregnancy tests and primary culturing
 for transmitting to a certified laboratory
- Have annual program evaluation
- Post days and hours of operation
- Not be a rehabilitation agency or facility that is primarily for the treatment of mental disease

- Not be a Federally Qualified Health Center
- Meet other applicable State and Federal requirements.

Rural Health Disparities

According to Healthy People 2020, health disparity is defined as a particular type of health difference that is closely linked with social, economic and/or environmental disadvantages. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on:

- racial or ethnic group
- religion
- socioeconomic status
- gender
- age
- mental health; cognitive, sensory, or physical disability
- sexual orientation or gender identity
- geographic location
- other characteristics historically linked to discrimination or exclusion.

The obstacles faced by health care providers and patients in the rural areas are greatly different than those in the urban areas. Health disparities predicated by provider density are deteriorating rapidly for the most vulnerable of rural individuals: children, adolescents, and older adults (Lui, 2007). Rural residents face a unique combination of factors that create disparities in health care such as economic factors, cultural and social differences, lack of education and isolation in living in remote rural areas (Cropley,

2014). Inadequate access to quality healthcare contributes to 10% of poor health and premature death while unhealthy behaviors account for 40% of illness and premature death (Mokdad, Marks, Stroup & Gerberding, 2004). In rural areas, residents need to travel greater distances to access different points of the health care delivery system (Periyakoil, 2010). During 2008-2010, rural women aged 18-64 reported the highest rates of delayed care or no medical care due to cost and no health insurance coverage (American College of Obstetricians and Gynecologist, 2014). Compared to their urban counterparts, rural communities have higher rates of preventable conditions such as obesity, diabetes, cancer, injury, and higher rates of related high-risk health behaviors such as smoking, physical inactivity, poor diet, and limited use of seatbelts (Downey, 2013).

Time after time, due to geographic distance, extreme weather conditions, environmental and climatic barriers, lack of public transportation, and challenging roads, rural residents may be restricted from accessing health care services (Periyakoil, 2010).

Healthcare in Rural Oklahoma

According to the Oklahoma State Department of Health (2014), one in four Oklahoma adults reported they did not have a regular source of healthcare. Oklahoma is ranked 48th in the nation for primary health care providers per patient population (United Health Foundation, 2014). The Oklahoma Health Improvement Plan Workforce Data Committee (OSDofH) and Oklahoma State University maintain that the need is greater in rural Oklahoma where 40% of the population is served by only 28% of the 3,660 primary care physicians. Accordingly, there are 71 out of the 77 counties in Oklahoma that are

designated as having medically underserved populations (Ray, 2015). Federal officials state that nearly 125,000 Oklahomans have signed up for health insurance through the federal marketplace created under the Affordable Health Act (Perry & Putnam, 2015). The Commonwealth Fund Scoreboard ranks Oklahoma's state health system performance 49th among the 50 states and Washington, D.C (Commonwealth Fund, 2014).

Improving healthcare in rural parts of Oklahoma is a major undertaking. Rural hospitals are fighting daily to survive budget cuts, and many have difficulty finding providers to work in rural areas. For both transportation and cultural reasons, many people living in rural areas prefer to receive healthcare locally, but affording and recruiting healthcare professionals can be extremely difficult (Strasser, 2003). Also, commonly cited barriers to rural health care include lack of financial resources to obtain care, distance to care, lack of transportation, and a shortage of healthcare professionals (Merwin, Snyder & Katz, 2011). Compared to their urban counterparts, rural residents are older, poorer, and sicker, in part due to a higher limitation on activity from complex, complicated health conditions (Rural Health Research & Policy Centers, 2014). Oklahoma is one of the eight states in the nation expected to have a large Medicaid expansion. Due to the weak primary care capacity, the demand for care by newly insured patients outweigh the supply of primary care providers (Ku, Jones, Shin, Bruen & Hayes, 2011). One of the ways to help the situation is to make sure that the very young, the very old, and more vulnerable populations have adequate access to healthcare in the rural communities.

Rural Health Changes

The Patient Protection and Affordable Care Act (2010), also known as the Healthcare Reform Act, was signed into law by President Obama March 23, 2010. On June 28, 2012 the Supreme Court rendered a final decision to uphold the health care law (U.S. Department of Health and Human Services, 2016). Two or more of the provisions of the Act include:

- ensuring people with preexisting conditions will not be denied insurance coverage, and
- covering wellness services such as:
 - 1. annual physical examination
 - 2. preventative screenings
 - 3. vaccinations and
 - 4. counseling services to help patients and their families self-manage their conditions and health (Odell, Kippenbrock, Buron & Narcisse, 2013).

Because of these requirements, estimates are that 32-46 million more people will have access to healthcare and will be seeking healthcare services (Fairman, Rowe, Hassmiller, & Shalala, 2011). The impact of more individuals being able to access healthcare will further put a strain on already limited healthcare systems and primary care providers. The strain may be felt particularly in the rural areas of Oklahoma.

Initiating change in health status will only occur when schools, communities, families, and health care providers work together to develop comprehensive health and social programs (Uphold and Graham, 1993, p.2). According to a study done by Clendon

and White (2001), a community needs analysis or survey should be treated as a means of determining the feasibility of establishing a nurse practitioner focused family practice clinic. There has been evidence from rural Oklahoma that suggests that for every dollar generated in rural healthcare services an additional forty-seven cents are distributed through the local economy via indirect business and household spending (Doeksen & Schott, 2003).

