MURRAY STATE UNIVERSITY

Contemporary Rural Social Work Journal

Volume 9 | Number 1 Article 6

7-9-2017

Don’t Get the Epizootus! Challenges and Promises of Modern Rural Health Care

Michael Daley
Texas A&M University - Central Texas

Don't Get the Epizootus! Challenges and Promises of Modern Rural Health Care

Michael Daley
Texas A&M University – Central Texas

Abstract. Rural communities face a crisis in terms of access, funding for health care, and the overall health needs of these communities. There are also shortages of health care professionals in rural areas. As national priorities shift away from health care to border security, small towns may be hard pressed to meet their residents' health care needs. Professional advocacy for rural people to address these issues is recommended.

Keywords. rural health care, rural social work

This manuscript is based on a keynote speech given at the 41st Annual National Institute for Social Work and Human Services in Rural Areas in El Paso, TX on July 6, 2016.

I want to extend my thanks to the sponsors at the College of Health Sciences and the Department of Social Work at the University of Texas at El Paso for inviting me to give these opening remarks at the 41st Annual National Institute for Social Work and Human Services. This is a distinct honor because this is a conference with which I have had an ongoing association for over thirty years and we are meeting in my home state of Texas. I continue to extoll the value of this conference to my colleagues because of the quality of the content that is presented annually and the informality of the interactions between the participants that permits an open exchange of ideas. I always come back from this conference with valuable concepts that inform my work and a sense of renewal to pursue my work with rural services. While at the conference I am able to engage with a group of professionals who embody the spirit of a small community, have the ethos of family and a small community that welcomes both veteran attendees and newcomers warmly.

El Paso is also a place that has some meaning to me in terms of my roots. Those of you who know something about rural people know that connections with place and family are very important. If you've driven in Texas you probably know how great the distances can be between destinations, and frankly though I have lived most of my life in the state I have rarely been to El Paso. It was always one of those places I was driving towards but never got to. Even now I live over six hundred miles away. Yet over one hundred-ten years ago my grandparents came through El Paso on their way west to build their future in the Arizona Territory where my grandfather had taken a job with the El Paso and Southwest Railroad. I am sure they came through here many times and saw what remained of the old West, and some of these stories of this place and events of that era, as recounted by my father, became a part of my childhood.

When I began thinking about what I would say today I noted that there was a strong link between rural social welfare and health care evident in the conference theme. So something related to rural health care seemed appropriate to address this morning. Frankly, my background is more in the area of rural social work than in health care, but one can't spend much time looking at rural social work without knowing something about health care in smaller communities, and some of the challenges that rural people face with our current system.

With that introduction it is time to get the title of my address for today. Some of you are probably wondering what is up with this odd title and what in the heck epizootus means. If I don't get to that pretty soon you may begin to think I am "one brick short of a load" from standing in this hot Texas sun too long. Epizootus (Bowman, 1995) is a colloquial word that has been used by rural people, especially in the South to refer to a generalized illness that seemed to defy any simple classification. Often it was employed by people like my father to describe some "bug" that was going around but had more ramifications than a low level illness commonly called the "crud". Now epizootus was a bit of a made up term, but is actually based on the word epizootic which denotes a widespread but temporary illness affecting livestock. In other words, the epizootus is a sort of a bovine pandemic. In the general context of life, it is common for rural people to use animal based colloquialisms to describe something that is going on in their lives (Daley, 2015).

So when I thought about what I could say to capture the current state of rural health and health care in a brief title, the old term "epizootis" seemed appropriate to depict a host of rural ailments. Hence the title of this address, "Don't get the Epizootus", essentially means *don't get sick*! I say this because in many ways, although rural health care is probably better than it has been in the past, the rural system of care is not quite what is available in the more populated parts of the country. And falling ill in a smaller community may present significant difficulties in getting treatment for some types of ailments.

