MURRAY STATE UNIVERSITY

Murray State's Digital Commons

Integrated Studies

Center for Adult and Regional Education

Fall 2019

Hospital Closures and the Impact on Rural America

Misti Minter
mistimcclain@yahoo.com

Follow this and additional works at: https://digitalcommons.murraystate.edu/bis437

Recommended Citation

Minter, Misti, "Hospital Closures and the Impact on Rural America" (2019). *Integrated Studies*. 233.
https://digitalcommons.murraystate.edu/bis437/233

This Thesis is brought to you for free and open access by the Center for Adult and Regional Education at Murray State's Digital Commons. It has been accepted for inclusion in Integrated Studies by an authorized administrator of Murray State's Digital Commons. For more information, please contact msu.digitalcommons@murraystate.edu.

Hospital Closures and the Impact on Rural America

Misti M. Minter

Murray State University

Abstract

It has been projected that by the year 2020, there will be approximately 120,000 physicians that we will lack in the United States. Smaller town hospital closures are prevalent in the United States. The shortage of physicians in rural communities is on the rise. The number of students interested in a potential medical physician career has become limited. Those that pursue the medical career path are most often not enticed to practice in rural areas. These increasing factors are directly and negatively impacting the average rural community, as quality patient care is compromised. The correlation exists between physician shortages, the closures of rural hospitals, and the decreased quality of patient care. The combination of the aforementioned factors is impacting rural communities in a negative way. Although the rise of hospital closures continues, there is a glimmer of hope to potentially slow down the progression. With the possibility of more states accepting federal funding, conversion of shut down facilities to other forms of access to medical care, and student programs to promote physicians in rural areas, the possibility of longevity for some rural hospitals is certain. This paper will focus on the impact of hospital closures and the delivery of patient care in rural areas.

Contents

The decline of rural hospitals 4
The uninsured community 8
The insured community 10
Barriers for access to care 11
Shortage of physicians 15
The Affordable Care Act 20
Physicians and the ACA 21
Hospitals and the ACA 22
Corporate Compliance 25
Urgent care centers 26
Acquisitions and mergers 28
McKenzie Regional Hospital 28
The impact on communities 33
Telemedicine: A potential solution 35
Save Rural Hospitals Act: A potential solution 40
Rural Emergency Acute Care Hospital Act 43
Recommendations and strategies 44
Lessons learned 53

The decline of rural hospitals

The decline of rural hospitals has had a steady increase within the last decade. The rapid rate of closures shows no potential signs of slowing. At one point in history, there was a surge in the number of fully operating rural hospitals. In 1946, the Hill-Burton Act was created to provide funding for the building and replacement of hospitals that had been directly affected by World War II. The greater number of those hospitals that benefited from this funding were primarily located in the Southern United States ("Hill-Burton Act," n.d.). As stated by Elrod and Fortenberry, "convenient access to healthcare services in these small communities was commonplace at one time, but the increasing urbanization and suburbanization of society has taken a severe toll on the viability of rural America (2017). According to the 2017 AHA Annual Survey, there were 6,210 total hospitals in the United States with 1,875 of those being rural community hospitals. However, between the years 2013 and 2017, sixty-four of those hospitals closed. Of these hospitals, more than 75 percent of them that shut down were in the South, which accounts for approximately 38 percent of rural hospitals collectively (Altus, 2018). Texas leads all Southern states with twenty facilities shutting down and is followed closely by Tennessee with twelve ("State by state breakdown," 2019).

Hospital decline is not a new trend in this era. A case study in 1989 placed an emphasis on potential risk factors that influence closures of rural community hospitals. Through a series of thorough hospital indicators, variables were identified and grouped into specific categories to help assign the potential risk factors. Those variables were for-profit hospital status, not-for-profit hospital status, presence of a skilled nursing facility/long term care unit and the number of other hospitals in the county (Mullner, Rydman, Whiteis, & Rich, 1989). This study used a quantifiable model to accurately identify the potential risk factors for rural hospital closures.

An epidemiologic matched case control study was used to identify the variables. This type of study was used because it was quick and allowed for a large amount of possibilities to be researched at once. Data was obtained from the membership files of the American Hospital Association and from their annual hospital survey. This data did not include hospital mergers, but actual closures (Mullner et. al., 1989). A large number (over 60) of variables were originally selected. Because there were so many limitations to the original variables selected, the number had to be lowered significantly. For example, some limitations included those hospitals that did not report competence and management styles and those that did not release the quality of patient care through surveys. The results of the study found that for-profit hospitals were at a higher risk of closure once revenue started to decline. The owners often re-direct their focus and invest in another business venture. Not-for-profit hospitals risked closure if they were not a part of a multi-facility group or system. Hospitals that did not offer a variety of services were also at a greater risk of closure (Mullner et al., 1989). These statistics are very similar to many current day hospitals.

Hospital closures are detrimental for any community, leaving the need for a major health care facility unsatisfied. Smaller, rural communities have the potential for more hazardous working conditions which could lead to unintentional deaths. These deaths are about 50 percent higher than they are in rural communities. In these areas, dangerous occupations such as lumbering, farming, and mining are common for many. In agriculture and mining communities, chronic diseases are more prevalent as workers are faced with exposure to harsh chemicals and pesticides (Mullner, Rydman, Whiteis & Rich, 1989).

Shutting down facilities creates a challenge for access to care. Patients may now face the obstacle of traveling longer distances to receive quality care. Patients are facing the need to travel

even during life-threatening emergencies. For example, driving to the nearest facility or being air lifted to the nearest facility makes it extremely difficult for emergency situations such as an obstetric patient or one in need of urgent care due to trauma. The large elderly population, the poor, and less healthy individuals in the community add to the need for an accessible hospital. These hospitals also serve as major employers for clinicians, administrators, IT staff, educators, technicians, etc. A small, local hospital is often a lifeline and the heart of some communities. The negative effects of closing these facilities trickles down into the community, potentially affecting other businesses.

States in the southern part of America have the worst results for the nation solely concerning one's overall health. Also, for southern states, according to the County Health Rankings annual report presented by the University of Wisconsin, "they have some of the largest in-state health disparities" (Berry-Jester, 2017). As previously stated, rural areas have a higher population of elderly and as well as uninsured patients. Most the of the elderly population rely on some form of state or federal assistance for health care such as Medicare or Medicaid. This assistance does not reimburse hospitals heartily, especially when compared to what may be reimbursed through a private insurance. Medicare and Medicaid provide approximately 50 cents on the dollar (or less) when it comes to reimbursement for hospitals. A high volume of patients with federally funded insurance sounds like a win for the facility, but realistically, it is a major loss. In rural areas with over 60 percent of patients using Medicare and Medicaid, the loss is even greater (Conte, 2019). Patients in rural areas that may have private insurance often travel to larger, more urban populated areas to receive needed health care, placing a major financial burden on a rural hospital. Also, because rural areas are much smaller in size than urban areas, there are

fewer patients housed in hospitals. This results in less bed occupancy which results in less revenue generated (Mullner et. al., 1989).

There are many potential reasons and risks that result in the closure of a hospital. Some of those include lesser need for services due to changes in the community that increasingly becomes less populated, demographic changes in the area that may eradicate the local facility, the conditions of older rural community hospitals may be too costly to renovate, and often real estate that the facility resides on may be valuable enough for another business to turn a profit (Burkey, Bhadury, Eiselt, & Toyoglu, 2017). Loss of revenue and fewer reimbursements are a large part contributing to the decline of smaller hospitals. According to the U.S. Census Bureau, "16.6 percent of families in rural health service areas were in poverty compared to 13.9 percent from metro areas. As a result, rural hospitals tend to have higher amounts of bad debt written off as charity care for the uninsured" (Janney, 2014).

A 2016 study showed that rural hospital closures were based on two major factors: the external and internal environment. The external factors were directly correlated to marketing. The internal factors were directly related to the hospital. With smaller, rural hospitals, the options available in comparison with larger scale hospitals are much more limited. They operate on smaller budgets, they are often housed in older facilities, it is harder to draw the interest of physicians and specialists, and the occupancy rates are lower (Holmes et al 2016). These factors combined cause a decline in revenue. From an external standpoint, uninsured patients, patients from a lower economic tax bracket, and minorities affect closures as well. This is due to lower amounts of financing contributed from these groups (Holmes et al. 2016).

The study involved comparisons of critical access hospitals and rural area hospitals. It also involved financial reports and marketing variables from the two facilities. Comparisons were

based on those that stayed open versus those that closed. Financial variables researched were liquidity or current assets, profitability or revenue generated, staffing, capital structure or total assets, and utilization (i.e. occupancy rate, surgery volume, etc.). The measure of these variable is linked to high values. (Holmes et al. 2016). That is, higher values for each variable equate higher success for the facility's operations.

Currently in 2019, there are over 650 hospitals in smaller, rural communities that are most vulnerable for closure. If this comes to fruition, the potential for over 11 million people to lose access to health care is certain. As it stands, almost half of those who reside in rural areas must travel at minimum 20 miles for adequate health care treatment. Closing hospitals affects both patients and residents of the community. Hospitals employ about 20 percent of workers in rural areas, yielding approximately 7 million in benefits and compensation. With potential closures, these small towns have the capacity to slowly crumble and fade away (NHRA, 2019).

The uninsured community

The uninsured population as well as those insured relying on government (federal, state, and local) funded coverage are a general part of rural communities. This population is extremely large. Southern states have the largest percentage of uninsured individuals. The high cost of insurance may be the primary factor for lack of coverage for many, but there are other reasons that contribute to the issue (Sofer, 2019).

Often, the uninsured have a difficult time finding a provider that will see them because they don't have insurance, they don't frequently see a provider when they absolutely need one because they don't have insurance, and once they finally see a provider for a service they create a large debt with the provider because they cannot cover the cost. Providing care to these

individuals most often results in free services being rendered that providers are not given reimbursement (Anonymous, 2003).

Let us examine how or why, other than cost, so many are in situations with no health benefits. Fear of cost for care often causes a delay in treatment. The delay in return results in sometimes serious issues that may have been able to be avoided if treated initially (Glied, n.d.) Before the Affordable Care Act was created, studies have shown that the majority of people that did not have any form of healthcare coverage were residents from rural communities. The studies also concluded that these communities were primarily in the southern and western portions of America (Ziller & Coburn, 2019). Many workers in smaller locations work for small businesses. They are twice as likely to be uninsured. Rural areas also have many workers who work for lower compensation, as in minimum wage. These individuals are not likely to be insured. If an individual works for himself, he is much likely not to have any insurance cover either (Blankenau, Bailey, & Hudson, 2009).

Currently approximately 13% of individuals in the United States are not covered by any form of insurance per a recent Gallup report. This percentage has increased over 2% (i.e. by 7 million people). The Affordable Care Act was created primarily to reduce the number of the uninsured by ensuring Americans that could not afford insurance previously could have an opportunity to get access to coverage. Millions of Americans were able to reap the benefits once the ACA was implemented. There were many however, primarily those that were not US citizens/undocumented immigrants, who were not eligible candidates for these benefits provided by the ACA. There are those without healthcare coverage simply because of specific beliefs politically or potentially because of their pride or because they do not want to feel as though they are being forced to purchase coverage. There are also those who are not covered simply because

they have never had the need for it and do not see the need for it. Some uninsured Americans are not familiar with the new standards put into action by the ACA. Also, pertaining to the ACA, many uninsured are without coverage because they have fallen into the coverage gap meaning their income is too high for eligibility but at the same time too low for preferential insurance (Makowska, 2018). States that did not opt for the expansion of Medicaid left thousands of individuals without insurance. Lastly, Medicaid coverage is not always easily accessible in some states as there are limitations.