When compared with urban providers, rural health providers require a broader range of clinical skills to function effectively. There is significant pressure for Nurse Practitioners to develop and practice at the highest level of their scope of practice as they may be the only consistent source of healthcare in the rural areas (Paliadelis, Parementer, Parker, Giles, and Higgins, 2012). According to a study done by Odell, Kippenbrock, Buron, & Narcisse (2013), the Nurse Practitioner working in the rural area provides care to a higher percentage of low income, uninsured, or underserved individuals. Health disparities can be reduced if appropriate resources such as funding and health care personnel are committed to improve the quality of healthcare access for all people regardless of socioeconomic status and geographic location (Amponsah, Tabi, & Gibbison, 2015). Whether through the physical terrain of their environment or the composition of their communities, including an aging population, lower socioeconomic status, and higher concentrations of ethnic and racial minorities, rural residents are at risk for negative health outcomes (Downey, 2013).

The success of a rural health care clinic is invaluable to a community. The rural health clinics, Grand Lake Medical Park in Langley, Monkey Island and Welch,

Oklahoma, have been very successful in meeting the needs of those communities. Last year the clinics had over 16,959 patient visits combined (Craig General Hospital, 2016). These rural clinics serve a specific purpose to provider health care closer to home for many rural residents. The potential long-term benefit is improvement in quality of care (Ortiz, Meemon, Tang, Wan, & Paek, 2011).

CHAPTER III

Methodology

The survey tool was created using the Dillman Tailored Design Method (Dillman, Smyth & Christian, 2014). This survey was a mixed-mode survey where mail-in and internet option for completion was available. The survey was distributed to 2,890 households in the Adair area and surrounding community within a 10-mile radius of the area that could be served by the clinic. The surveys were prepared by this author and agreed upon by the DNP Scholarly Project Committee. Craig General Hospital agreed to absorb the cost of printing and postage to an area within the 10-mile radius which is in the prime area for potential patients of a rural health clinic in the Adair area. The surveys were completed with return postage paid or there was a link on the survey which the person could use to go online and fill out the survey confidentially. The data when received was evaluated by the student and presented to the Board of Directors at Craig General Hospital by the student.

The survey was used after obtaining approval from the Craig General Hospital and DNP Scholarly Project Committee. Exempt status was approved by Pittsburg State University's School of Nursing, Pittsburg State University's IRB Committee, and Pittsburg State University's Committee for the Protection of Human Research Subjects.

The list of households was based on every address within the zip code of 74330 in the state of Oklahoma. The list of addresses and the mailing of the surveys was done by Craig General Hospital. The surveys were requested to be returned in a self-addressed, postage paid envelope to Craig General Hospital by August 30, 2016. The link included on the mailed survey was AdairRuralHealthClinic@survey.monkey.com. The participant could go directly to the link and fill out the survey confidentially online. There were directions included and a disclaimer that any information gathered in the survey would be used for the purposes of obtaining information about the feasibility of a rural health clinic in the Adair, Oklahoma, area. Craig General Hospital designated a special private locked box for all surveys to be placed for this author to access and calculate the results. Any data that had identifying features was redacted. All files were kept in a locked cabinet in medical records at the hospital for a minimum of two years and then destroyed. After the survey return date passed, all data was calculated and processed by this author. Data from the surveys was tallied using the software available through the SurveyMonkey website. Category totals were placed into graphs and tables for easier explanation of results. The population was the 2,890 with a sample size of 341. Those surveys that were not received within two weeks were sent a reminder letter (Appendix C).

The results of the survey were presented to the Craig County Hospital Board of Directors to determine if a need exists for a rural health clinic in the Adair area. Any results from the data was used to inform the Craig County Hospital Board of Directors in the decision making process for pursuing the effort to build and operate a rural health clinic in the Adair area.

The completed assessments were only viewed by the Chief Operating Officer, CEO administrative personnel, PSU DNP Scholarly Project Committee and this author. No identifying factors were included in the reporting of the data and no compensation was given to participants. The research did not involve more than a minimal risk. This author will present data to the Craig General Hospital Board of Directors in a professional manner with visual aids, tables, and auditory presentation tentatively scheduled for October 2016. The data was used for the sole purpose of Craig General Hospital in determining the feasibility of building a rural health clinic in the Adair, Oklahoma area. No individual's survey data was identifiable in the summation of findings. Survey results were posted on the Craig General Hospital website after results are tabulated.

Quantitative research is based on the relationship to patterns that are unique to a particular population or group of people and can be useful in investigating the effectiveness of intervention (Terry, 2015). The research tool used in this project will be a survey. The survey tool will be developed by the author in concert with the administrations of Craig General Hospital with final approval by DNP Scholarly Project Committee. The details of the survey will be to extract data that Craig General Hospital has requested, and the survey will be developed with the help of a member of the DNP Scholarly Committee who is also a data analysis specialist. The questions will be written in a manner to gather information about the feasibility and interest in a medical health care clinic in the Adair community and surrounding area.

In addition, information was gathered from the Craig General Hospital

Community Needs Assessment that was done in 2016. In the Craig General Hospital

Community Needs Assessment of 2016, there was a finding of a known need for more
rural health care clinics in the area.

Another valuable source of information gathered was demographics from the Grand Lake Medical Park in Langley, Oklahoma which is thirteen miles east of the Adair area. Langley most closely matches the population and economic status to the area of Adair. That rural health clinic has been in place for ten years and is a very busy rural health clinic.