Today I want to speak to some of the major issues confronting rural health care in the United States and our role in strengthening that system. First, and foremost, my background is in rural social work, and although I do have a general knowledge of health care, there are probably many of you in the audience who have more specific knowledge of the rural health care system than I can provide today. But I do want to address some of the general issues that we face in rural health and health care.

When we talk about life in rural communities today it is all too common for us to focus on the problems that exist, and frequently our discussion begins with the services that smaller communities lack. This minimizes the incredible richness and strength of less populated areas and the people who are proud to call rural communities home. We should all be keenly aware that small communities do not have the same range and breadth of services available in large cities but this does not necessarily mean that rural health care is either inferior or lacking. Rather rural health care is delivered by a system that functions differently than one would see in a large city and understanding that system and the challenges it presents is important to effectively serve rural people.

So before I get into the challenges facing rural health care I would be remiss if I did not acknowledge that as a society we have made great strides in improving the access that rural people have to the health care system. Indeed innovative approaches such as the use of telemedicine, mobile clinics, and integrative programs have helped to broaden and enrich the array of physical, dental, and mental health services to many less populated areas (Rural Health Information Hub, 2016a). As a result many who live in smaller communities have better access to some diagnostic and therapeutic services than in the past. Although many rural areas still tend to be served by health care providers who provide general services and cover a broad area, we

have come a long way from the old model of the single country doctor who was the entire health care system in days of our parents and grandparents.

Challenges for Rural Health Care

Despite the improvements in services, today we still face a number of significant challenges in providing high-quality health care to rural America. I would like to focus on three of the prominent aspects of rural health care that have to be addressed in order to provide a stronger health care system for smaller communities. These challenges are:

1) Health care access - or getting the health care where it is needed;
2) Overall health of rural people - dealing with the poverty, lifestyle, and chronic illnesses that disproportionately affect country people; and
3) Funding for rural health care – to create funding sources that reflect the realities of rural health, illness, and life.

These issues have a significant effect on both need for health related services and the way in which these services are delivered for the roughly 19% of the population living in rural communities (Daley, 2015; National Rural Health Association, 2016).

Access to Health Care

Perhaps the greatest and most consistently identified issue affecting the health care of rural people is that of access to services. In other words, while smaller communities may have health related services available, these services may neither be located nearby, nor easy to use. So the real challenge of access lies in connecting rural people with the assistance they need in an effective way. The structural problem facing those who live in the rural United States is that the population is so widely dispersed over such a large area. This creates a geographic quandry of how to best locate health care near the people who need it. For example, according to the Federal Office of Rural Health Policy (2015) rural areas are defined as consisting of census tracks that consisted of at least 400 square miles and had a population density of no more than 35 people per square mile, which encompass 84% of the area of the U.S. Just by point of comparison, Los Angeles, California had a population density of 7,683 people per square mile (USA Today, 2016). Obviously health care has to be more widely dispersed in the rural setting.

Given the low population density and low concentration of rural communities it is often difficult to reach the health care services that are available. Practicality and efficiency usually dictate that rural health services be concentrated in regional centers located in the large communities in the region. Yet these health centers may well be located more than a hundred miles from the people who need to rely on them. Greater distances mean longer travel times and greater expense for rural residents. Poor roads, older vehicles, geographic barriers, and weather conditions may significantly lengthen both the travel time and expense involved in receiving those services. For example, in the Northern Plains harsh winter weather may present considerable travel and safety risks, whereas in the South crossing rivers such as the Mississippi may necessitate a longer route to reach a bridge. Mountains and large bodies of water also present significant barriers to travel. Many rural roads are narrow, winding, and may be in need

of repair in comparison to the Interstate highways, thus creating longer travel times from point to point. When these factors are coupled with the typical rural distrust of outsiders, the likelihood of rural people of making the difficult trip for medical help is less likely.