The insured community

To afford the benefits of healthcare coverage, Americans depend on two options. The first option is the benefits provided by one's employer or privately-owned policy. The second option is the benefits provided by the government in the forms of Medicaid and Medicare (Alexander 2018). There are many individuals who have coverage but are hesitant to use it because of the out of pocket expenses that may accumulate after services are rendered. This "underinsurance" is defined as "out-of-pocket spending that exceeds 10 percent of family income or five percent if the household income is 200 percent below the federal poverty level" (Ziller, Coburn, and Youseflan, 2006). Subscribers of privately-owned insurance are facing many difficulties financially. The steady increase of premiums co-pays, deductibles, and cost sharing has put a strain on their finances. Increasing premium co-pays are often fueled by a younger, healthier population that may even terminate their coverage as they see no need for it (Alexander 2018). Patients do have options to reduce these fees by choosing to use assigned in-network provider. However, many out of the assigned in-network providers that they may have to choose from are not the specialists that they may need. Therefore, they may be forced to pay an outrageous dollar amount to receive the proper care needed from an out of network provider, despite the fees. Families may subject

themselves to large amounts of medical debt and possibly bankruptcy (Dickman, Himmelstein, & Woolhandler, 2017). Essentially those that are covered by some form of health insurance are not necessarily in better health than those who are not, especially if they are not benefiting from their healthcare coverage. For some, it is not feasible financially to exhaust large sums of money for care that has set limitations for preferred providers. Most often, in the United States, the wealthy receive the most medical care. Ironically, they are the typically the group that needs it much less than the poor, who most often cannot afford it.

Discrimination is also present among insured patients. Discrimination is displayed dependent upon the specific type of insurance one may hold. This has been an issue that predates the implementation of the ACA. Physicians have been known to “pick and choose” which patients they may render services dependent upon how much reimbursement they will receive. Quite often, patients that have Medicaid coverage are not being serviced at all simply based on the very low reimbursement amounts. Unfortunately, patients that have Medicaid coverage are the group of individuals most likely to suffer from this insurance discrimination in comparison to any other groups with healthcare coverage (Han, Call, Pintor, Alarcon-Espinoza, & Simon, 2015).

Barriers for access to care

The basic healthcare needs of many in the United States, primarily the underserved, are not being met. This country pales in comparison to others in the world in affordability of healthcare as well as “timely access to care”, according to a survey conducted in 2016 (Osborn, Squires, Doty, Sarnak, & Schneider 2016). Obstacles that those in the rural community face while looking for care or accessing care have a direct influence on the fate of their overall health.

There is a clear and significant difference in the care received by those in urban areas than those in rural areas. The National Rural Health Care Association (NRHA) states the following:

> The obstacles faced by healthcare providers and patients in rural areas are vastly different than those in urban areas. Rural Americans face a unique combination of factors that create disparities in health care not found in urban areas. Economic factors, cultural and social differences, educational shortcomings, lack of recognition by legislators and the sheer isolation of living in remote rural areas all conspire to impede rural Americans in their struggle to lead a normal, healthy life.

One barrier to patient access to healthcare is financial status. A large population of people in rural communities struggle monetarily when compared to their urban counterparts. Quite often the health status of individuals in poorer areas is overlooked. In a recent study, the life span of a much richer or wealthy individual seems to be much longer by several years than one who is poorer. Not only is there a disparity between the rich and the poor but also between different ethnicities and races (Dickman et. al., 2017). An imbalance between urban and rural areas also lies among potentially excess deaths. This is explained by the Center for Disease Control and Prevention is those deaths that potentially could have been averted. Because there are fewer programs in more remote areas to prevent these deaths, the numbers are much higher. People in these communities most often live at or below the poverty line and sometimes lack proper education (Ziller & Coburn, 2019). Lower income households are often those who opt for some form of government assistance whether it is SNAP, Medicaid or CHIP. In addition, undocumented immigrants are not eligible for any government funding. Patients are often challenged with the decision of seeking medical care from a physician and getting a large bill that

they cannot afford or simply taking the risk of compromising their health and well-being by not seeking the needed attention.

Although most may take having access to a vehicle for granted, to some it may determine whether they are able to receive needed medical treatment. This is especially true in poorer areas of rural communities. And though there are alternatives for those who do not own a vehicle, those options are filled with barriers for use as well due to the dependency on someone else to provide means of transportation. For some, walking or biking to a medical appointment is not an option especially if they are in poor health. Depending on public transportation (i.e. buses, commuter trains, taxi cabs) comes with an added cost. Newer ride-share options such as Uber come with a much more expensive cost than public transportation. In addition, borrowing a vehicle or getting a ride from or with someone is not always ideal or convenient for either party involved. Because transportation issues existing with the poor, elderly, disabled, and minorities, accessing medical care is sometimes not an option. Difficulty exists when trying to reach an appointment or follow up visit which may lead to failed appointments or those that must be cancelled. This barrier to medical care is so great that it affects approximately 3.6 Americans each year (Dillahunt & Veinot, 2018).

If transportation poses a problem for some, then distance creates yet another hurdle. Residents located in both rural and isolated areas with transportation barriers have the greater difficulty. Those patients with conditions in need of specialty treatment may face the greatest challenges as their physicians may practice in much larger cities that are a great distance away (Chan, Hart, & Goodman, 2006). In a 2014 letter written to President Obama by over twenty Unites States senators, “Requiring patients to travel long distances for care may result in life-threatening emergency care delays and barriers to essential preventative care” (Jaffe, 2015).

Adding to the running list of potential barriers in accessing healthcare in rural areas is the overall quality of patient care. Differentiating an urban setting from a rural setting most often yields the same results. For example, there is the presumption that everything is "bigger and better" in the city. In many ways this holds true once the comparisons of healthcare in rural and urban communities are concerned. Urban areas most often have an abundance and wide variety of physicians and services available, easily accessible locations for care (i.e. distance traveled/transportation), and less monetary strain to cover patient financial responsibility. Transportation and distance are a challenge and patients struggle to afford care or forego it if they cannot afford it (Smith, Egan, & Appelt, 2019).

Over the last several years, the quality of healthcare has been compromised in smaller communities due "the quality of care delivered by the United States health care system is suboptimal" (Friedberg & Landon, 2018). It has been reported by the Center for Disease Control (CDC) that a much greater number of rurally located Americans have succumb to the top ranked killer diseases than those in more populated areas. This has partially been attributed to the lack of access to proper treatment for those conditions (Iglehart, 2018). In smaller, more remote areas, physicians are limited and there are often limited resources as well. Hospitals and clinics are smaller which results in the staff being smaller (Agrawal & Slabach, 2018).

For quality measurement, the Institute of Medicine (2001) indicates that physician payouts are directly connected to quality. The amounts reimbursed can be based on the quality of services rendered. Some of the specific measured areas are safety, efficacy, patient-focused, timely, efficiency and equity. These measures have been challenging to achieve high ratings due to fewer available clinicians, lack of access to technology, limited resources, treating a population with high vulnerability, and being shut out of opportunities like Critical Access Hospitals and

Federally Qualified Health Centers that are reimbursed differently. In 2005, the IOM stated, “In general, the smaller, poorer, and more isolated a rural community is, the more difficult it is to ensure the availability of high-quality health services” (“Rural Healthcare Quality,” 2018).

Shortage of physicians

Another barrier to patient access is the shortage of physicians. The ratio of physicians in rural communities in comparison to patient population is much less than that in larger cities. Physician access in densely populated areas is prevalent. In researching this topic, there seem to be several underlying issues resulting in the shortage of physicians in America, especially rural communities. It has been projected that by the year 2020, there will be approximately 120,000 physicians that we will lack in the United States alone. In addition, by the year 2020 a large percentage of currently practicing physicians will be at the retirement age (“Physician Job Search, n.d.). This leaves an even larger impact on the shortage. According to the fifth annual study by the Association of American Medical Colleges, the shortage may increase more than 120,000 by the year 2032 based on supply and demand.

In order meet that supply and demand need, we would need to increase our employed physicians to over 95,000 right away. In addition, it takes 10 years or more for a physician to complete a residency, so the demand is even greater in that aspect (Association of American Medical Colleges, 2019). The report also found that the shortage affects both general practitioners as well as specialists. For specialists, the timeframe for completion is much longer than that of a general practitioner. Once you incorporate college, medical school, residency, and fellowship, the average for completion could be in upwards of 18 years (Valadka, 2019). Although there have been some increases in medical colleges, they have not been producing

enough students to fill the void ("Physician Job Search," n.d.). Not only is there a shortage of general physicians, but the lack of specialists in rural areas is extreme. Patients dealing with substance abuse or mental illness are not able to receive adequate care necessary for survival. Per every 10,000 persons in a smaller community, the number of providers for each of those people is approximately 30 percent less than the number of providers in a larger community.

There are several factors contributing to the physician shortage that include but are not limited to political, professional, economic, and educational reasons. Let us take a glimpse at some of the underlying reasons behind the shortage crisis in remote areas. The first may be the most obvious: location. Unless a practicing physician has been raised in a smaller, more remote area, the odds him/her practicing there are not often likely. Although being raised in rural area may be a factor in choosing to practice there, the same may be use for not wanting to practice there. A large percentage of medical students choose not to return after they graduate. Most students tend to practice where they are completing their residencies (i.e. larger cities). There are some medical colleges that are addressing the need for care in rural communities and are placing their students in smaller areas for residencies. More medical colleges are also implementing rural-specific training, such as the Scholars in Rural Healthy program at the University of Kansas Medical Center's KU School of Medicine. Some rural hospitals have begun to do their own recruiting for potential doctors. The appeal of a more laid-back lifestyle, slower community pace, stress free living, and wide open, rural country land has been effective in luring more doctors to smaller communities (Slabach, 2018).

In previous discussions, it was mentioned that rural communities often are much poorer than urban communities. It is extremely difficult to attract physicians to these underserved areas. Finding a position in the medical field requires one to make many decisions and location,

location, location, is often the primary factor in that choice. The choice of where a physician decides to go or not to go could potentially be life altering. In a 2019 Merritt Hawkins Survey of Final-Year Medical Residents, results indicate that only 1% of doctors in their final year of study have the desire to live in a community with a population of less than 10,000 (Siegler, 2019). Smaller town physicians are not paid as highly as they would be if practicing in a much larger city. Student loan debts accumulate during medical school and once a residency has been completed, often their first goal is to pay that debt as quickly as possible. Practicing in a small town would certainly prolong the loan repayment process.

Rural communities are peaceful, have beautiful landscapes, lower crime rates and are often closely knit socially. These things may be appealing, but to a new or even seasoned physician, they may not be enough to draw enough attention to start a career there. Taking their families, or thinking of a family in the future, there potentially may be fewer options in areas of entertainment and social events, education, shopping or opportunities for employment for a spouse/significant other. From a work standpoint, doctors like to have professional camaraderie with others they can relate to or consult with if necessary. Being isolated from colleagues along with not being exposed to the latest technological advances, equipment, and continuing education opportunities could be problematic (Williams, 2018).

Recruitment and retention of doctors in rural communities is a very important part of the quality of care available to patients in those areas. The economy is not often something an underserved area can use to appeal a potential clinician. Although the salary may be lower in a smaller town, the cost of living I much lower than in the city, which may appeal to some. Life in the county may have many perks for a physician who has easily adapted to the area. However, the shortage of colleagues in proximity often leads to longer work hours and a wide variety of

patients with different medical issues that need to be addressed. Often, general medical doctors in small communities must accommodate many people who may ideally need a specialist to treat their condition. Patients diseased with terminal illnesses and even obstetric patients must rely on a general physician given he/she is their only option. The high demand to offer so many services has the potential to lead to burnout, which is one major issue that could cause a doctor to leave the area or stop practicing entirely (Rabinowitz & Paynter, 2002).

Adaptation may be the primary factor in retaining a physician in a rural area ("Rural Practice", 2015). It will not however guarantee a physician will hold a position long term. Another determinant of physician shortage is burnout. "Burnout is a syndrome characterized by exhaustion, cynicism, and reduced effectiveness. Physician burnout has been shown to influence quality of care, patient safety, physician turnover, and patient satisfaction", according to a 2017 article by Shanafelt and Norsworthy. With the Affordable Care Act in effect, the increased demand for care erupted as many people became insured. The stress and burden of a large workload often drives physicians away, especially in smaller areas. The combination of hard work in many areas of treatment and the little amount of compensation earned for it can drive a physician out quickly (West, Dyrbye, & Shanafelt, 2018).