Information was gathered from the survey on accessibility to health care and how far patients have to drive to their personal healthcare providers. The availability of health care professionals in the area compared to the current population was an important component of the study. Another resource that was detailed was what, if any, availability of school nurses were there in the area of concern. Behavioral health was assessed for the area and the availability of any local resources, such as psychiatrists, psychologists, group counseling, and other behavioral health resources in the area.

Transportation needs were assessed, due to the fact that many in this area do not have reliable transportation, and many depend on such avenues as SoonerRide, which is a free service available to Medicaid patients in the area. Arrangements have to be made at least three days in advance for travel and the service will only travel within a thirty-mile region unless specialty treatment is necessary. The location of the clinic would need to be evaluated so it would remain within the constraints of the local population.

The number of Medicaid and Medicare participants in the area were assessed from Medicaid and Medicare federal and state records. The success of a rural health clinic weigh heavily on the numbers. Fee for service that is required by the federal government from the rural health clinic were be taken into consideration. The Grand Lake Medical Park in Langley will be the closest rural health clinic in proximity to the size and scope of any potential clinic that would be built in Adair.

CHAPTER IV

Evaluation of Results

Introduction

The purpose of the feasibility study was to ascertain the need for a rural health care clinic in the Adair, Oklahoma community. The aim of the survey was to reach households within the community and gather their views on what sources of health care needs the people felt were the most important for the area. The objectives of the survey were to determine:

- Type of healthcare the household currently used
- Type of insurance coverage the household utilized, if any
- Distance traveled to receive healthcare
- Likelihood of using a rural health clinic located in Adair, Oklahoma

Results

The rural health survey (Appendix C) for this study was mailed on July 11, 2016, along with a cover letter (Appendix A) to 2,890 households in the Adair area and surrounding community within a 10-mile radius of the area that would be served by the rural health clinic. On July 21, 2016, a second reminder letter (Appendix B) was sent out

to all households to remind them to fill out the survey. There were 88 surveys returned, which was a return rate of three percent (3%).

The instrument asked information regarding the household's use for medical services in the last 24 months. The results from the survey could provide information on whether a hospital or clinic services were used within the last 24 months and which hospital or clinic the household had used. The survey showed 17% of the respondents (n=15) did not use any hospital or clinic services in the last 24 months, although 83% of the respondents (n=72) did use hospital or clinic services in the last 24 months. (See Figure 1).

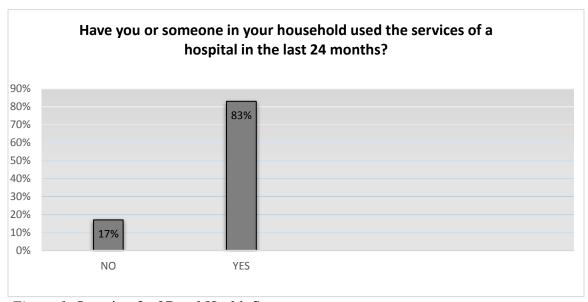


Figure 1. Question 3 of Rural Health Survey

The survey was designed to gather information regarding travel times to the nearest medical facility, which showed 32% of the respondents (n=27) traveled at least 11-15 miles, while 39% (n=33) traveled 16-20 miles and 27% (n=23) traveled greater than 20 miles to reach a medical facility. Two percent of the respondents (n=2) showed

they drive less than or equal to 10 miles to the nearest medical facility. This data shows that over 98% of the households surveyed traveled greater than 10 miles to a medical facility. (See Figure 2).

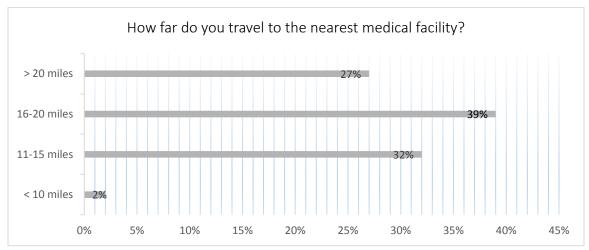


Figure 2. Question 5 of Rural Health Survey

The stakeholders, which were the CEO and Manager of Outreach Clinics at Craig General Hospital, were also interested in determining if the household had a primary care provider whether, medical doctor, physician assistant, or nurse practitioner which 92% of the households (n=80) surveyed stated that they did have a primary care provider. The results of the survey showed that 8% of the households (n=7) did not have a primary care provider.

It was important to the stakeholders to ascertain how many households thought they were able to get an appointment with their healthcare provider when needed and 87% of the households (n=67) responded yes with 13% responded no (n=10).

The instrument asked what kind of medical provider the households used for their routine healthcare and 64% of the participants (n=47) answered a medical clinic, with 11% of the participants (n=8) answering Rural Health Clinic, 23% of the participants

(n=17) answered Specialist and 3% of the participants (n=2) answered emergency room or hospital. (See Figure 3).

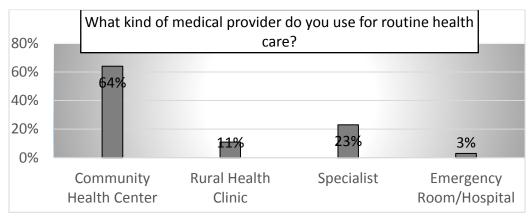


Figure 3. Question 9 of Rural Health Survey

The stakeholders at Craig General Hospital were also interested in ascertaining if the households thought there were enough healthcare providers in the area. The results were split between 59% of the households (n=46) answering no and 41% of the households (n=32) answering yes.