Health of Rural People

A second challenge for health care is the overall health of rural people. Poverty rates in rural communities are higher in rural areas. For example in 2015 the rural poverty rate was 16.7% versus 13% for urban areas (United States Census, 2016), and rural children are more likely to live extreme poverty (Population Reference Bureau, 2009). Rural communities also have a 65 and older population of 16.5% that is higher than the national average of 14.9% (Cornell Chronicle, 2013; United States Census, 2015). Since the elderly, children, and the poor usually need more health care, this is another potentially large group in need of health care.

Additionally a high proportion of the rural population has chronic health conditions, and consequently a greater need for health care. Rural people are more prone to have conditions such as hypertension, coronary disease, alcohol and tobacco related issues (especially among the young), and diabetes (National Rural Health Association, 2017). Many rural young are experiencing health problems from the use of smokeless tobacco (United States Food and Drug Administration, 2016). Environmental factors such as pollution from energy and mineral production, as well as agricultural waste and chemicals may produce additional health issues. The rural production of street drugs such as methamphetamines for sale may also be a factor in creating other health care issues (Daley, 2015).

Funding for Health Care

The third challenge for rural health care is the adequacy of funding for services. Rural residents are more likely to be poor, have lower incomes, and work in jobs that do not offer private health insurance (Kaiser Family Foundation, 2014; United States Department of Health & Human Services, 2013). Indeed a high proportion of rural residents fit the low to moderate income population that is targeted by the Affordable Care Act (ACA). Yet almost two thirds of the uninsured in rural communities live in states that did not implement the Medicaid expansion that came from the ACA, and, as a result, many residents in small communities have fewer options for affordable health care coverage (Kaiser Family Foundation, 2014).

What this means for rural communities is that many residents are uninsured, underinsured, or heavily dependent on public funds to support the health care that they do receive. In rural communities 16% of residents are covered by Medicaid versus 13% for urban areas (Center for Rural Affairs, 2012). Reliance on Medicare to fund health care is also high in rural America. Twenty-three percent of the Medicare beneficiaries live in rural communities, yet the rural population represents only 19.3% of the nation's population (Rural Health Information Hub, 2016b). Where rural residents have no insurance and qualify for neither Medicare nor Medicaid the burden for payment for health services often falls on the local community, and small communities may have limited resources with which to pay for medical services for their residents. What this means is that rural inhabitants tend to depend on publicly funded services

more often that in urban areas and that rural health care providers are more sensitive to changes in payment rates and practices in public health care funding than in the larger cities.

So health care access, the health of rural people, and health care funding are three prominent concerns facing the delivery of health related services in smaller communities in the United States, how does it appear that we are trying to address these issues now and for the future? As I said in introducing my title the state of rural health care is not ideal, and the future does not appear to be much brighter. To reiterate, if you live in a small community, don't get sick and it does not look promising for the future.

I have already outlined the present challenges for rural health care and I draw my outlook for the future from the recent dialogue on national priorities arising from the primary campaigns for state and national elections. During the primaries I consistently heard two topics of political dialogue for offices at the federal, state, and even local levels. The political positions were loud and clear that our priorities should be to repeal Obamacare (ACA) and build a security fence along the border with Mexico. The intent seems to be to create a strong barrier to curb immigration to the United States by undocumented workers and to eliminate what is perceived as an expensive and unwarranted intrusion by the government into private health care matters. Perhaps some of my perceptions of this political dialogue may be shaped through my residence in Texas, but these kinds of political positions do not seem confined to this region of the country.

You may ask how all of this affects rural health care. Well what this suggests is that rural health care is not high on the list of national priorities. It seems odd to me that when I drive my car I am required to have insurance, but requiring me to purchase some insurance for my health is viewed as an intrusion on personal liberty.

Beyond that is the issue of overall funding of affordable health care for everyone, which appears to be a target for cuts or elimination. The Affordable Care Act, commonly termed Obamacare, does appear to be high on the hit list because it is unpopular with many conservative politicians. But Medicaid, and to some degree Medicare, are also unpopular with these same conservative groups because they represent government involvement in the health care sector. All of these programs offer some health care coverage for individuals with limited ability to pay for services.