The number of students applying to medical schools is declining. As previously mentioned, more students have either applied to medical school and not been accepted or have simply lost interest in pursuing a medical career path. A "bottleneck" effect occurs as the number of students applying to medical colleges are not being accepted. This decreased acceptance rate only prolongs the time it takes to complete the requirements, thus prolonging care to potential patients. Students who are applying outweigh the number of slots available at the medical colleges. Adding to the dilemma are the requirements for residency. These requirements are

grossly backed financially by Medicare. However, there are limits to this funding (Harrington, 2014). Again, the bulk of funding is provided for residencies via Medicare and Medicaid and is extremely costly. Over 9 billion dollars has been provided by Medicare and over 2 billion has been provided by Medicaid. These large costs are the reason for hesitation when considering expansion of residency availability (Waldron, 2019).

The shortage is certainly not improving, according to Dr. Vikas Saini, president of the Lown Institute. He is concerned that the focus for practitioners has been in primarily urban areas versus smaller, rural communities. In larger cities, people are generally do better financially and are more often highly trained in education. Simply considering more wealth and higher education in an area is more attractive to most medical students than a less wealthy area with not as much flair to offer. It is difficult to attract a potential student to a rural area. Saini states. “where people train tend to be where people practice” (Saini, 2018).

Although the shortage of physicians is on the rise, there have been efforts to try and make a difference in the decline. For example, a program in Pennsylvania, The Physician Shortage Area Program (PSAP), was established in 1974. The idea behind the PSAP program was to help improve the geographic maldistribution of physicians in underserved and rural areas (Diamond et al., 1999). These areas are the poorest financially, are in poorer health than in more urbanized areas, have a higher population of elderly people, and have the highest number of uninsured or those who rely on Medicare or Medicaid. In 1974, Jefferson Medical College established PSAP, Physician Shortage Area Program, to try to increase the number of rural physicians. The program selectively recruits native students from rural areas of the state of Pennsylvania. These students must have a desire to practice in rural areas. Third year residents are required to practice family medicine in a rural community. Once graduation is completed, there is also an expectation to

complete a residency in an underserved/rural area. However, there is no penalty if this is not carried out (Diamond et al., 1999).

Also, there are some medical colleges that are addressing the need for care in rural communities and are placing their students in smaller areas for residencies. More medical colleges are also implementing rural-specific training, such as the Scholars in Rural Healthy program at the University of Kansas Medical Center's KU School of Medicine. Some rural hospitals have begun to do their own recruiting for potential doctors. The appeal of a more laid-back lifestyle, slower community pace, stress free living, and wide open, rural country land has been effective in luring more doctors to smaller communities ("Fixing the Medical Staff, 2018).

The Affordable Care Act

According to the dictionary, the Affordable Care Act (ACA) is a "federal law providing for a fundamental reform of the US healthcare and health insurance system, signed by President Barack Obama in 2010". Once President Obama was elected, he decided to use health reform as his platform. His main objective while in office was to allow as many citizens of the US as possible to be able to afford healthcare by insuring the uninsured (Affordable Care Act, n.d.). The laws of the ACA that were passed in March 2010 have been the largest change to healthcare in over 50 years and have made attempts to make major changes within our healthcare system. It has done so by tackling areas such as unaffordable and costly healthcare, insufficient quality and access to healthcare, and by expanding Medicaid. These laws serve as a mechanism to improve our nation's overall health (Shaw, Asomugha, Conway, & Rain, 2014). The ACA requires options for coverage allowing the uninsured to choose a specific plan best suited for their needs. Those not interested in coverage are faced with a tax penalty. In 2017, the current President

passed a bill that repealed the individual mandate that required coverage for face a tax penalty ("Understanding Obamacare", 2018).

As with any new program, there are positives and negatives to consider. The initial rollout of the law was met with a ton of backlash. More Americans were against it than in favor of it. The negatives associated with ACA are great in number. Some of them include an overall increase in the cost of healthcare, loss of insurance provided by employers to offset costs by paying the tax penalty instead, and the cancellation of many private policies that did not offer some essential benefits provided by Obamacare. Other than its initial intention, the ACA allowed children to stay on their parent's plan until age 26, pre-existing conditions do not exclude individuals any longer, many essential benefits are covered, and the cost of healthcare has been lowered significantly. Of all the entities attached to Obamacare both good and bad, one of the most significant impacts on physician shortages and hospital closures is Medicaid expansion.

Physicians and the ACA

Once the Affordable Care Act went into effect, an influx of patients had access to healthcare coverage. This concept of providing coverage for many more Americans rested well with some providers, but for others in rural communities, the concept has not been received very well. The shortage in rural areas has not changed but the increase in patients needing care has greatly. Now that the ACA has expanded coverage for many more, some patients are being seen for the first time and are being treated for conditions that may require a specialist. This is a stressor for a small-town general physician. The expansion has also generated a delay in access to care in rural areas with fewer clinicians as wait times for appointments have increased a great deal. Another challenge physicians

face is the idea that the expansion could be scaled back or eliminated completely. In the instance that this does happen, the access to care barrier would only be strengthened in these underserved areas (Wishner & Burton, 2017).

In addition, many physicians view the ACA implementation as a negative in speaking of the healthcare system. Lower reimbursement rates have resulted in some providers seeking additional part-time work to offset their income. Many also are considering early retirement. These factors directly contribute to the potential clinician shortage. A Physician's Foundation survey was conducted in 2014. This survey concluded that over 80 percent of clinicians felt "overextended or at full capacity'. Almost 60 percent of clinicians indicated they were less optimistic pertaining to the future of our healthcare system in the US since the ACA's passage. Over 45 peercent of clinicians rated the ACA at a "D or F grade" (Morrisey, 2017). The ACA has also reportedly created more paperwork for physicians as well as less time spent with patients. An increase in paperwork concerning insurance proves to be time consuming and is one of the determinants of physician burnout.

Hospitals and the ACA

Some measures have been taken to try and prolong the lives of rural hospitals. The federal government implemented 4 categories to help rural hospitals with reimbursement from Medicare. These categories include Critical Access Hospitals, Medicare Dependent Hospitals, Sole Community Hospitals, and Rural Referral Centers. These specific categories for low volume hospitals were entitled to a 25 pecent increase in Medicare reimbursement pending they met certain criteria. The ACA was briefly able to increase this entitlement but expired in 2016 (2017 fiscal year). As a result of the increase, over 450 low volume rural hospitals received $248

million in adjustments. The expiration of reimbursement to the low volume hospital categories makes a major negative impact on these facilities (Whitaker, Holmes, & Pink, 2017).

One major provision of the Affordable Care Act was the expansion of Medicaid. Before the ACA came into effect, different rules and stipulations established the basis of state Medicaid health coverage. These stipulations were based on age, disability, and income. In 2014, the ACA expanded its program and allowed for more people to meet the requirements. Not all states however chose to expand these benefits. More than 50 percent of hospitals in the United States are in states that did not expand (Reiter, Noles, & Pink, 2015). States that did not expand Medicaid eligibility as allowed by the ACA may be at a disadvantage compared to the states that did expand. These non-expanding states have not seen a reduced number of patients that are not insured. This does not lower uncompensated care provided by hospitals which results in a negative impact on the hospital's financial status.

Again, the strain of little to no payment puts these facilities at risk for bad debt which could result in closure (Kaufman, Reiter, Pink, & Holmes, 2016). Lack of expansion is compromising the health of some in that more people (about 20%) are bypassing medical attention due to cost and more people (about 8%) are bypassing needed prescriptions or are reducing doses of needed prescriptions due to cost (Alonso-Zaldivar, 2018). Non-expansion is ultimately costing hospitals billions in revenue (table 1) and places a hindrance on the state's economic growth (Dorn, McGrath, & Halahan, 2014). Thus far the expansion of Medicaid has been able to be funded without increasing taxes, but that may not always hold true. It is possible in the future that funding to support expansion may stem from taxpayers paying an extra cost. Lastly for those enrolled in the Medicaid program, the cost for their participation is much higher than it is for those who hold private insurance. Lower copay fees are attractive to Medicaid

participants, which results in more frequent office or hospital visits than necessary. Finally, the take it or leave it concept for Medicaid participation may hinder some from wanting to be more successful financially. That is, some may be inclined to stay at a lower income level to keep government benefits, holding them prisoner for coverage dependency (Medicaid expansion, n.d.).

	State Price Tags to Expand Medicaid	**For states that EXPAND Medicaid**:	**Consequences of NOT Expanding Medicaid**	
	10-year total cost to expand Medicaid (millions)	For every $1 a state invests in Medicaid expansion, $13.41 in federal funds will flow into the state. Expanding Medicaid will likely also generate state savings and revenues that exceed expansion costs.	Federal Medicaid funding LOST (billions)	Hospital reimbursement LOST (billions)
Alabama	$1,081		$14.4	$7.0
Alaska	$147		$1.5	$0.6
Florida	$5,364		$66.1	$22.6
Georgia	$2,541		$33.7	$12.8
Idaho	$246		$3.3	$1.5
Indiana	$1,099		$17.3	$9.2
Kansas	$525		$5.3	$2.6
Louisiana	$1,244		$15.8	$8.0
Maine	$570		$3.1	$0.9
Mississippi	$1,048		$14.5	$4.8
Missouri	$1,573		$17.8	$6.8
Montana	194		$2.1	$1.1
Nebraska	250		$3.1	$1.6
North Carolina	$3,075		$39.6	$11.3
Oklahoma	689		$8.6	$4.1
Pennsylvania	$2,842		$37.8	$10.6
South Carolina	$1,155		$15.8	$6.2
South Dakota	157		$2.1	$0.8
Tennessee	$1,715		$22.5	$7.7
Texas	$5,669		$65.6	$34.3
Utah	364		$5.3	$3.1
Virginia	$1,326		$14.7	$6.2
Wisconsin	248		$12.3	$3.7
Wyoming	118		$1.4	$0.4
	TOTAL: $31.6 billion		TOTAL: $423.6 billion	TOTAL: $167.8 billion
Table 1-Source: Robert Wood Johnson Foundation Urban Institute				

Corporate Compliance

According to encyclopedia.com, “compliance can be defined as the act of adhering to or conforming with a law, rule, demand or request”. In reference to a business setting, “conforming to the laws, regulations, rules, and policies is the part of operations often referred to as corporate compliance”. This concept of corporate compliance is composed of many elements that monitor closely the company’s environment and many changes it may face. It seeks to ensure the company is functioning properly so that it remains in good graces with its specific industry and customers it serves (“corporate compliance, 2019). Hospitals and hospital systems are required to meet over 340 standards at minimum according to the American Health Association. These standards are regulated by federal agencies and are also very expensive to maintain. Although the standards are put into effect to protect patients, there is quite a bit of time and effort taken from hospital staff to manage the standards that may take time away from patients. Compliance has often been labeled as a burden and proven to have the opposite effect on the care provided for patients.

Over 35 billion dollars is spent each year in healthcare in relation to corporate compliance. This cost often includes fees needed to hire additional employees such as IT specialists to help keep the faculty compliant. These growing costs are a large but necessary obstacle hospitals face. Without being compliant, these facilities risk closure. Smaller, rural hospitals that may already be in a financial bind list compliance as a top stressor for the faculty (Trifilio, n.d.)

Once there was a surge in rural hospital closures in the late 1980s and early 1990s, congress implemented a classification for them. This classification was implemented with specific criteria to make a hospital eligible and were titled Critical Access Hospitals. The goal via the Balance Budget Act of 1997 was to keep quality healthcare accessible to patients in rural

communities and to also reduce financial stressors to these rural facilities. The criteria include 25 or fewer acute care inpatient beds, must be located more than 35 miles from another hospital, must provide 24/7 emergency room services, and maintain an annual average length of stay of 96 hours or fewer. Despite these efforts to ease financial strain, compliance is still a mandatory standard that cannot be overlooked (Critical Access Hospitals, 2019). The risk of failure to comply with these standards cannot be overlooked either. In an effort or an attempt to save costs, many rural hospitals are outsourcing corporate compliance. These facilities cannot afford the penalties of not being compliant. Outsourcing corporate compliance is beneficial in that their risk is minimalized as the hired organization is responsible for management. Because maintaining, monitoring, and managing compliance is time and cost consuming, the hired organization makes the faculty and its staff more effective in caring for patients. Also, the hospitals operational cost is reduced. This reduction in cost may be the most important feature of outsourcing. Outsourcing reduces the operational cost and saves money in areas such as training, research, salaries, technologies, etc. Improving the financial status of a rural facility is a major gain toward securing its risk against potential closure (“Outsourcing corporate compliance”, 2019).