It was critical to examine how many of the households would be willing to receive their care at a healthcare facility in Adair if one were to become available and 93% of the respondents surveyed (n=74) answered yes and only 8% of the respondents (n=6) were not willing to use a healthcare facility if one would be available in the Adair area. (See Figure 4).

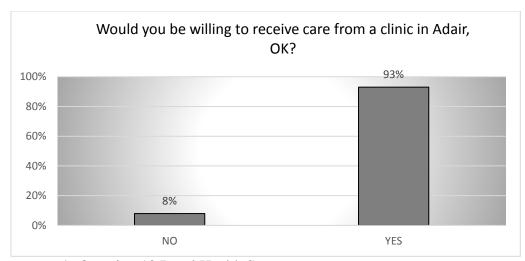


Figure 4. Question 10 Rural Health Survey.

When those surveyed were asked what kind of services should be offered at a health clinic if one was available in the Adair area the responses were mixed but the majority 75% of participants (n=57) answered that the clinic should include lab, radiology, specialty physicians, behavioral health, and referral to outside specialties. (See figure 5.)

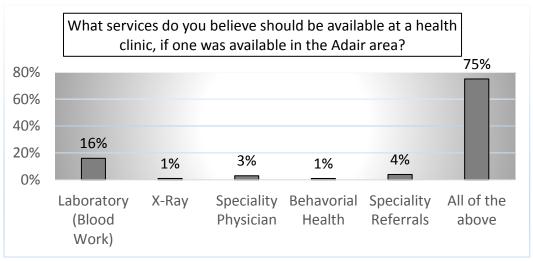


Figure 5. Question 11 of Rural Health Survey

The survey solicited information of how many households used Medicare or Medicaid as their primary healthcare coverage. The survey showed 52% of participants

(n= 46) did use Medicare or Medicaid while 43% (n=37) had private insurance through their workplace and 4% (n=4) no insurance at all. (See Figure 6).

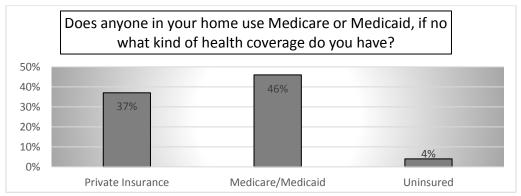


Figure 6. Question 13 and 14 of Rural Health Survey

The stakeholders from Craig General Hospital were interested in the family dynamics which made up the households. Of the households responding the following information was gathered on the age groups living in the households. (See Figure 7).

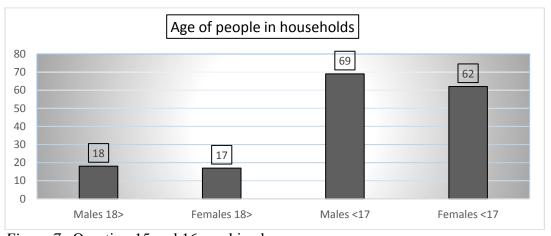


Figure 7. Question 15 and 16 combined.

The stakeholders at Craig General Hospital wanted to acquire the personal data on the households surveyed. Of the 88 surveys, 9 respondents chose to leave some sections of these questions blank. When asked about the total yearly income for the household, 79 out of the 88 surveys returned answered as follows in Figure 8 below.

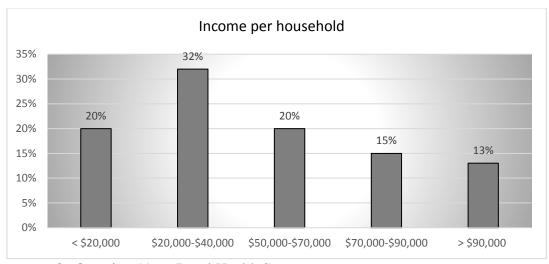


Figure 8. Question 19 on Rural Health Survey.

From the 85 respondents that answered the marital status question; 60% were married (n=51); 7% were single (n=6); 9% were divorced; 19% were widowed (n=16); 4% were separated (n=3); and 1% were in a relationship (n=1). (See Figure 9).

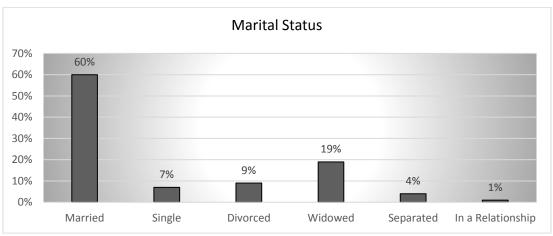


Figure 9. Question 20 of Rural Health Survey.

When the respondents were asked about their ethnicity/race, 86 households answered that 83% were White (non-Hispanic) (n=71); 16% were Native American (n=14); 1% were Hispanic or Latino (n=1); and there were no responses for the categories of African American, Asian/Pacific Islander or other as in Figure 10 below.

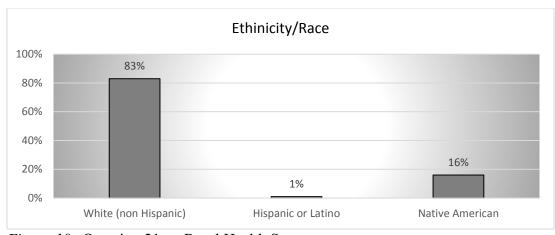


Figure 10. Question 21 on Rural Health Survey

The survey was a constructive tool in which to ascertain information from the different households about their healthcare needs and family dynamics. The overall rate of the return of the surveys were low at 88 and a higher percentage of surveys returned would have proven to have better outcomes for analysis.