Eliminating the Affordable Care Act, especially the provisions that provide for reasonably priced health coverage, would have a more profound effect on rural residents because so many lack access to affordable health insurance. Even though the ACA has not been quite as beneficial in funding rural health care as it has been in larger communities, it is a valuable resource for those in small communities who otherwise could not purchase health insurance. Should a move to cut publicly sponsored health care expand to Medicaid and Medicare, the effects on health coverage and services would be even more profound than would be the case in urban communities.

The matter of building a secure fence along the border with Mexico is another priority that may have some significant effects on health care for residents in smaller communities. It seems odd that given the location of this conference in El Paso, where one can see Cuidad Juarez

from this campus, and the interdependence of communities along the border like El Paso and Juarez are so obvious that such determination to build a border fence exists. Indeed, given the back and forth flow of people who legally cross the border to work each day suggests that more security on the border may be quite disruptive to the respective economies of the U.S. and Mexico rather than a deterrent to undocumented immigrants.

In any event, building a more secure border fence could prove expensive, if not impractical in places. The fence would have to cover a long distance, and cross some remote and rugged terrain. I am no expert on how much such a fence would cost, but I know how much it costs to fence my back yard and that fence would not keep a determined person out for long. A border fence would be higher, stronger, and cover hundreds of miles, not hundreds of feet. It would also need sophisticated monitoring equipment and thousands more of security personnel in order to make it work. We are indeed talking about a lot of money to build, patrol, and maintain such a fence.

The concern for health care, especially rural health care is that such an expensive fence would need to draw its funding from somewhere. In the era of repeated calls for tax cuts, funding would likely be reallocated from programs that were cut. Slashing funding for health care, vis a vis Obamacare (ACA) seem a likely target. The problem, of course, is that the effects of such cuts will tend to fall move heavily on rural people and health care systems.

Just take the example of what happened when the Affordable Care Act was implemented. There was a corresponding expansion of Medicaid to encourage states to encourage states to establish their own health care exchanges. Many of states that declined to participate in Medicaid expansion had large rural areas. Yet states that did not participate in Medicaid expansion had a higher closure rate for rural hospitals (Callow, 2014). Even the publicly funded health care that currently exists, as well as the Affordable Care Act, is pushing health care providers to be more efficient. But rural hospitals do not have the high concentrations of patients to meet these efficiency criteria well. So that our current system of funding health care is forcing rural hospitals into closing because they cannot meet the efficiency criteria, or small town residents are unable to afford purchasing health insurance, and the rate of rural hospital closings is accelerating (Respaut, 2014).

A stark reminder of what this means may be found in the case of a 68 year old native of Linden, Texas who suffered a mild stroke. He was rushed to the local emergency room and evaluated, treated, and was able to return home. Soon afterwards he learned that he would be around longer than the hospital because the hospital on which the Northeast Texas community had relied since the 1960s would be closing because it did not have enough patients (Respaut, 2014). This scenario is all too common for rural communities and means that residents must travel even longer distances in order to get medical care. In the case of emergency services like strokes and heart attacks where time is of the essence in treatment, it means patients may have to wait longer to receive the health care they need and receive it outside of their home communities. Such additional waits could prove fatal. With decreased funding we may expect to see more rural hospitals close because they can no longer afford to provide care.

The current trend seems to be to shift more rural health care to clinics which are more efficient to operate, but tend to offer fewer services. For emergency and urgent care that is beyond the capacity of a clinic, the use of ambulances to transport patients to a regional hospital seems to be increasingly common. While care is still available for rural residents, it may take longer to get treatment for some conditions which may pose long-term problems that more rapid treatment could mitigate.

The closing of hospitals is not the only current issue to affect the changing face of rural health care. Even primary care is declining in small town America. At present rural communities have only between 50% and 75% of the primary care physicians of urban areas, and 44% of rural areas are experiencing a shortage of primary care (Doescher et al., 2009; Gordon, 2014). In addition, 77% of the rural counties in the United States are considered health care shortage areas (National Association of Social Workers, 2012; National Conference of State Legislatures, 2016).