Urgent care centers

Beginning in the 1980s, quick care clinics have been on the rise. These urgent care facilities provide an alternative to the traditional emergency room visit or offer convenient care service when a primary care physician may not be readily available. As reported in 2013, over 9,000 of these facilities had sprouted across the United States within a twenty-year time frame (Yee, Lechner, & Boukus, 2013). Currently these centers provide access to care for over 160 million patients in the United States. Their growth was expected to surpass the 5.8 percent increase projected for 2018 (Rechtoris, 2018). Urgent care clinics are convenient and generally

cost saving. A study in the Annals of Emergency Medicine found on average the cost of an urgent care visit would be 10 times less than that of a visit to the emergency room (Dolan, 2019). The convenience and access to care seems to be the largest influence on keeping these facilities successful. Most often, one can simply walk in and be seen without an appointment. Urgent care clinics are often free standing, located in shopping centers and strip malls, or in major retailers such as CVS or Wal-Mart.

For non-life-threatening needs, urgent care clinics are the perfect solution for some. As the increase in physician shortages emerges, the nation's population of patients over age 65 will double by the year 2035. Our population will have a community of senior citizens that represent over 10 percent of the United States. Within this group of seniors, 26 percent will account for hospital visit, 35 percent will account for hospital stays, and 38 percent will account for emergency room visits. The problem lies in those areas, mainly rural, that potentially may not have local hospital facilities to provide adequate care for the growing group of those age 65 and older. Urgent care clinics could bridge the gap here. However, urgent care clinics most often are not in network with Medicaid and take away from the already dwindling number of primary care physicians currently available (Yee et al, 2013). A 2008 study found that "27.1 percent of all emergency department visits could be managed at a retail clinic or urgent care center" (Weinick, Burns, & Mehrotra, 2010). This is problematic in the steadily increasing number of hospital closures. If the emergency department shows a decline in revenue, the overall financial status of the facility may be compromised.

Acquisitions and mergers

We have already established the concept that a very large part of rural communities are highly dependent on public insurance assistance to receive medical care. We have also established the concept that those in rural areas with private insurance are not likely to frequent their local hospital for care. This “compound reimbursement” challenge results in the publicly insured patients utilizing the local hospital (yielding less revenue) and the privately insured patients seeking care elsewhere (yielding less revenue). Rural hospitals have been proven to be financially fragile in their struggle to generate revenue. When this becomes a pressing issue that may lead to closure, often mergers or acquisitions occur. Merging with a larger facility may bring other problems. These mergers sometimes make the facility less profitable than before. Decreases in staff and decreases in salaries are inevitable (Holmes, 2015). There has not been significant proof to show that mergers greatly increase the facility’s revenue, pull the facility out of debt, or increase bottom line profits. Due to the change in reimbursements, all hospitals have been compromised in areas for financial growth. Rural hospitals are especially compromised for significant increase in revenue simply based on size and location. Despite losses in senior management and staff salary, in desperation to avoid potential closures, the risk is taken with mergers and acquisitions (Noles, Reiter, Pink, and Holmes, 2014).

McKenzie Regional Hospital

In the northwest portion of Tennessee, a small town in Carroll county lost its hospital in September of 2018. The estimated population of McKenzie, Tennessee is just over 5,000 and is

the home of Bethel University, a private Christian college. McKenzie Regional Hospital housed 45 patient beds and had been in operation for over 44 years before the shutdown. The staff of about 200 employees was provided a 6 week notice before the doors were finally closed which unfortunately left little time to find work in another facility. On July 27, 2018, the hospital posted a message via social media stating:

> Our hospital recently announced it will discontinue most patient services, including the emergency department, as of September 15. However, outpatient diagnostic imaging and ambulance services will continue. The difficult decision was made following years of low patient volumes, increased competition, and declining reimbursements from government and commercial insurers. Please visit our website for more information. Thank you for trusting McKenzie Regional Hospital with your health care needs.

With the closure of this town's hospital, patients in need of an overnight stay or those that are transported by ambulance must now use their closest options with facilities about 10 miles away in Paris, Tennessee or about 18 miles away in Huntingdon, Tennessee. It has been reported that the hospital made negative 12 million dollars in the last few years. Popular opinion places the blame on the state's failure to expand Medicaid (Conte, 2018). Carroll County ranks 13th in a state of 95 counties as one of the highest in reference to the unemployment rate. In this small town, nearly 1 in 5 people live in poverty. Those residents who do have private insurance are very few. Approximately 12 percent of those employed are not covered by any insurance (Kent and Walton, 2018).

In researching information for this project, a few members of the community were contacted for their personal accounts on how the shut-down has affected them as well as the rest

of the community. Carolyn Patterson, a resident of Carroll County for 60 years gave an account of a family she had met who had recently moved to McKenzie for work. The family was particularly interested in some property Mrs. Patterson had to offer and the group began to negotiate an agreement for the property. The family had a small child with severe allergic reactions, and they made it clear that they could not reside more than 7 minutes from a hospital. With the closure of McKenzie Regional, the family opted out of the property and were forced to find another location. Mrs. Patterson's most personal account with the shut-down also affected her own family. Her husband became very ill and was taken to the emergency room at McKenzie Regional. The nurses in the ER found that Mr. Patterson had experienced a heart attack with a 99 percent blockage. The medical staff immediately burst a blood clot within Mr. Patterson and then had him airlifted to a much larger facility. Mrs. Patterson was informed that if they had not made it to the ER in the time frame that they did, Mr. Patterson most likely would not have survived. The Patterson's are most gracious for the care they were able to receive in that crucial moment that saved a life. Now, the Patterson's worry that more lives will be lost than saved without the access of a local hospital with an emergency department.

Personal interview September 20, 2019-Carroll County Mayor, Jill Holland:

"I learned that the hospital was closing when the buyers and hospital administrators called my office for an emergency meeting. I was told that the members of the Baptist (Hospital) team purchased our hospital as well as the one in Huntingdon and were closing ours but changing the name of the other. They had already purchased our diagnostic medical center. They indicated we would still have a helipad and ambulance. I understood that the hospital just could not sustain itself on what it was bringing in, especially when it was losing 3 to 4 million dollars per year. The bulk of those people (patients) are on government insurance and few people have corporate

insurance. It is disheartening, running into people in town because I know a lot of them who worked there. Some of them were able to go and work at the medical center, but several also had to relocate, their whole family had to relocate. It is upsetting. So many people in town were affected. It hurts our businesses. The city was already struggling economically. I am worried that businesses will decide not to come here because of this. Trying to recruit kids for the college, or new industries is hard. People want to know they can send their kids somewhere a hospital is close by and industries will just eliminate you if there is no hospital. Without the hospital, it's like losing a right arm"

Personal interview October 11, 2019-Amy Hannah, Certified Nurse Midwife:

"I worked as a Certified Nurse Midwife for over 14 years providing women's health and Maternity care. I found out about it (closure) while seeing patients as normal an impromptu OB (obstetrics) department meeting was called. They gathered us all together and told us the hospital would be shutting their doors on October 1, 2018. No other reasons why were given other than Baptist was buying the hospital strictly for our Radiology services yet had no plans of continuing to utilize the facility itself. The last day I saw patient at MRH was August 28th However, I was paid until October 1st. Basically, we were guaranteed our paychecks for 60 days. I was in shock, disbelief, lots of tears, and mostly concern for our active OB patients…especially the ones who were due in the next few weeks…It took several months for the truth to actually sink in. Mostly because I have worked as a CNM for nearly 20 years in our area. I provided care to so many women and adolescents throughout the years. It still affects me on that level because I have patients contact me daily. That makes you feel good and yet sad at the same time. I have been their comfort zone for so long and in an instant, it was taken away from them. Although one would think that affects them more than me, that is so untrue because they are a lot like my kids and the feeling of abandonment is overwhelming. Obviously, the salary being pulled away for over the past year has been an adjustment. I have learned budgeting and it has made me realize things can change in a blink of an eye, especially in healthcare. While the providers' main

concern is the care of the patient, the people controlling the corporation's main concern is the bottom dollar. After living in the area all my life I recently accepted a new position out of state. This means I am leaving both of my college aged children behind, my granddaughter, my family, my friends, and my hometown. It is a very scary new venture. It most definitely left several people unable to get the care they needed either because of the overflow of new patients into the surrounding counties or their type of insurance. It most certainly was not a benefit to patients. The surrounding facilities revenues most definitely increased and well as their numbers. Providing a specialty care, such as nurse midwifery, was totally pulled away from the patients who were able to receive this care for over 30 years in our area. We can only be supported by the practicing Ob/Gyns…if that support is not there, neither are nurse midwives. The medical center itself is still providing excellent primary care, as well as other specialties. However, women's health in that community is obsolete."

Personal interview October 29, 2019-Joseph R. Hames, M.D., Dean & Vice President of the College of Health Sciences, Bethel University:

"The ED department supervisor informed me (about the closure). I was both surprised and not surprised. There had been rumors for years that the hospital was in a precarious financial situation. I had adjusted to those rumors as "background noise." So, when the news came, I was surprised while at the same time thinking that the inevitable had eventually happened. My faculty were concerned because the hospital was an important clinical site for our Nursing and Physician Assistant educational programs. As a result, we can longer place students in OB/Gyn clinical experiences in this area. That has put a significant strain on the University's ability to provide this educational experience for our students. It (the closure) has had a negative impact on the physicians' practice (McKenzie Medical Center). They have had significant reductions in their workforce. The void for emergency care of a more serious nature has not been filled by the medical center. They do a good job of taking care of less serious urgent care cases. The University had to go further afield to locate the clinical experiences that are required for the education of our Nursing and Physician Assistant students. The on-campus students now have a

much longer drive to be seen in an Emergency Department, which is not a good thing".

The impact on communities

It has already been established that once hospitals close, patients suffer. Access to care is compromised, patients must travel longer distances for certain care from specific practitioners, and those closely located are sparse. The community is directly affected by the shutdowns. People are worried. They are worried about not being able to live if presented with an emergency or life and death situation that cannot be addressed in a timely manner. They are worried about the time frame it will take to get access to needed care. They are worried about giving birth while rushing to an adequate medical facility. In addition, there is often the loss of a sense of community when a major hospital in the area closes. As most of the community has generational ties to its hospitals, once it is gone, an emotional connection is broken. In areas that are already suffering, the hope for growth in the area is lost. Attracting new industries is virtually impossible making the possibility of attracting new residents or retirees unheard of.

In an issue brief by the Kaiser Foundation, a nonprofit organization, several key points were identified concerning the direct effects of hospitals closures in the community as well as key points that may have fueled the closures. In leading up to the point of shutdown, patients with private insurances chose to receive care outside of their local communities. This decision placed a negative view on the local hospital as well as negatively impacted the facility's revenue. Under the Hill-Burton Act, hospitals are now in competition with one another for federal funding, patients, and healthcare resources. Decisions by corporations, i.e. owners of large health systems, placed preference on other hospitals in neighboring towns when implementing mergers and acquisitions. Lower amounts in both Medicare and Medicaid reimbursements have affected the hospital's bottom line. As a result of these key findings, most of the physicians and staff left the areas once the facility was closed. Job loss in the community

trickled down onto other businesses as a loss of revenue. The community suffered a major loss in the economy. Attracting new businesses or industries becomes extremely difficult with no hospital close by (Wishner, Solleveld, Rudowitz, Paradise, & Antonisse, 2016).

Most often in a smaller, rural community, the hospital is that area's largest employer. Losing employment is a serious concern for the medical staff. They are forced to find other positions in their field which is most likely in another town. Once these employees are uprooted from their place of work, they are taking their families with them. This leaves their spouses who travel with them and sometimes children too. An entire family leaving the community affects businesses and schools.