CHAPTER V

Discussion

Geographic distribution of health services plays an important role in access to healthcare, use of healthcare services, distribution of chronic disease, and treatment outcomes (Kearns, 1993). In correlation with the evidence of the study, the majority of the participants that were surveyed state they drove at least 10 miles to a healthcare facility. Access to healthcare is shown to be one of the most important steps in securing a healthy lifestyle for rural populations.

The Centers for Medicare and Medicaid Services show the State of Oklahoma has 38% of the population enrolled in Medicare and/or Medicaid. The rate for the Adair area is at a much high rate of 55% (Centers for Medicare & Medicaid Services, 2016). This figure correlates with the survey data which shows 46% of rural populations depend on Medicare and Medicaid for their healthcare coverage. In this study, the results show that only one in 29 households surveyed did not have insurance coverage.

The results of the survey correlate with the U.S. Census Bureau (2015), in which the estimated median household income for the Adair area was \$37,500 a year. The results of this survey show that the majority of the households 32% show income between \$20,000 to \$40,000 on average.

The Oklahoma State Department of Health (2014), stated that one in four Oklahoma adults reported they did not have a regular source of healthcare, in contrast, this survey shows that 92% of the household in this area do have a regular source of healthcare even if they have to drive 10 to 20 miles to access.

The study shows the majority of people in the Adair area do have some sort of healthcare coverage, whether it be Medicare or Medicaid, private insurance, or the use of Indian Health Services. The study also shows that even with healthcare coverage the 59% of the households still feel there were not enough healthcare providers in their area that were easily accessible.

Based on the data collected in the survey, there was an overwhelming majority of the households which stated they would use a rural health clinic in Adair if one was available. However, a low rate of return cannot support this. The area of Adair is still an untapped resource to provide continuing medical care in a growing community. Since the beginning of this study, Craig General Hospital has been in the midst of being acquired by Saint Francis Health Systems in Tulsa, Oklahoma. At this time the information was given to the entities in charge of the takeover of the hospital, but any action on the outcome of how the survey may play in future endeavors for the hospital is unknown at this time.

The most important information extracted from the survey was the overwhelming majority of 93% of households responded they would be willing to use a rural health clinic if one would become available in the Adair area.

The response of the survey was very low with only 88 responses out of 2,890 mailed. A higher response of 300 would have given a much better idea of what the true sample size should have been. For any stakeholder to make a decision for a new facility a much larger number would have been more feasible.

The future plans of the hospital organization are currently unknown. The author spoke with the Vice President of Outreach Facilities for St. Francis Healthcare System and he was interested in the survey results and the information this author had gathered. Since a greater return rate would have produced more reliable data, is recommended that a similar survey with St. Francis logo may be sent out at a future date in hopes that more households might complete the survey.

The interesting aspect of this project was to learn how to construct a survey that people could understand and to be able to extract the information in a way that was useful and confidential. The process of using SurveyMonkey to help analyze the data was very helpful to the overall project. The data was entered into the server and then each of questions were analyzed and percentages calculated. The SurveyMonkey software made graphs of each question and placed it in a format that could be extracted for use in a report.

This DNP Scholarly Project of conducting a feasibility study for a rural health clinic in Adair, Oklahoma did produce beneficial results. The households surveyed showed how they felt about the need for a rural health care clinic in the Adair area. It also showed the households willingness to use a healthcare clinic in the Adair area if one were to become available. The percentage of uninsured at 4% (n=4) was a surprising find

since this is below the state average of 18.5% (Witters, 2015). Accordingly, the median household income was very much in line with the national estimation of Mayes county at \$37,500 a year.

Since all plans for the hospital are at this time unsure, it will be difficult to know what effect, if any, this study will have on the decision process for further expansion.

Conclusion

In conclusion, the results of the survey did show that most of the people surveyed did have some form of health insurance. Along with that information, 98% (n=83) of households reported they had a primary care provider even if they had to drive a distance of over 10 miles to reach a healthcare facility. The data showed that 75 (n=57) of the households would like a full service clinic, with a range of services, such as lab work, xray, and specialty physicians. The data from the study was almost at tie with 59% (n=46) of households that did not think there were enough healthcare providers in the area to 41% (n=32) of households who thought there were enough healthcare providers. Also, 64% (n=47) of the households used a community health care clinic for their healthcare and 87% (n=67) of the households stated they could get an appointment with their primary care provider is needed. The data showed a median household income of \$20,000 to \$40,000 was the most common, with a tie between the lowest income household making less than \$20,000 and the third highest income of between \$50,000 and \$70,000. According to the data the 60% (n=51) of the households were married with 19% (n=16) widowed coming in second. Also, there was 83% (n=71) population of the

households surveyed that considered themselves as white with the Native American respondents being the next in line at 16% (n=14).