There are fewer physicians per capita in rural areas than in larger cities, as only 11% of the physicians in the United States work in rural areas to provide for approximately 19% of the population (Mareck, 2011). Residents in smaller communities who see a doctor are much more likely to see a family practitioner, as 42% of rural visits are to a family practitioner (American Academy of Family Practice, 2014). This raises some concerns in the medical profession about the availability of rural emergency services since family physicians outnumber emergency physicians by a ratio of seven to one in small communities (American Academy of Family Practice, 2014).

Perhaps a greater issue for rural health care is the availability of physician specialty care. The number of health care specialists in rural areas tends to be significantly less than what it is in urban communities (30 versus 263 per 100,000) (National Rural Health Association, 2017). As a practical matter the residents of small communities have less access to specialty care locally and have to travel much further than urban residents to receive specialty care. Thus, small town residents are more likely to have to travel outside their home communities to get specialty care if they receive such care at all. This additional traveling causes new burdens such as increased travel time and greater travel costs for food and lodging.

But many of those who seek health care in smaller communities do not see a physician. Forty-one percent of rural Medicare beneficiaries saw either a nurse practitioner or a physician assistant for some or all of their primary care (National Conference of State Legislatures, n.d.). While this is generally good quality health care there are some limits on what nurse practitioners and physician assistants can provide. But then even non-physician health care providers are short supply for rural practice, and given the age of many rural residents and the generally lower income levels of smaller communities the demand for rural health care is expected to grow while the number of providers appears to be decreasing.

In the current environment, we need to develop effective strategies for recruiting more health care professionals to live and work in rural communities. Rural communities face a shortage of health care professionals (Rural Health Information Hub, 2017; National Rural Health Association, 2017) There are also some significant challenges in the delivery of health

care for smaller communities, especially when we are facing the possibility of substantial cuts in funding for services, and there is a push for efficiency in services. Rural communities are more dependent on public funding and cuts would tend to affect rural providers more. Rural health care providers may not be able to benefit from some of the economies of scale that urban providers use to help meet efficiency guidelines. Inability to meet efficiency standards can result in cuts to services and closing facilities. Clearly a one size fits all model of funding health care does not suit the needs of rural people well. In this type of environment it may be necessary to re-envision our model of rural health care, or develop funding models that better reflect the realities of rural health care services.

The State of Rural Health Care

Rural health care is not where it needs to be to adequately serve our citizens. Providing health care for rural Americans is no minor matter since we are talking about 19% of the population. In our current system residents of small communities tend to face challenges of accessing and paying for health care. There are not as many health care providers in rural America and patients tend to have to drive further to get the health care they need. When that is coupled with the tendency for rural people to experience some chronic health conditions at a higher rate and to also have a higher rate of being uninsured, a picture of rural communities being underserved emerges.

There are significant barriers for rural residents receiving the health care they need. Long commutes, older vehicles, poorer roads, weather and geography mitigate against reaching health care easily or quickly. Shortages of health care providers, closing of facilities, and reliance of public programs to pay for care further reduce the access that small town America has to the health care system. Yet, paradoxically, rural residents often support the fiscally conservative politicians who continue to attack and reduce funding for publically funded health care in promoting the role of limited government. And further cuts for publicly supported health services does not bode well for the future of rural Americans.

Further pressure on rural providers for efficiency that may not be realistically achievable and greater cuts to public health care funding may force increasing responsibility for rural health care onto local governments. But rural county governments have tended to rely on state and federal funds to help supplement the limited funds they have available to provide health care. Taking more local responsibility for health care may stretch rural counties beyond their means. And rural counties in many areas are often facing declining tax bases that further limit their ability to respond to any sizeable state and federal cuts for health care. Add to that the fact that some rural governments are philosophically opposed to providing for any but those in the direst circumstances, and the future outlook for rural health care at present does not appear to be bright.