For the community's economy any dreams of progress are killed. These closures are the start of the area's slow decline and destruction of its economy. Loss of sales tax revenue, loss of local businesses, loss of students in schools, loss of many members in the community, and a rise in unemployment adds to the decline (Bolin, Watzak, & Dickey, 2019). It has been estimated that a decrease of almost $1300 in per capita income is the result or approximately $30 million in losses for the county (Holmes, 2015). Industries, especially those that may involve dangerous work, are not looking to plant themselves in a community without a local hospital. The older population and retirees do not want to spend their last days in an area where they could potentially die because healthcare access is inadequate. Hospital's business with other industries in the area such as floral and food sales, as well as employment spending, aids in the economic growth of the community. This economic activity stimulates other areas in the local community as it creates more tax revenues. This revenue could then fund other areas in the community. But without it, the entire community suffers (Eilrich, Doeksen, & St. Clair, 2015). Table 2 provides a clear

example of economic effects of hospital closings in rural areas, specifically employment and wage growth of counites with and without closures, in a five-year span (Edmiston, 2019).

Table 2: Economic Effects of Hospital Closings in Rural Areas (2011-16)

Total employment				
	Median employment	Average annual growth, previous 3 years (percent)	Average annual growth, following 3 years (percent)	Difference (percent)
Counties with no closures	3,683	0.3	0.7	0.4
Counites with closures	5,694	0.0	-0.5	-0.5
Aggregate wages				
	Median aggregate wages, 2013 (billions)	Average annual growth, previous 3 years (percent)	Average annual growth, following 3 years (percent)	Difference (percent)
Counties with no closures	$125.2	2.7	3.0	0.3
Counties with closures	$179.9	3.0	1.1	-1.9
Source: Bureau of Labor statistics				

Telemedicine: A potential solution

Although there are hospitals closing at an alarming and unheard-of rate, there may be a few potential solutions that could prolong a potential closure of hopefully prevent a potential closure. These facilities must partner with local governments to formulate a creative strategy that will increase their odds of survival. A toddler died in her parent’s arms from choking because their county hospital was closed and there was no facility available for assistance. Within a few

days of the local hospital closing, a middle-aged female died from a heart attack while waiting to be air lifted to another location because there was no facility for assistance (NRHA, 2019). If no real solutions are created for the survival of these facilities and for the survival of patients, then plans must be implemented to address patient's lack of access to care and physicians.

Telemedicine, as defined by the World Health Organization (WHO), incorporates "the delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment, and prevention of disease and injuries research and evaluation, and for the continuing education of health care providers, all the interests of advancing the health of individuals and their communities". Its sole purpose is to provide access to care. The National Rural Health Association states, "without health care, without a hospital, a rural community will crumble". Using telemedicine increases the quality of patient care while also reduces the time it takes to gain access to said care (Greiwe, 2018). In rural communities, this is precisely what is needed for those who face those challenging barriers for access to care (Kruse, Karem, Shifflett, Vegi, Ravi & Brooks, 2018). Often, rural facilities are aged and not as technologically advanced as some facilities in larger cities or towns. These declining locations that seem primitive to locals hinder their reputation within the community. For the more isolated rural hospitals, telemedicine provides an opportunity to provide advanced care in technology where they may have lacked previously. Telemedicine uses a two-way interactive video transmission along with equipment specially designed for diagnostic purposes. (Hicks, Boles, Hudson, Madsen, Kling, Tracy, Mitchell & Webb, 2001). The network connects a "spoke" location (rural area) with a "hub" location (urban area). Consultations and conferences can be conducted via video and telephone and radiographic x-rays can be sent electronically. It is also

extremely useful when used in the specialty areas of dermatology, orthopedics, mental health, cardiology, and emergency room/triage services (Capalbo & Heggem, 1999).

In referencing the previous section on the shortage of physicians, the use or implementation of telemedicine has the potential to reduce the need of heavy recruitment of those who are not so willing to live in remote areas. Rural hospitals are often in financial despair, so hiring specialists is not conducive to their bottom line. Telemedicine provides a chance for these small-town doctors to experience a top quality, innovative format that is certain to change the face of medical treatment. It is also very important that the right physicians are used for this specific method of access to care. One who is highly skilled is most often preferred as he/she may be exposed to a myriad of different clinical situations that may be out of their standard scope of practice. There are a few options today that offer a pre-staffed service so that hospitals do not have to worry with training their existing staff. This allows them to effectively tend to their existing patient base without compromising their care. It also eliminates the need to hire more staff while at the same time still extending access to care for the community (Park, 2017).

Telemedicine may be the answer to bridging the gap between urban and rural area access to care. As mentioned previously, those in urban areas are exposed to an abundance and wide variety of physicians and services. With telemedicine technology, this could hold true for those in rural communities as well. It “has been described as the single most important way to equalize the differentials in resource availability between rural and urban areas”, according to Thomas Ricketts (2000). Telemedicine has been reported to have seen some of the best results when it comes to emergency care. It is the emergency department that patients flock to in their time of need, whether it is a true emergency or not, and they often travel by ambulance. The emergency department is seen by them as a last resort option in their time of need. With telemedicine, access

to a clinician would be more cost effective to both the patient and the facility without the unnecessary trip to the actual facility (Park, 2017). For those that do experience a traumatic event or serious medical incident may face delayed care due to either lacking technology to treat specific needs or due to the distance to a facility that may be equipped to treat specific needs. Telemedicine could potentially improve and impact the diagnostic and treatment abilities of the emergency department (Hicks et al, 2001).

There are other benefits to a telemedicine system other than access to care. For hospitals that may face value-based penalties dependent on readmissions, telemedicine services provide some savings to costs in that area. Telemedicine allows the patient to be monitored from a distance (i.e. at home) so that if an issue was to arise, the patient could receive attention quickly. This reduces their odds of having to return to the hospital. The patient can check in with their clinician regularly. Staying abreast of any changes in their condition, especially those with chronic conditions, saves time and money for both the patient and the facility. Also, patients with difficulty understanding the details of their discharge details benefit from telemedicine. Many times, patients are not compliant with their post-operative or discharge instructions. Telemedicine provides an outlet for these patients to better understand specifics on what they need to do to prevent readmission as well as provide access to clinicians to check the status of their patients (Park, 2017). Also, there is a significant decrease in the number of patients transferred out of a rural area medical facility to a much larger one with the use of telemedicine. The patient may receive a diagnosis earlier and be able to begin treatment earlier with no need for transfer (Hicks et al, 2001). An increase in admissions and revenue is seen as patients are more satisfied and confident that they will receive the quality care that they need (McCormick, 2016).

As with anything newly implemented, there are potential barriers. Those barriers for patients may be computer literacy, resistance to change, level of education, confidentiality and privacy issues, unawareness, age, and socioeconomic status. Very rural areas without broadband are sometimes limited to their access to internet services as well. Those barriers for clinicians may be resistance to change, technically challenged staff, poor design of system, language barrier, potential lack of reimbursement, licensing, perception of impersonal care and inoperability (Kruse et al, 2018). The American Hospital Association lists the top hurdles for telemedicine implementation as, "statutory and regulatory, restrictions on how Medicare covers and pays, lack of adequate broadband connectivity in some areas, cross-state licensure hurdles for practitioners, and the high cost of acquiring and maintaining necessary equipment". Significant support from the government would be necessary for telemedicine to come to fruition across the United States. There are strides being made by Medicare and Medicaid to improve reimbursement. The use of telemedicine among Medicare patients has increased drastically from approximately 7,000 users in 2004 to over 100,000 in 2013 (Wicklund, 2019).

There are some federal sources that have provided funding for telemedicine. Groups such as the Office of Rural Health Policy, the Rural Utilities Service, the National Telecommunications and Information Administration, and the Health Care Financing Administration have all made significant contributions to aid in the success of telemedicine. This funding includes grants to supply research and the newest equipment and reduced long distance rates (Capalbo & Heggem, 1999). However, the success of telemedicine is not solely dependent on financing. Its success may possibly need to include coverage for specific services to secure longevity. Gap service coverage limits what a plan will cover. Implementing this provides access to a broader range of services. Urgent service coverage that include telestroke, teletrauma, and teleburn, provides

expert care quickly from specialists in dire situations. This is a close comparison to and electronic intensive care unit that intertwines vitals monitoring, physician knowledge and an alert system to lower morbidity and mortality. Mandated services for patients who are incarcerated would provide in-house care in a jail or prison without having them leave the premises. This adds a level of safety to the community as well. Finally, video-enabled multi-site group chart rounds provides a mentorship from specialists to primary care physicians in managing chronic diseases and disorders (Weinstein, Lopez, Joseph, Erps, Holcomb, Barker, & Krupinski, 2014).

Telemedicine has many characteristics and features that would allow it to improve the financial woes of many rural hospitals. Treating a patient at the local hospital could potentially generate reimbursement. Keeping the patient’s treatment in a local facility creates revenue for the community as well (Hicks et al, 2001). Providing this type of care gives rural hospitals the chance to improve and expand its services. Lobbying for changes in legislation for Medicare reimbursement are crucial. In the end, ease of use and acceptance are the key for the success of the implementation of telemedicine (Capalbo & Heggem, 1999).

Save Rural Hospitals Act: A potential solution

In a bold attempt to provide rural hospitals a great deal of relief, state representatives Same Graves (Republican) of Missouri and David Loebsack (Democrat) of Iowa, introduced a bill on June 20, 2017. This Save Rural Hospitals Act, a bill titled H.R. 2957, made a bold attempt to amend titles XVIII and XIX under the Social Security Act, primarily Medicare and Medicaid, respectively. Representative Graves stated, “This bill shines a light on the rural health crisis in Missouri and across the country”. Similarly, representative Loebsack stated, “Rural hospitals are the cornerstone of ensuring patients have access to high quality care and are a major contributor to

the local economy, creating jobs in the hospital and the community", (Zumbrun, 2017). The goals of the bill were to establish a method to increase payment to rural care physicians as well as change some of the vast requirements that were put into place under the Medicare umbrella.

For provisions under Medicare title XVIII, eight different entities were suggested. First, for critical access hospitals and rural hospitals, it would reverse those cuts for bad or unpaid debt and would change the set requirements for critical access hospitals. For Medicare dependent hospitals and low volume hospitals, it would provide an extension pertaining to payment levels. For Medicare dependent hospitals and sole community hospitals, it would reinstate diagnosis related group payments. For outpatient care in a sole hospital, it would reinstate hold harmless treatment. For those hospitals that may have been a bit slower in upgrading their electronic recording system, the bill would delay those penalties. There would be a permanent increase in payments, primarily Medicare, for rural ground ambulance services. For outpatient services, specifically those in therapeutic hospitals, requirements for supervision would be modified. The requirements for using and paying recovery audit contractors would be altered. Finally, for the rural hospitals that met specific requirements, there would be an opportunity for them to receive additional payment for specific qualifying outpatient services.

For provisions under Medicaid under title XIX, the major difference would be the extension of Medicaid primary care payments. For rural hospitals, H.R. 2957 would ultimately phase out the uneven distribution of share hospital payment reductions. In addition, changes would be made for the Public Health Service Act to implement competitive grant programs for qualifying rural hospitals. Also, one of the most important changes in the H.R. 2957 bill would affect the Balanced Budget and Emergency Deficit Control Act. This modification would essentially eradicate Medicare cuts for small rural hospitals (H.R. 2957, 2019).

Although the bill sounds as if it could have been the answer to all the woes of rural hospitals, it did have areas of concerns that would not have been addressed if the bill had passed. There areas of concerns that may not have been presented in the H.R. 2957 bill are the factors (i.e. cost) that would ensure the economic success of rural facilities, costs that patients must pay out of pocket to ensure economic success, or how rural health care delivery management is more innovative at larger facilities. Dr. Brandon Isaacs, D.O. makes a stand in his recommendations on not supporting the bill. Dr. Isaacs suggested the following provisions be introduced instead of the proposed Save Rural Hospitals Act.

