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What Ails Bessie: Barriers and Challenges to Good Health for Rural Older Adults

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What Ails Bessie: Barriers and Challenges to Good Health for Rural Older Adults

by

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Chapter I: Introduction

Of the 39.6 million older adults in the United States, about 8.7 million of those older adults live in rural areas (Hutchinson, Hawes, & Williams, 2010). By the year 2030, the elderly population will double, presenting the United States with 20% of its population over age sixty-five (Hutchinson et al., 2010). While aging in general has been shown to increase many adults' service needs, these needs may be more difficult to address for elders living in rural areas. It is important that as people age, they are given every opportunity to age in place. As the fictional story below suggests, elders living in rural areas can face some unique challenges.

Bessie's Story

Bessie[1] is an 80-year-old woman living in rural Midwest America. She is widowed and lives alone. Her husband was a rancher for many years. Bessie has never worked outside of her home but helped her husband with the ranching. Bessie and her husband had one son, who died when he was younger. She lives four miles from the nearest town and 16 miles from a town where she can access a grocery store, pharmacy, bank, and medical care. She has a neighbor who lives a few miles away and looks in on her. The neighbor and his wife occasionally bring her food and pick up medications for her, but they are ranchers and can only check on her as time permits. The only other relative she has is a niece who lives several miles away in a metropolitan area. Bessie does not have much contact with the niece, but they do speak by phone a few times yearly.

[1] "Bessie" is a composite, fictional character based on the experiences of several older adults living in the rural Midwest.

Bessie receives only her husband's Social Security income and has no supplementary health insurance or dental insurance. She has a very small savings account but uses it only in absolute emergencies. Her home is old and in need of new windows, a roof, and a furnace. Bessie refuses to invest the money in any home repair because she would like to leave what money she does have for her niece.

While Bessie has a car she uses when necessary and to get her mail at the end of her driveway, which is a quarter of a mile from a main road, it has been suggested by her doctor that she not drive as her eyesight has become increasingly worse since her husband's death. Bessie, however, does not want to burden other people with her comings and goings and feels that driving gives her freedom to do as she pleases, although she does not drive that often. The car is also not insured as she does not have the money to insure it. Unfortunately, there are no transportation services available to Bessie in her area. This leaves her isolated, vulnerable, and unable to properly tend to her personal and health care needs.

Like many others her age, Bessie does have some health problems. She has high blood pressure, macular degeneration, and asthma. She sees her physician on an annual basis but refills her prescriptions only when able and takes them at her own discretion. At times, Bessie has to choose which prescriptions to fill because she cannot fill them all each month. She cuts pills in half or skips them altogether to make them last longer. Bessie's neighbors have noticed she has more breathing problems, has become incontinent, and they wonder if she might be depressed. Her food choices are poor due to her lack of activity and the availability of fresh fruits and vegetables. She cannot get to the store on a frequent basis and, when she does, she finds that many of the nutritious foods are too expensive.

Bessie believes she is doing fine and denies not feeling well or needing any assistance. Bessie is a very determined and self-reliant person and would have a hard time accepting help from anyone.

Realities of Rural Aging

Although Bessie is a fictionalized composite, her story is all too real and represents some of the challenges rural elders face today. While all elders are at risk for challenges during the aging process, elders in rural areas are particularly vulnerable to these challenges as they age. Older adults living in rural areas often have significant, unique, and frequently unmet needs. Due to limited access and availability of services in rural areas, they can experience deficits in nutrition, transportation, income and housing. Poverty levels are higher in rural areas than in urban areas with 12% of rural elders living in poverty versus 9.5% of urban elders (Roff & Klemmack, 2004). For instance, "30% of substandard housing in rural areas is occupied by older adults with urban older adults occupying only 17%" (Goins & Krout, 2006, p. 165). Rural housing values are typically much lower and outstanding mortgages tend to be higher in rural areas than other areas (Goins & Krout, 2006). Current economic conditions suggest the family home cannot be expected to produce much equity, preventing rural adults from buying smaller homes, renting apartments or purchasing condominiums (Goins & Krout, 2006).

Transportation problems are apparent in rural areas as well. As adults get older, many have to give up driving, requiring them to rely on family, friends, or neighbors for their transportation. Rural adults may not have people to rely on for transportation. Current transit programs focus primarily on trips to meal sites, medical facilities or shopping and many do not

travel into rural areas. Additionally, rural adults are also at a disadvantage health-wise and have been found to suffer with more chronic illnesses than urban adults (Goins & Krout, 2006).