In a very real sense it behooves small town Americans to stay as healthy as they can and not get sick. Getting the epizootus may mean a lot of out of pocket expenses and real challenges in getting the services needed to treat that illness.

Where Do We Go From Here?

All of this sounds like an imposing challenge for the delivery of health care for those of us who work with people who live in the less populated parts of the country. It really seems like our health care system is either biased against, or just plain neglectful of small town Americans. This is unlikely to change for the better without a concerted effort to do so, as current national priorities appear to be elsewhere.

In my opinion the onus for starting that change lies with people like us who are attending this conference. We represent professionals who have a core of knowledge and also demonstrate both an interest and commitment to both rural services and health care issues. We know health care and we know the rural issues of implementing that care. Simply stated, we know the burden that the current rural health care system places on both providers and patients. As professionals we are committed to serving our patients and clients and improving their lives. So we are in one of the best positions to raise our voices to question what plan is in the works for addressing the current needs for rural health care. If things are ever going to change, it is important that we initiate that discussion.

One of the really wonderful and inspiring things about attendees of the National Institute for Social Work and Human Services in Rural Areas is that in the forty plus year history of this event members of this group have been a powerful voice, have advocated, and have made positive changes to help address the needs of rural people and communities. For example, the National Rural Social Work Caucus that sponsors this event has worked with professional associations such as the National Association of Social Workers (NASW) and developed a policy statement on rural social work, influenced the wording of the NASW Code of Ethics, informed NASW on rural issues, and formed a formal lineage to facilitate communication. The Rural Caucus has also developed a rural social work listserv to promote professional communication and hosts this conference annually to promote the discussion of rural issues, methods, and services. In a very real sense this group has strongly influenced much of our current professional literature related to rural practice (Daley, 2015).

Based on what we know, we need to influence the dialogue about rural health care and change that dialogue on at least three levels. The first of these is to work through our respective professional associations. Many of us are members of professional associations, but the bulk of the membership of those associations live and work in the urban environment, and do not typically consider the needs of rural people unless we speak up and advocate for rural issues. I have already suggested how this group has, over time, persuaded NASW to pay closer attention to rural service concerns. Many of you are members of health care professions and can do the same in your own fields. Professional associations often have a legislative arm and being more attentive to rural services may help to produce some positive change.

Our professional associations can help to elevate the health care needs of rural people at two other levels, both the state and federal. These are the entities that potentially have some of the resources and can enact policies that can lead to improvement. Individually we may also have to become more politically active by supporting candidates, communicating with our elected representatives, and voting. In essence we need to advocate for social justice in terms of an equitable and adequate health care system for the 19% of us who live in rural communities. In conveying our concerns about rural health, it is important that we personalize the issues by

emphasizing the effects on both small town people and communities. It is an enormous task, but we need to begin shifting the state and national discussion away from diverting major resources for the health care of lower income rural people and from putting these funds into the construction of a very expensive barrier on our southern border.

In conclusion, health care for rural people is not where it needs to be compared to that offered in the larger cities. We need to work to improve that, but we will not be able to change that overnight. I am optimistic that we may be able to make some positive change because of those of you in the audience. This Conference and the Rural Social Work Caucus have served as catalysts for change before and can do so again. This group has always demonstrated strength beyond its numbers because of the committed people who have fought for rural people and communities. It is wonderful to see all of you here today and I hope than in attending this conference you will be energized by what you hear, will learn some new things, and take home some great ideas. I hope you have a terrific conference!

References

American Academy of Family Practice. (2014). Rural practice, keeping physicians in (Position Paper). Retrieved from http://www.aafp.org/about/policies/all/rural-practice-paper.html

Bowman, B. (1995). *He's wetting on my leg, but it's warm and wet and feels good*. Lufkin, TX: Best of East Texas Publishers.