The purpose of this study was to see if a healthcare clinic in the Adair community would be feasible. The results of the study did show that people in those households surveyed would be willing to use a clinic in the Adair area, but the response rate was too low to be reliable. The survey tool worked very well in ascertaining the views of the local community in regards to healthcare, although some of the questions that were openended may have been able to have been reworded to make them easier to understand. Some of the questions were left blank, possibly due to the personal nature of the question such as income and age or it could have been an omission by mistake. This author believes that with the bankruptcy rumors affecting Craig General Hospital at the time of the survey may have attributed to the low return of surveys. Since St. Francis Healthcare System is in the process of buying the hospital this author believes it could benefit St. Francis Healthcare System to produce a new branded survey, possibly using the same format, and resend to see if the response would be better received.

REFERENCES

- 360 Grand Lake. (2015). *Adair area chamber of commerce, adair school district*.

 Retrieved from http://www.360grandlake.com/BusinesstoBusiness/

 AdairAreaChamberofCommerce/p-A
- Adair City Data. (2015a). *Adair public school enrollment*. Retrieved from http://www.city-data.com/city/Adair-Oklahoma.html
- Adair City Data. (2015b). *National bridge inventory (NBI) statistics*. Retrieved from http://www.city-data.com/city/Adair-Oklahoma.html
- American College of Obstetricians and Gynecologists. (2014, February). *Health*disparities in rural women (Committee Opinion No. 586). Washington, DC:

 Lippincott.
- Amponsah, W. A., Tabi, M. M., & Gibbison, G.A. (2015). Health disparities in cardiovascular disease and high blood pressure among adults in rural underserved communities. *Online Journal of Rural Nursing & Health Care*, *15*(1), 185-208. doi:10.14574/ojrnhc.v15i1.351
- Clendon, J., & White, G. (2001). The feasibility of a nurse practitioner-led primary health care clinic in a school setting: A community needs analysis. *Journal of Advanced Nursing*, 34(2), 171-178. doi:10.1046/j.1365-2648.2001.01742.x
- Commonwealth Fund. (2014). Commonwealth fund scorecard on state health system performance. Retrieved from
 - http://www.commonwealthfund.org/scorecard-home/2014-scorecard-home

- Craig General Hospital. (2013). Community health needs assessment,1(1), 1-10.

 Retrieved from http://www.craiggeneralhospital.com/pdf/chnasummary.pdf
- Craig General Hospital. (2015). Craig general hospital. Retrieved from http://www.craiggeneralhospital.com
- Craig General Hospital. (2016). Grand lake medical park. Retrieved from http://www.craiggeneralhospital.com/facilitiesgrandlakemedicalplaza.html
- Cropley, S. (2014). Rural health disparities. *Texas Nursing*, 88(1). 14-15.
- Dillman, D., Smyth, J.D., & Christian, L.M. (2014). *Internet, phone, mail, & mixed-mode surveys: The tailored design.* (4th ed.). New Jersey: Wiley.
- Doeksen, G., & Schott, V. (2003). Economic importance of the health-care sector in a rural community. *Rural Remote Health*, *3*(1), 1-6.
- Downey, L.H. (2013). Rural populations and health. *Preventing Chronic Disease* 10(104), 1-3.
- Fairman, J., Rowe, J., Hassmiller, S., & Shalala, D. (2011). Broadening the scope of nursing practice. *New England Journal of Medicine*, *364*(3), 193-196.
- Graves, B. A., (2009). Community-based participatory research: Toward eliminating rural health disparities. *Online Journal of Rural Nursing and Health Care*, 9(1), 12-14.
- Ku, L., Jones, K., Shin, P., Bruen, B., & Hayes, J. (2011). The states' next challenge-securing primary care for expanded medicaid populations. *The New England Journal of Medicine*, 364(6), 493-495.

- Lui, J. J., (2007). Health professional shortage and health status and health are access. *Journal of Health Care Poor Underserved*, 18(3), 590-598.
- Merwin, E., Snyder, A., & Katz, E. (2011). Differential access to quality rural healthcare. *Family Community Health*, 29(3), 186-194.
- Mokdad A.H., Marks, J.S., Stroup D.F., & Gerberding, J.L. (2004). Actual causes of death in the united states, 2000. *Journal of the American Medical Association*, 291(10), 1238-1245. Doi: 10.1001/jama291.10.123
- Moran, K., Burson, R., & Conrad, D. (2014). *The doctor of nursing practice scholarly project: A framework for success.* Burlington, MA: Jones and Bartlett Learning.
- Odell, E., Kippenbrock, T., Buron, W., & Narcisse, M. (2013). Gaps in the primary care of rural and underserved populations: The impact of nurse practitioners in four Mississippi delta states. Journal of the American Association of Nurse Practitioners, 25(2013), 659-666. doi: 10.1111/1745-7599.12023
- Oklahoma Health Care Authority. (2015). *Provider fast facts*. Retrieved from http://www.okhca.org/research.aspx?id=87&parts=7447
- Oklahoma Health Improvement Plan Workforce Data Committee & Oklahoma State

 University Center for Rural Health. (2013). Oklahoma healthcare workforce data
 book 2013. Retrieved from

http://www.healthsciences.okstate.edu/ruralhealth/documents/OHIP%20 Workforce%20Data%20Book.pdf

Oklahoma State Department of Health. (2014). 2014 state of state's health report.

Retrieved from http://www.ok.gov/health/pub/boh/state/SOSH%202014.pdf

- Oklahoma State Department of Health, Center for Health Statistics, Healthcare

 Information. (2014). *OK2SHARE vital statistics*. Retrieved from

 http://www.health.state.ok.us/ok2share/
- Ortiz, J., Meemon, N., Tang, C., Wan, T., & Paek, S. (2011). Rural health clinic efficiency and effectiveness: Insight from a nationwide survey. *Journal of Medical Systems* 35, 671-681. doi: 10.1007/s10916-009-9404-4
- Paliadelis, P., Parmenter, G., Parker, V., Giles, M., & Higgins, I. (2012). The challenges confronting clinicians in rural acute care settings: A participatory research project.