Dr. Issacs proposes that first the issues concerning the physician shortages be addressed. He suggests changes be made to the HPSA (Health Professional Shortage Areas) in that the standards or requirements work to improve rural community recruitment and retention of physicians. With these modifications would allow opportunities for future physicians to have access for loan repayment as they are often faced with large debts once they have completed their schooling. Secondly, he suggests that rural communities introduce a pipeline type of program that introduces students to the medical profession. By doing so, these students who are successful in the medical field are more likely to return to their rural roots to practice. He suggests that the incentive programs begin as early on as elementary school. Because some of the smaller communities are not equipped to provide the educational structure to lead students on this path, implementation of such programs at an early stage, in his opinion, would be the best long-term solution. Dr. Isaacs also believes that changing hospitals to a community hospital outpatient model would be more cost friendly for rural communities. These modifications result in patients not spending as much time as in overnight stays in the hospital long term. The shift would lean toward cost-effective services that would include emergency and prenatal care. Lastly, the shift

from concentrating on crisis management would be most beneficial for a rural community hospital. Medicare standards are currently based on maintaining infrastructure. Dr. Isaacs suggests the focus be shifted to options that result in less patient admissions and less cost for maintenance. Dr. Isaacs ideas to help rural communities “grow your own” clinicians have great potential for both long and short-term solutions (Isaacs, 2019).

Although there have been many proposed solutions to aid in the rural hospital crisis, nothing thus far has seemed to offer a major lifeline. Going back to the Save Rural Hospitals Act in 2017, the bill died. For a bill to pass, it has to be approved by both the House and the Senate before it is approved by the President. If all of this is successful, then the bill becomes a law. H.R. 2957 was not enacted in the time frame allotted, so it was cleared (H.R. 2957, 2019).

Rural Emergency Acute Care Hospital Act

In 2017, yet another bill was introduced into congress by state representative, Charles Grassley (Republican) of Iowa. The introduction of S. 1130 on May 16, 2017 had an identical ending to the H.R. 2957 act. Although it did not come to fruition, its intentions were presented with hopes of providing some relief to the rural hospital crisis. REACH, also known as the Rural Emergency Acute Care Hospital Act, attempted to make changes to title XVIII of the Social Security Act as well (S. 1130, 2019). Senator Grassley stated, “When a rural hospital closes, its emergency room closes with it. This proposal will fill a pressing need, help keep hospital doors open, and offer hospital services where and when people need them most” (Rural Emergency Acute Care Hospital, 2017). REACH was created primarily to support free-standing emergency departments in communities in need. Those eligible facilities would be the ones who had already folded within the last five years and those with less than 50 hospital beds. The standards for

operation would require 24 hours a day, every day of the week center for emergency care that is fully staffed. These emergency centers would not provide inpatient care and would not house any patient long-term. Any patient requiring treatment for long-term stays would have to be transported to another facility.

A large part attributing to the success of a stand-alone emergency facility would be the high rate of reimbursement. The rate would need to be set so that it is high enough to support the facility in its operating costs, but not so high that it would compete with other medical facilities in the area. The suggested increase would be raised by 9 percent, placing the rate at 110 percent. The act also includes provisions that co-payments are not any higher than they would be at a critical access hospital. Currently, co-payments are much higher at a critical access hospital than they are at urban facilities. The REACH act made attempts for emergency care in rural areas to be reasonable, reliable, and long-lasting. Although it would not have saved every vulnerable community in America, it at least made an attempt with its proposal to change the future of access to care for those who need it (Rural Emergency Acute Care Hospital, 2017).

Recommendations and strategies

There are countless recommendations and strategies that have been suggested in years past to aid in access to care and hospital decline. One of the most logical was introduced by the AHA. In 2015, the American Hospital Association created a report with a complete guideline of suggestions that provide several ideas on how to improve access to care for those in areas of need. The board of trustees created the team to address concerns that help is not only needed in rural areas. These guidelines were set by a 29-member special task force team for all communities that are most vulnerable for access to care. Once the team began to make recommendations for

strategy, they realized that there was no exact formula that would provide an answer for all communities and that potential barriers would need to be identified. Also, they realized that although rural and urban communities had great variances in health care access, there were also many that were identical. For this reason, they created a standard set of characteristics that identified a community, whether rural or urban, as vulnerable. The group's goal was to help identify vital health care services for communities and provide insight on how to protect and preserve those services. The first order of business was to characterize the vulnerability in areas of need. Previously, we have already identified several of the same characteristics. The report identifies qualification for vulnerability as lack of primary care access, poor economy, limited income, high unemployment rates, large groups of uninsured and underinsured patients, lower levels of health care comprehension, differences in culture, environmental challenges, and declining and aging populations. Also identified were areas of health care most needed for these areas that include primary care access, emergency care access, mental health treatment, substance abuse treatment, prenatal care, dentistry, home health care, diagnostic testing, transportation for access to care, and a sound-medical care referral system. Once the characteristics of at-risk communities and their primary health care needs were identified, the strategies were created for the report. Table 3 demonstrates how the health care services most needed could be improved with the suggested strategies.

		Essential health care service								
		Primary care	Substance abuse & mental health	Emergency department	Prenatal care	Transportation	Diagnostics	Home health	Dentistry	Referrals
Strategy	Social determinant of health					x				x
	Global budget payments	x	x	x	x	x	x	x		x
	Inpatient/ outpatient transformation	x	x	x	x		x			x
	Emergency medical center	x		x		x	x			x
	Urgent care center	x					x			x
	Virtual care	x	x	x						x
	Frontier health system	x	x	x	x	x	x	x		x
	Rural hospital health clinic	x	x	x	x		x		x	x
	Indian health services	x	x	x	x	x	x	x		x
	Retrieved from www.aha.org/ensuringaccess									

The first strategy addressed is the social determinants of health. This strategy focuses on barriers patients endure when accessing care. As defined by the World Health Organization, these include specific circumstances that define daily lifestyles as well as those in which people are born into, work in, live in, and age in. For those areas in need, the task force identifies these circumstances as lower incomes and lack of employment, poorer education levels, unstable living conditions, food and utility needs, interpersonal violence, no transportation, risky health behavior, and poor support from family or the community. The approach to this barrier was to intertwine the potential support from the community socially with clinical services. The Center for Medicare and Medicaid Services currently has a similar program. Three paths to link clinical care to the community social services as defined by the task force. The first path involves screening and information. The second involves navigation and the third involves alignment. The screening

and information portion allow patients to be screened can identify health related social needs. Once specific needs are identified, the screener can determine what areas in the community could potentially be of service to them. A complete list of available options would need to be compiled to provide information for access, time, date, location, etc. The navigation option is simply identified by its definition. This source provides assists to patients in navigation to certain services once they have been screened and pertinent information has been gathered regarding their health. Patients may need help with preparing paperwork, contacting a facility, or assistance with any questions about the next steps to be taken for care for both the patient and the clinician. The clinicians are responsible logging their success with navigation efforts. This log would also detail if the patient was successful in obtaining care, what care was received, and if the patient was pleased with the outcome. Keeping track of the success or unsuccess would allow for modification of the program in the future if necessary. Lastly, the alignment phase is the final stepping-stone of the trio in the sequence to accessing care. The goal of this phase is to involve community stakeholders to coordinate health options with direct needs of those in the community. Since there are strategies in place, there are also probable barriers to the strategies. In the social determinants of health strategy, hurdles include limited federal funding and the Civil Monetary Penalty law. Grant funding is limited and difficult to locate if it is available. Besides, vulnerable areas may not have a local grant writer. The Civil Monetary Penalty law attaches large fines if mistakes are made. These mistakes could then end or exclude the program.

The second strategy is global budget payments. The goal of global budget payments is to provide vulnerable areas with financial security. With global budget payments, the focus is shifted from volume-based payments. This allows single payments to cover fees connected to patient care. An incentive to control growing health costs in the area would be achieved if

clinicians are able to provide care to keep the community healthy and lower the number of visits to the hospital. There are specifications that allow for global payment. The details are simple in that payments give an allotted sum for a specific time for certain groups versus a fixed rate for individual care. For example, if the clinician can provide care below the budget then the difference is kept, and the opposite if the clinician exceeds the budget. Because each community has different needs, customized budgets could be created with a certain community in mind to devise a plan that is most beneficial financially for them. It is important when building program budgeting that clinicians start low and slow to allow it to flourish. It is also suggested that a wide variety, if available, of physicians participate to accurately synchronize providers with the care needed in the community. Other factors that would need to be considered are services offered or not eligible for payment and time and configuration of payments. Hurdles for global budget payments could be fraud and abuse laws, waivers of current Medicare payment rules, and access to timely data.

Inpatient and outpatient transformation is the third strategy suggested by the AHA. As mentioned previously, there has been a decline in the number of patients being admitted to the hospital for stays as outpatient procedures have increased dramatically. This strategy would shift the focus to outpatient treatment while benefitting instead of hindering the community facility. Requirements for this strategy are lowering inpatient bed capacity based on specific needs of the community, revitalizing the outpatient care service options while emphasizing prevention and wellness, and continuation of the local emergency department that provides care 24 hours a day, each day of the week. Obstacles facing inpatient and outpatient transformation could be the existing federal statutory and regulatory provisions directly correlated to the type of inpatient services offered, quality of service, and number of services.

The fourth strategy proposed is the emergency medical center. The design of the emergency medical center is not like the typical emergency department. The emergency medical center does not require inpatient care, mainly inpatient beds. The center would provide emergency care services along with outpatient care services. Federal and state requirements must be met for this facility to exist. Standards of care for the emergency medical center would include emergency services 24 hours a day, each day of the week and services for transporting patients. The emergency medical center would offer a variety of options for outpatients that may include access to home health services and access to hospice care. The community would need to be given precise, detailed information on what services were and were not offered. The success with the emergency medical center may stem from its origin from a hospital conversion. It could stand alone and not be associated with a system. Again, barriers are present for EMCs as well. Currently, there are no existing designations for them regarding licensure and certification, current reimbursement may not support the facility long-term, and hiring staff to meet regulations while also bearing in mind cost containment could be challenging.

Previously, we discussed urgent care centers in depth and the specifics attributed to their growth in the United States. The AHA lists them also as their fifth strategy for vulnerable communities. Looking back at the AHA's strategies, it was mentioned that each community is different, and ideas need to be customized for each area based on need. For some vulnerable areas, it may only be an urgent care center needed that would addresses their concerns. Provisions for an urgent care facility are patients receiving care as a walk-in, facilities are open later in the day and on weekends, radiographic services are available, and minor sutures and cast placement services are available. The urgent care facility model is based on patient care that does not present a life and death situation but does necessitate attention within 24 hours. When

tailoring the urgent care centers to the communities, the options are endless. Common medical treatment for them are sprains, lacerations, back pain, diagnostic services, flu, dehydration, accidents, and fractures. For the communities with tiny populations, urgent care centers have the potential to serve as the medical hub for all as they handle chronic conditions, swing beds, and observation. If their realm of care is presented to the community in detail, the potential for success is great. Hurdles for urgent care centers are current reimbursements, which are common for many of the suggested strategies. Reimbursement from the federal government may not be enough to stabilize the facility since it would not have a high patient volume. Due to predicted low patient volumes, alternative means for financing would need to be presented in order for the urgent care center to remain successful.

Virtual care corresponds with our prior section about telemedicine. The AHA gives hope for vulnerable communities that have difficulty with recruitment and retention of clinicians. Virtual care allows patient to immediately connect with a physician, most often 24 hours a day. This would provide much relief as often the physicians contacted are specialists or those that are not near to the community. The high-tech features allow care from the comfort of the patient's home as a means of convenience. The primary benefit of virtual care is cost, more so less cost for care. There are many uses for virtual care that include, but are not limited to, observation for intensive care patients, patient consultations, prescription assistance, and post-operative visits. The methods for this type of communication involves live patient to physician interaction via a secured high-definition audio visual system. As technology emerges, the delivery of virtual care will emerge also with the possibility of patients having access to care through a tablet or smart phone. Reimbursements for virtual care today will vary by payer. To increase the payments, a system would need to be created to expand policies to offset costs as this concept grows.