Callow, A. (2014). Medicaid expansion and rural hospital closures. Retrieved from http://familiesusa.org/product/medicaid-expansion-and-rural-hospital-closures

Center for Rural Affairs. (2012). Rx: Medicaid and Rural America. Retrieved from http://files.cfra.org/pdf/Medicaid.pdf

Cornell Chronicle. (2013). Graying of rural America has policy implications. Retrieved from http://news.cornell.edu/stories/2013/07/graying-rural-america-has-policy-implications

Daley, M. R. (2015). *Rural social work in the 21st century*. Chicago: Lyceum Books.

Doescher, M. P., Skillman, S. M., & Rosenblatt, R. A. (2009). The crisis in rural primary care. Retrieved from http://depts.washington.edu/uwrhrc/uploads/Rural_Primary_Care_PB_2009.pdf

Federal Office of Rural Health Policy. (2015). Defining rural population. Retrieved from https://www.hrsa.gov/ruralhealth/aboutus/definition.html

Gordon, D. (2014). Provider shortage threatens rural primary care. Retrieved from http://www.beckershospitalreview.com/hospital-physician-relationships/provider-shortage-threatens-rural-primary.html

Kaiser Family Foundation. (2014). Health reform. Retrieved from https://www.kff.org/state-category/health-reform/

Mareck, D. G. (2011). Federal and state initiatives to recruit physicians to rural areas. *AMA Journal of Ethics,* 13 (5), pp. 304-309.

National Association of Social Workers. (2012). Rural social work. *Social work speaks: National association of social workers policy statements* (9th ed., pp. 296-300). Washington, DC: NASW Press.

National Conference of State Legislatures. (2016). Closing the gaps in the rural primary care workforce. Retrieved from http://www.ncsl.org/research/health/closing-the-gaps-in-the-rural-primary-care-workfor.aspx

National Conference of State Legislatures. (n.d.). Meeting the primary care needs of rural America: Examining the role of non-physician providers. Retrieved from http://www.ncsl.org/research/health/meeting-the-primary-care-needs-of-rural-america.aspx

National Rural Health Association. (2016). About rural health care. Retrieved from https://www.ruralhealthweb.org/about-nrha/about-rural-health-care

National Rural Health Association. (2017). About NRHA. Retrieved from https://www.ruralhealthweb.org/about-nrha/about-rural-health-care

Newkirk, V. & Damico, A. (2014). The Affordable Care Act and insurance coverage in rural Areas. Retrieved from http://kff.org/uninsured/issue-brief/the-affordable-care-act-and-insurance-coverage-in-rural-areas/

Population Reference Bureau. (2009). Poverty is a persistent reality for many rural children in the U.S. Retrieved from http://www.prb.org/Publications/Articles/2009/ruralchildpoverty.aspx

Respaut, R. (2014). Rural hospitals pressured to close as health care system changes. Retrieved from http://www.reuters.com/article/us-healthcare-rural-insight-idUSKBN0GY14620140903

Rural Health Information Hub. (2016a). Retrieved from https://www.ruralhealthinfo.org/community-health/project-examples

Rural Health Information Hub. (2016b). Medicare and rural health. Retrieved from https://www.ruralhealthinfo.org/topics/medicare

Rural Health Information Hub. (2017). Rural healthcare workforce. Retrieved from https://www.ruralhealthinfo.org/topics/health-care-workforce

United States Census. (2015) Quick facts: United States. Retrieved from http://www.census.gov/quickfacts/table/PST045215/00

United States Census .(2016). Income and poverty in the United States 2015. Retrieved from http://www.census.gov/library/publications/2016/demo/p60-256.htm

United States Department of Health and Human Services. (2013). The Affordable Care Act – What it means for rural America. Retrieved from https://www.hhs.gov/healthcare/facts-and-features/fact-sheets/what-aca-means-for-rural-america/index.html

United States Food & Drug Administration. (2016). FDA launches first ad campaign focused on dangers of smokeless tobacco among rural teens. Retrieved from http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm496631.htm

USA Today. (2016). Los Angeles, CA population and races. Retrieved from http://www.usa.com/los-angeles-ca-population-and-races.htm