 Rural and Remote Health. Retrieved from http://www.rrh.org.au
- Periyakoil, V. J., (2010). Healthcare disparities and barriers to healthcare. *Stanford*eCampus Rural Health 9, 1-2. Retrieved from

 http://www.ruralhealth.stanford.edu
- Perry, G., & Putman, C. (2015). In the know: 125,000 Oklahomans have signed up for health insurance under affordable care act. *Oklahoma Policy Institute*.

 Retrieved from http://www.OKPolicy.org
- Ray, A., (2015, December 21). How nurse practitioners could help save rural health care in Oklahoma [Web log post] Retrieved from http://www.npofoklahoma.com/blogpost/1259904/2359904/How-Nurse-Practitioners-Could-Save-Rural-Health-Care-in-Oklahoma?hhSearchTerms=%22
- Rural Health Clinics Service Act of 1977, Pub. L. No. 95-210, Sec. 1, 1861 Stat. 91 (1977).

- Rural Health Research and Policy Centers. (2014). *The 2014 update of the rural-urban chartbook*. Retrieved from http://www.ruralhealth.und.edu/projects/health-reform-policy-research-center/pdf/2014-rural-urban-chartbook-update.pdf
- Strasser, R., (2003). Rural health around the world: Challenges and solutions. *Family Practice*, 29(4), 457-463.
- Terry, A.J. (2012). *Clinical research for the doctor of nursing practice*. Sudbury, MA: Jones and Bartlett Learning, LLC.
- Thomas, T., DiClemente, R., & Snell, S. (2014). Overcoming the triad of rural health disparities: How local culture, lack of economic opportunity, and geographic location instigate health disparities. *Health Education Journal*, 73(3), 285-294. doi:10.1177/0017896912471049
- United Health Foundation. (2014). *America's health rankings*. Retrieved from http://cdnfiles.americashealthrankings.org/SiteFiles/Reports/Americas%20Health%20Rankings%202014%20Edition.pdf
- United States Census Bureau. (2015). *American fact finder*. Retrieved from http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml
- United States Department of Health and Human Services, Centers for Medicare and Medicaid Services, Medicare Learning Network. (2014). *Rural Health Clinic*.

 Retrieved from http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/RuralHlthClinfctsht.pdf

- United States Department of Health and Human Services, National Institute of Health,

 National Institute on Minority Health and Health Disparities. (2010). Fact sheet:

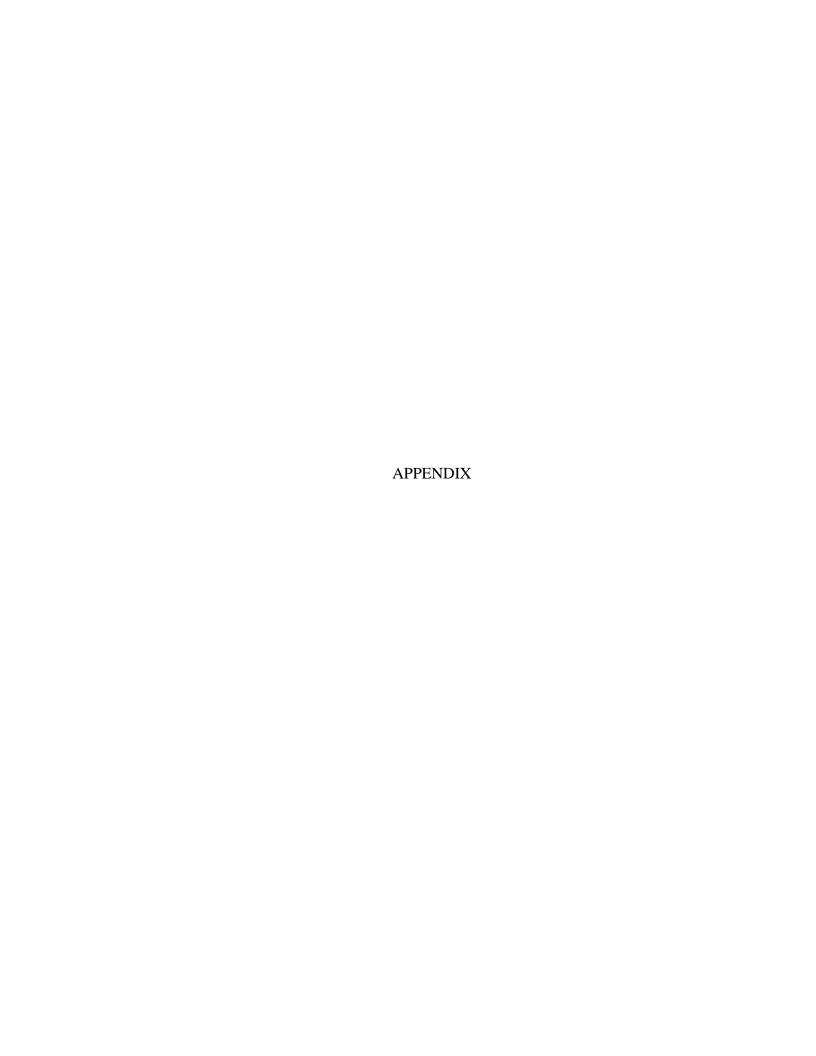
 Health disparities. Retrieved from http://www.nimhd.nih.gov
- United States Department of Health and Human Services, Office of Disease Prevention and Health Promotion. (2014). *Healthy People 2020*. Retrieved from https://www.healthpeople.gov/2020/
- United States Department of Health and Human Services. *Read the law: The affordable care act, section by section*. Retrieved from http://www.hhs.gov/healthcare/about-the-law/read-the-law/index.html
- United States Department of Health and Human Services. *The secretary's advisory*committee on national health promotion and disease prevention objectives for