Medicare does provide some assistance, depending where the patient lives. For example, Medicare may only provide reimbursement for eligible facilities located in areas designated as a physician shortage area, virtual care may not be covered if the patient is not seen at a site approved by specific laws, services cannot be provided by another other than a Medicare-eligible provider, and only a very small amount of services are reimbursed by Medicare. To reiterate potential barriers, current reimbursement and coverage is problematic. Providers have the capacity to lose on their investment in virtual care if reimbursement is not adequate. This could be harmful for those areas that could benefit the most from virtual care. Again, expansion of payment for this type of care and broader access to this type of care are going to be the factors to ensure long-term success. Privacy and security laws pose a threat to virtual care. Large amounts of patient health information are stored electronically which may concern patients. There is always the possibility of the system being infiltrated by hackers. HIPPA and HITECH provide patient protection, but clinicians will need to know the requirements to further protect patients as their records are given additional exposure. Finally, fraud and abuse laws present physicians with more liability.

A geographical strategy other than rural or urban, exists with the frontier health system. This system addresses the geographic isolation of frontier communities. When you add treacherous mountain ranges and large bodies of water to the equation, the access to adequate health care is compromised. Severe weather such as whiteout snowstorms, floods, and terrible road conditions also worsen access to care. These areas have very low populations which equal low patient volumes. There is not strong payment reimbursement in these areas. The ACA suggests the frontier health system be created to accommodate a variety of frontier communities, not just those with low patient volume or those that have extreme distances between available

physicians. This system builds a local integrated system that uses providers to give primary care, emergency care, inpatient care, extended care, visiting nurse care, and preventative care access. Once more, reimbursement is the top barrier for the frontier health service. This is problematic because providers are reimbursed differently. For example, a traveling nurse may be compensated based on fee-for-service while inpatient services compensation may be based on cost. As with other barriers, a new payment model would need to be created to unify reimbursement for providers. Waivers of current Medicare payment rules hinder implementation of the frontier health service. Waivers would need to exist that would only coordinate with services provided by frontier health systems. Examples for such waivers are elimination of the 35-mile ambulance rule and elimination of telehealth restrictions. Fraud and abuse laws present themselves here as well subjecting physicians to additional liability.

The rural hospital-health clinic integration is the eighth strategy suggested by the American Hospital Association. This model suggests that rural hospitals extend and build partnerships with all medical care facilities in the community. The goal of this initiative is to eliminate competition via integration to provide the best health care options in the area for all patients in need. Integration for all facilities would involve contracts or agreements for referral or purchase of services, creating a network for all facility's administrative purposes, and corporate integration. Each facility would still operate as before, but the elimination of duplicate services would allow limited resources to be distributed efficiently. Regulatory and reimbursement differences present themselves as the first barrier for integration. Combining would require changes to the current specific regulatory requirements that must be met. The merger would need to be marketed so that regulators have a clear understanding of the intent.

Finally, the last strategy introduced is the Indian health service strategy. While the frontier health system focused on geography, this strategy is focused on ethnicity. American Indians and Alaskan Native Tribes would get an upgrade in care through the Indian Health Service. Suggestions for enhancement are partnering with non-IHS providers by assessing the current services provided. With feedback from the assessments, care options would be expanded through non-IHS providers and given in areas that may have been lacking previously. For example, medical specialists and specialty equipment available for non-IHS providers would now be accessible to Indian health service providers. An additional assessment would be needed to determine specifics concerning finances and how to potentially establish a foundation to broaden their ability to receive services needed. IHS could use the other strategies listed previously to build and improve their access to care. Lastly, funding is mentioned as the primary obstacle facing the Indian health service. This is very similar to any strategies that have been mentioned in this paper. Funding for this program through the federal government is appropriated. It is determined and set aside early on just as it is for similar programs in other geographic areas. Although funding may be pre-allocated, it has been insufficient in supporting the areas in need resulting in the service depleting all the funding before year's end. Depleting funds spirals into many problems that negatively affect reimbursement for providers (Task force, 2016).

Lessons learned

Many topics have been discussed in this paper about the large amount of problems rural hospitals are presented. We have established that problems facing rural areas correspond to problems in any vulnerable area, despite its location. Referencing this paper, rural, more vulnerable communities, are smaller and poorer and their patients are sicker and older in comparison to larger metropolitan areas in the United States. The problem for access to care was

identified year ago. If access to care posed a threat years ago, then the declination of hospitals in rural areas simply adds to the threat. Together the two have the ability to potentially ruin a small community.

Patients in desperate need of health care are not receiving it and that alone is decreasing their quality of life. Communities are suffering from a health care standpoint. Because hospitals are on the decline and are closing, communities are suffering from an economic standpoint. The facts cannot be overlooked. These vulnerable areas need some options for care and also some options for saving their health care facilities. A lot strategies for improvement have been introduced, but many of them have been introduced and not enacted, or introduced and failed. It is clear that financing holds to the key to success with any of the strategies recommended. There are many difficulties associated with reimbursement and reimbursement cuts. Insurance, underinsurance, and lack of insurance are a large portion of reimbursement woes. Although financing is clearly the solution, creating the perfect plan to gain financing is the giant hurdle.

The important factor to remember is that Americans must continue to put forth tireless efforts before any real change can be made. We must focus on specifics of each vulnerable community and customize plans for improvement. The inequalities in health care across America need to be addressed beginning from the community level. We must partner with our community leaders and ensure our state and national representatives are doing all things necessary to find resolutions. In closing, implementing ways to reduce factors that pose risks to our rural health care access and their facilities is the area of concern that needs the most attention.

References

5 ways telemedicine is helping rural hospitals & their communities. (2019, August 28). Retrieved from https://relymd.com/blog-5-ways-telemedicine-is-helping-rural-hospitals.

Affordable care act. (n.d.). Retrieved from https://www.dictionary.com/browse/affordable-care

Agrawal, S., & Slabach, B. (2018, October 17). Retrieved from https://www.healthaffairs.org/do/10.1377/hblog20181012.255573/full/.

Altus, A. (2018). Rural hospital closures increased dramatically in the past 5 years. Retrieved from https://thedo.osteopathic.org/2018/10

Amadeo, K. (2019, April 16). 10 pros and cons of Obamacare. Retrieved from https://www.thebalance.com/obamacare-pros-and-cons-3306059.

Barry-Jester, A. (2017, June 28). The health care system is leaving the southern black belt behind. Retrieved from https://fivethirtyeight.com/features/the-health-care-system-is leaving-the-southern-black-belt-behind/

Blankenau, J., Bailey, J.M., & Hudson, J. (2009). The causes and consequences of the rural uninsured and underinsured. Center for Rural Affairs, 3.

Bolin, J., Watzak, B., & Dickey, N. (2019, September 30). Rural hospital closings reach crisis stage, leaving millions without nearby health care. Retrieved from https://today.tamu.edu/2019/09/30/rural-hospital-closings/.

Burkey, M.L., Bhadury, J., Eiselt, H. A, & Toyoglu, H. (2017). The impact of hospital closures on geographical access: Evidence from four southeastern states of the United States. *Operations Research Perspectives*, *4*, 56-66

Chan, L., Hart, L. G., & Goodman, D. C. (2007, August 13). Geographic access to health care for rural Medicare beneficiaries. Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1748-0361.2006.00022.x.

Conte, C. (2018, September 14). Consequences 'Deadly,' As More Hospitals Close. Retrieved from https://www.newschannel5.com/news/consequences-deadly-as-more-tn-hospitals-close.

Conte, C. (2019, August 27). America's rural hospitals are in crisis and it's devastating Middle Tennessee. Retrieved from https://www.newschannel5.com/news/americas-rural-hosptials-are-in-crisis.

Corporate Compliance. (2019, November 14). Retrieved from https://www.encyclopedia.com/science/encyclopedias-almanacs-transcripts-and-maps/corporate-compliance.

Dickman, S. L., & Himmelstein, D. U. (n.d.). Inequality and the health-care system in the USA. *The Lancet*, *389*(10077), 1431–1441.

Dillahunt, T. R., & Veinot, T. C. (2018, October). Getting there: Barriers and facilitators to transportation access in underserved communities. Retrieved from https://doi.org/10.1145/3233985.

Dolan, S. (2019, March 18). The urgent care industry trends looking to fulfill the demand of a growing segment in the healthcare market. Retrieved from https://www.businessinsider.com/urgent-care-industry-trends.

Dorn, S., McGrath, M., & Holahan, J. (2014, August). What is the result of states not expanding Medicaid. Retrieved from

https://www.urban.org/sites/default/files/publication/22816/413192-What-is-the-Result-of-States-Not-Expanding-Medicaid.

Douthit, N., Kiv, S., Dwolatzky, T., & Biswas, S. (2015). Exposing some important barriers to health care access in the rural USA. *Public Health*, *129*(6), 611–620. doi: 10.1016/j.puhe.2015.04.001

Edmiston, K. D. (2019, July 16). Rural hospital closures and growth in employment and wages. Retrieved from https://www.kansascityfed.org/en/publications/research/eb/articles/2019/rural-hospital-closures-growth-employment-wages.

eHealth Insurance. (2018, February 28). How does Obamacare work: Obamacare explained. Retrieved from https://www.ehealthinsurance.com/resources/affordable-care-act/understanding-obamacare.

Eilrich, F. C., Doeksen, G. A., & St. Clair, C. F. (2015, July). The economic impact of recent hospital closures on rural communities. Retrieved from ruralhealthworks.org.

Ellison, A. (n.d.). State-by-state breakdown of 83 rural hospital closures. Retrieved from https://www.beckershospitalreview.com/finance/state-by-state-breakdown-of-83-rural-hospital-closures.html.

Elrod, J.K., & Fortenberry, J.L. (2017). The hub-and-spoke organization design revisited: A lifeline for rural hospitals. *BMC Health Services Research, 17*(795).

Fox Group. (2019, September 30). Outsourcing corporate compliance in rural hospitals. Retrieved from https://www.foxgrp.com/hipaa-compliance/outsourcing-corporate-compliance-in-rural-hospitals/.

Friedberg, M. W., & Landon, B. (2018). Measuring quality in hospitals in the United States. Retrieved from https://www.uptodate.com/contents/measuring-quality-in-hospitals-in-the-united-states.

Glied, S. (n.d.). Healthcare Crisis: Who's at risk? Retrieved from http://www.pbs.org/healthcarecrisis/.

Greiwe, M. (2018, December 18). Can telemedicine help declining rural healthcare? Retrieved from https://www.ortholive.com/blog/can-telemedicine-can-help-declining-rural-healthcare.

Han, X., Thiede-Call, K., Kemmick-Pintor, J., Alarcon-Espinoza, G., & Baines-Simon, A. (2015). Reports of insurance-based discrimination in health care and its association with access to care. *The American Journal of Public Health,105*

Harrington, R. (2014, May 18). Medical school bottleneck worries analysts, who foresee shortage of doctors. Retrieved from http://www.startribune.com/med-school-numbers-foretell-a-doctor-shortage/259674871/.

Heggem, C., & Capalbo, S. (1999). Innovations in the delivery of health care services to rural communities. *Rural Development Perspectives*, 8–13.

Hicks, L., Boles, K., Hudson, S., Madsen, R., King, B., Tracy, J., … Webb, W. (2001). Using telemedicine to avoid transfer of rural emergency department patients. *The Journal of Rural Health*, *17*(3), 220–228.

Hill-Burton Act. (n.d.). Retrieved from https://medical-dictionary.thefreedictionary.com/Hill-Burton Act.

Holmes, M. (2015). Financially fragile rural hospitals: Mergers and closures. *North Carolina Medical Journal, 76*(1), 37-40.

Holmes, G. H., Kaufman, B. G., Perry, J. R., Pink, G. H., Randolph, R. K., Thomas, S. R., & Thompson, K. W. (2016). The rising rate of rural hospital closures. *The Journal of Rural Health, 32*, 35-43.

How telemedicine can help reduce rural hospital closures and provide easier access to care. (2017). Retrieved from https://www.healthitoutcomes.com/doc/how-telemedicine-can-reduce-rural-hospital-closures-provide-easier-access-care-0001.

H.R. 2957 (2019). 115th Congress: Save Rural Hospitals Act. Retrieved from: https://www.govtrack.us/congress/bills/115/hr2957

Iglehart, J. K. (2018). The challenging quest to improve rural health care. *New England Journal of Medicine*, *378*(5). doi: 10.1056/NEJMhpr1707176

Institute of Medicine. (2009). *America's uninsured crisis: Consequences for health and health care*. *America's uninsured crisis: Consequences for health and health care*. Washington, DC: The National Academies Press.