 2020. Retrieved from

 http://www.minorityhealth.hhs.gov/npa/templates/browse.aspx
- Uphold, C. R., & Graham, M. V. (1993). Schools as centers for collaborative services for families: A vision for change. *Nursing Outlook* 41, 204-209.
- Witters, D., (2015). Arkansas, Kentucky see most improvement in uninsured rates.

 Gallop Poll. Retrieved from

 www.gallup.com/poll181664/arkansas-kentucky-improvement-uninsured-rates



Appendix A

Adair Area Resident Adair, OK 74330

Dear Adair Resident:

I am a graduate student at Pittsburg State University and I am working under the supervision of Craig General Hospital and the Irene Ransom Bradley School of Nursing to determine the needs of healthcare in your area. I am writing you today to ask for your help in improving and understanding the health care needs of the Adair community and surrounding areas. Your address has been chosen according to your zip code.

Because healthcare is an important issue in our lives today Adair, Oklahoma and the surrounding area is considered a location where health services may be needed. The health needs in the area need improvement for greater access to health care and better health for all our neighbors. To be sure we can determine the healthcare needs of people living in your area, please have an adult (age 18 or older) in your household complete the enclosed survey. Please return the survey in the enclosed self-addressed postage paid envelope. Your responses are voluntary and all your information will be kept confidential.

If you prefer the internet, you may also fill out your survey at AdairRuralHealthClinic@SurveyMonkey.com using code (ABCD).

Thank you for your consideration in this important survey.

Sincerely,

Cindy Noble, ARNP-CNP Doctor of Nursing Practice Student Pittsburg State University

Appendix B

Adair Resident Adair, OK 74330

Dear Adair Resident:

Recently a letter with a survey about healthcare needs was mailed to your home, asking your help with an important study about health care resources in your area. If you or someone in your household has already completed the survey, please accept my sincere thanks. If not, please complete and return the survey as soon as possible. If you would rather use the internet to fill out the survey, a link has been provided AdairRuralHealthClinic@surveymonkey.com using code (ABCD).

Thank you so much for your time, the input you provide in completing the survey will be invaluable to the decision making process. I appreciate your willingness to help me as I proceed.

Sincerely,

Cindy Noble, ARNP-CNP Doctor of Nursing Practice Student Pittsburg State University

Appendix C

Craig General Hospital Rural Health Survey		Health	Health
Please check the box, or fill in the blank in the questionnaire below and return in the self-addressed, postage paid envelope to Craig General Hospital, 735 N Foremon Street, Vinita, OK 1430.1-143 or follow the link at the bottom of the questionnais if you would rather answer confidentially on-line. All information will be kept confidential. Your individual results will not be identifiable in any manner.		7. Are you able to get an appointment with your healthcare provider when you need one?	What services do you believe should be available at a health clinic, if one was available in the Adair area?
START HERE 1. Have you or someone in your household used the services of a hospital in the last 24 months? No Yes 2. If so, which hospital did you use? (Please Specify)	5. How far did you have to travel to the nearest medical facility? 10 miles 15 miles 20 miles Greater than 20 miles 6. When you are ill or injured, do you have a family healthcare provider (physician, nurse practitioner, physician's assistant) for most of your routine health care?	No Yes 8. What kind of medical provider do you use for routine health care? (Please check all that apply) Community Health Center Rural Health Clinic Health Department Specialist Emergency Room/Hospital Other (Specify)	Blood Work N-Ray Specialty Physicals (Sports.
3. Have you or someone in your household used the services of a medical clinic in the last 24 months? No Yes	☐ No ☐ Yes Other	9. Do you believe there are enough healthcare providers in your area that are easily accessible? No Yes	13. Does anyone in your home use Medicare or Medicaid for their primary healthcare coverage? No Yes
	- - -	10. If there was a Rural Health Clinic in the town of Adair, would you or your family member be willing to receive your care there? No	14. If no, what type of insurance coverage do you have? (If no coverage please write NONE)
	Family 15. How many adults ages 18 and older	Family 18. Which of the following best describes	
	do you have living in your household? Number of Males 18 or older	your marital status? (Please check one) Married Single Divorced	
	Number of Females 18 or older	□Widowed □Separated □ In a Relationship	
	16. How many children 17 and under do you have living in your household? Number of Males 17 and under	19. Which of the following best describes your ethnicity/race? (Please check one) White (non-Hispanic) Hispanic or Latino African American	
	Number of Females 17 and under	□ Native American □ Asian/Pacific Islander □ Other	
	17. What is the total yearly combined income of your household? (Please check one) Less than \$20,000 \$20,000-40,000 \$50,000-70,000 \$570,000-90,000 \$590,000 omore	Thank you for answering this survey!	