Isaacs, B. (2019). Save rural health care: Time for a significant paradigm shift. *The Journal of the American Osteopathic Association, 119*, 551-555.

Jaffe, S. (2015, January). Aging in rural America | Health Affairs. Retrieved from https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2014.1372.

Janney, C. (2014, January 24). Small rural hospitals face big changes under the Affordable Care Act. Retrieved from https://www.pjstar.com/article/20140125/News/140129435

Kaufman, B. G., Reiter, K. L., Pink, G. H., & Holmes, G. M. (2016). Medicaid expansion affects rural and urban hospitals differently. *Health Affairs*, *35*(9), 1665–1672. Retrieved from https://www.healthaffairs.org › doi › hlthaff.2016.0357

Kent, A., & Walton, A. (2019, October 21). Advocates for families in Tennessee. Retrieved from https://www.tnjustice.org/mckenzie-regional-hospital-closure-rural-tnnessee/.

Khazan, O. (2014, August 28). Why are there so fewer doctors in rural America. Retrieved from https://www.theatlantic.com/health/archive/2014/08/why-wont-doctors-move-to-rural-america/379291/.

Kruse, S., Karem, P., Shifflett, K., Vegi, L., Ravi, K., & Brooks, M. (2018). Evaluating barriers to adopting telemedicine worldwide: A systematic review. *Journal of Telemedicine and Telecare*, *24*(1), 4–12.

Leighton, C., Hart, L. G., & Goodman, D. C. (2007). Geographic access to health care for rural Medicare beneficiaries. *The Journal of Rural Health*, *22*(2), 140–146. doi: https://doi.org/10.1111/j.1748-0361.2006.00022.x

Makowska, M. (2018). Uninsured America: Problem of lack of health insurance in the US. *Journal of Public Health, 2*, 33-39

Maximizing Efficiency and Improving Access to Providers at the Department of Veterans Affairs Act (2017 - S. 113). (2019). Retrieved from https://www.govtrack.us/congress/bills/115/s113.

McCormick, M., Cook, A., Hansen, K., & Locke, T. (2019, March 4). Telemedicine in rural areas. how it's saving hospitals: Eagle. Retrieved from https://www.eagletelemedicine.com/telemedicine-saving-rural-hospitals/.

Medicaid Expansion: NH Issues. (2019, November 7). Retrieved from https://www.citizenscount.org/issues/medicaid-expansion.

Merritt Hawkins. (2018). Convenient care: Growth and staffing trends in urgent care, retail medicine, and free-standing emergency centers. Retrieved from https://www.staffcare.com/uploadedFiles/convenient-care-growth-staffing-trends-urgent-care-retail-medicine.pdf.

Morrissey, S. P., & Johnson, J. E. (2017, August 15). The shifting landscape: How technology and regulations have changed physician practice and retirement readiness. Retrieved from https://journals.ke-i.org/index.php/mra/article/view/1482.

Mullner, R. M., Rydman, R. J., Whiteis, D. G., Rich, R. F. (1989). Rural community hospitals and factors correlated with their risk of closing. *Public Health Reports*, *104*(4) 315-325

Noles, M., Reiter, K., Pink, G. H., & Holmes, M. (n.d.). Findings brief.

Noles, M. H., Reiter, K. H., Pink, G. H., & Holmes, M. H. (2014, August). Rural hospitals and mergers and acquisitions: Who is being acquired and what happens afterward. Retrieved

from https://www.shepscenter.unc.edu/wp-content/uploads/2014/08/MergersAcquisitionsAugust2014.pdf.

Osborn, R., Squires, D., Doty, M. M., Sarnak, D. O., & Schneider, E. C. (2016). In new survey of eleven countries, US adults still struggle with access to and affordability of health care. *Health Affairs, 35*(12). Doi.org/10.1377/hlthaff.2016.1088

Physician job search: Tips and advice. (n.d.) Retrieved from www.practicematch.com

Rabinowitz, H. K., & Paynter, N.P. (2002). The rural vs urban practice decision. *The Journal of the American Medical Association, 287*(1), 113. doi:10.1001/jama.287.1.113-JMS0102-7-1

Rechtoris, M. (2016, March 9). 7 statistics on urgent care centers, EDs & retail clinics. Retrieved from https://www.beckersasc.com/asc-quality-infection-control/5-statistics-on-urgent-care-centers-emergency-departments.html.

Reiter, K., Noles, M., & Pink, G. (2015). Uncompensated care burden may mean financial vulnerability for rural hospitals in states that did not expand Medicaid. (2015). *Health Affairs, 34*(10). doi:10.1377/hlthaff.2014.1340

Ricketts, T. (2000). *The changing nature of rural health care*. *The changing nature of rural health care*. Annual Review Public Health.

Rural emergency acute care hospital. (2017, May 16). Retrieved from https://www.grassley.senate.gov/news/news-releases.

Rural Health Information Hub. (n.d.). Retrieved from https://www.ruralhealthinfo.org/topics/health-care-quality.

Rural Health Information Hub. (2019, August 20). Retrieved from https://www.ruralhealthinfo.org/topics/critical-access-hospitals#swing-bed.

Rural Practice, Keeping Physicians In (Position Paper). (2015, February 26). Retrieved from https://www.aafp.org/about/policies/all/rural-practice-paper.html.

S. 1130. (2019) 115th Congress. Rural Emergency Acute Care Hospital Act. Retrieved from https://www.govtrack.us/congress/bills/115/s1130

Saini, V. (2018). What's driving America's rural doctor shortage. Retrieved from https://lowninstitute.org

Searing, A. (2018). More rural hospitals closing in states refusing Medicaid coverage expansion. Retrieved from https://ccf.georgetown.edu

Shanafelt, T. D., & Noseworthy, J. H. (2017). Executive leadership and physician well-being. *Mayo Clinic Proceedings*, *92*(1), 129–146. doi: 10.1016/j.mayocp.2016.10.004

Shaw, F. E., Asomugha, C. N., Conway, P. H., & Rein, A. S. (2014). The Patient Protection and Affordable Care Act: opportunities for prevention and public health. *The Lancet*, *384*(9937), 75–82. doi: 10.1016/s0140-6736(14)60259-2

Siegler, K. (n.d.). NRHA. Retrieved from https://www.ruralhealthweb.org/about-nrha/about-rural-health-care.

Siegler, K. (2019, May 21). The struggle to hire and keep doctors in rural areas means patients go without care. Retrieved from https://www.npr.org/sections/health-shots/2019/05/21/725118232/the-struggle-to-hire-and-keep-doctors-in-rural-areas-means-patients-go-without-care.

Sievert, M. (2016, June 13). How physicians Feel about the Affordable Care Act. Retrieved from https://healthecareers.com/article/healthcare-news/physicians-and-the-affordable-care-act.

Slabach, B., & National Rural Health Association. (2018). Fixing the medical staff shortage problem in rural areas: Physicians are disappearing from the map of rural America. Retrieved from https://www.beckershospitalreview.com/population-health/fixing-the-medical-staff-shortage-problem-in-rural-areas.html.

Smith, J., Egan, A., & Appelt, D. (2019). The barriers that deter the geriatric population from receiving healthcare. Retrieved from https://digitalcommons.pcom.edu/.

Sofer, D. (2019). The number of uninsured Americans is on the rise again. *American Journal of Nursing, 119*(4), 15.

Task Force on Ensuring Access in Vulnerable Communities Report: AHA. (2016, November 28). Retrieved from https://www.aha.org/guidesreports/2016-11-28-task-force-ensuring-access-vulnerable-communities-report.

The Henry J Kaiser Foundation. (2018, December 7). Key facts about the uninsured population. Retrieved from http://files.kff.org/attachment/fact-sheet-key-facts-about-the-uninsured-population.

The Rural Emergency Acute Care Hospital (REACH) Act: A ... (2015, June 23). Retrieved from https://www.grassley.senate.gov/sites/default/files/news/upload/White Paper on REACH Act_FINAL2.pdf.

Tran, C. (2018). For rural Americans, healthcare and hospitals can be far away. Retrieved from https://www.citylab.com

Trifilio, S. (n.d.). The true cost of healthcare regulatory compliance: HealthcareSource. Retrieved from http://education.healthcaresource.com/healthcare-regulatory-compliance-cost/.

Valadka, A. B. (2019, June 11). There is a severe physician shortage and it will only worsen. Retrieved from https://thehill.com/opinion/healthcare/447923-there-is-a-severe-physician-shortage-and-it-will-only-worsen.

Waldron, T. (2019, July 24). Retrieved from https://blog.definitivehc.com › factors-lead-to-physician-shortage

Weinick, R., Burns, R. M., & Mehrotra. A. (2010). Many emergency department visits could be managed at urgent care centers and retail clinics. *Journal of Health Affairs, 29*(9). doi:10.1377/hlthaff.2009.0748

Weinstein, R. S., Lopez, A. M. Joseph, B. A., Erps, K. A., Holcomb, M., Barker, G. P., & Krupinskini, E. A. (2014). Telemedicine, telehealth, and mobile health applications that work: Opportunities and barriers. *The American Journal of Medicine, 127*(3), 183-187.

West, C. P., Dyrbye, L. N., & Shanafelt, T. D. (2018). Physician burnout: Contributors, consequences and solutions. *Journal of Internal Medicine*. doi: https://doi.org/10.1111/joim.12752

Whitaker, R. G., Holmes, G. M., & Pink, G. H. (2017). How would rural hospitals be affected by loss of the Affordable Care Act's Medicare low-volume hospital adjustment. *The Journal of Rural Health*, *33*, 227–233. Retrieved from https:doi.org/10.1111/jrh/12225

Wicklund, E. (2019, February 6). AHA says telehealth expansion can help struggling rural hospitals. Retrieved from https://mhealthintelligence.com/news/aha-says-telehealth-expansion-can-help-struggling-rural-hospitals.

Williams, J. P. (2018, August 22). Solutions story tracker®. Retrieved from https://storytracker.solutionsjournalism.org/stories/wanted-rural-doctor.

Wishner, J. B., & Burton, R. A. (2017, November). How have providers responded to the increased demand for health care under the Affordable Care Act. Retrieved from https://www.urban.org/sites/default/files/publication/94396/2001576-how-have-providers-responded-to-the-increased-demand-for-health-care-under-the-affordble-care-act_0.pdf.

Wishner, J., Solleveld, P., Rudowitz, R., Paradise, J., & Antonisse, L. (2018, April 19). A look at rural hospital closures and implications for access to care: Three case studies - Issue Brief. Retrieved from https://www.kff.org/report-section/a-look-at-rural-hospital-closures-and-implications-for-access-to-care-three-case-studies-issue-brief/.

Yee, T., Lechner, A. E., & Boukus, E. R. (2013, July). The surge in urgent care centers: emergency department ... Retrieved from https://www.researchgate.net/publication/257202014_The_surge_in_urgent_care_centers_emergency_department_alternative_or_costly_convenience.

Zaldivar, R. A. (2018, October 15). Here's what happens when states don't expand Medicaid. Retrieved from https://patch.com/us/white-house/heres-what-happens-when-states-dont-expand-medicaid.

Ziller, E., Coburn, A., & Youseflan, A. E. (2006). Out-of-pocket spending and the rural underinsured. *Health Affairs (25)*: 1688-1689

Ziller, E., & Coburn, A. (2019). Health equity challenges in rural America. *Human Rights Magazine*. Retrieved from https://americanbar.org/groups/crsj/publications/human_rights_magazine_home/

Zumbrun, E. (n.d.). Blogger. Retrieved from http://connect.nrharural.org/blogs/dan-altenbernd/2017/03/23/whyhealthcaremarketingcannolongerbeevil.

Zumbrun, E. (2017, June 20). NHRA endorses reintroduction of Save Rural Hospitals Act to new congress. Retrieved from http://connect.nrharural.org/blogs/erin-mahn/2017/06/20/nrha-endorses-reintroduction-of-save-rural-hospitals-act-to-new-congress.