While recently there has been increasing interest in research focusing on the concerns of elders in rural areas relating to health, nutrition, home care, and transportation, a gap still exists between what the research has indicated and what policy and program development is actually taking place. The growing population of older adults, soon to be increased further by the aging of the Baby Boomers, is likely to increase the service needs of rural elders. As a result, recognition of the fact that services for aging rural adults are in need and knowledge on how to deliver the services is a must.

The purpose of this paper is to review the literature and illustrate the health of rural older adults as well as identify challenges unique to elders living in rural areas and provide awareness to both service providers and policy makers. Specifically, I will examine how barriers to health care and homecare, transportation, and proper nutrition can affect rural elders' well-being, health and independence.

Chapter II: Literature Review

While specific definitions vary, the two most commonly used definitions of rural for research and policy is provided by the United States Census Bureau and the Office of Management and Budgets. The United States Census Bureau defines urban "as metropolitan areas and nonmetropolitan areas with a population of at least 2,500 total residents incorporated as cities, villages, boroughs, and towns. Rural is any area not defined as urban" (Goins & Krout, 2006, p. 6). This office uses community size and density to determine rural areas whereas the Office of Management and Budgets uses population size and density to designate counties as rural (Goins & Krout, 2006).

Myths of Rural Living

Rural living has long been romanticized in the United States as being a homogeneous, healthy place to live where older persons are supported by family, neighbors, and friends. These myths and stereotypes of rural living suggest that rural elders live on farms, are in better physical and mental health due to hard work, good food, a healthy rural lifestyle, and "living in the country." Other common myths include the belief that rural elderly are more active, are better able to make ends meet and take care of themselves, are surrounded by large and supportive kin networks that are always willing and able to help, have less need for health and social services and can get everything they need at the local country store (Goins & Krout, 2006).

Research, however, indicates that these stereotypes are far from true. In fact, rural elders are in "double jeopardy" because they are old and they are rural (Goins & Krout, 2006). The reality is that rural elders do not always live on farms (with some exceptions), are very diverse; have fewer recreation and leisure opportunities available; have lower incomes than their urban

counterparts; have lower Social Security payments, pension, and savings; less widespread pension coverage; lack transportation alternatives and are much more likely to rely on private vehicles. They also have access to a smaller number and range of home- and community-based services, especially services for the severely impaired. They often have diets that are too high in fat and lack important nutrients due to limited food choices are less healthy than urban residents and are more likely to report their health as poor and have higher rates of a number of chronic diseases and acute health conditions (Goins & Krout, 2006).

With these established myths and stereotypes, a closer look at the demographics of rural areas will prove them to be untrue. The history of these demographics will also show that rural elderly are, in a sense, being left behind, leaving many rural counties aging and vulnerable.

Demographics of Rural Migration

The move from rural to urban locations is the greatest migration trend since the industrial age in the United States however people did not forget their rural roots. A generation ago, surveys still indicated that the majority of Americans would prefer to live in small towns and rural areas if the proper jobs were available (Goins & Krout, 2006).

The 1960 census indicated "133,000 retirees had moved to a rural area" (Goins & Krout, 2006, p. 37). By 1960, retirement was becoming traditional in the United States and the rapid growth of the economy after WWII increased a sense of security in old age. Most people that were of retirement age did not need to consider employment opportunities when it came to making location decisions. These older migrants were the frontline in a more general migration turnaround in the 1970s, when both young and old contributed to the first net migration increases to rural areas (Goins & Krout, 2006).

This net population migration movement to rural America was short-lived. Many manufacturing jobs went to developing countries, where wages were lower. Stagflation and rising interest rates during the 1970s ended the population shift. About "1.5 million people, ages 20-29 left rural areas during the recession years of the 1980D" (Goins & Krout, 2006, p. 38). At that time, rural areas were facing higher levels of poverty and unemployment than urban areas (Goins & Krout, 2006).

In the past and now in the present, employment opportunities are more available in urban areas than in rural areas, pulling younger adults away from rural communities. Retirees, however, have more freedom to act on their preferences and tend to prefer rural retirement settings for a number of reasons, including low cost of living. Along these lines, older homeowners in areas where housing stock has appreciated over the past few years may choose to sell their homes in order to fund a new life in a cheaper housing market. Many retirees also move to escape the problems that come with urban life such as traffic, pollution, and crime (Goins & Krout, 2006). Other parts of the country have aged with the outward movement of young adults. Regardless, the difference in dynamics in the growth of the older population results in disparities between communities in terms of resources to meet medical, social service, economic, housing, and long-term care needs of the aging populations (Rogers, 2002).

This outward migration of young adults to urban areas leaves rural communities at risk. Without consumers, rural communities cannot sustain their businesses and services, creating fewer employment and supportive services opportunities. This has left a disproportionate number of elderly living in rural areas, potentially stranded on their own, with limited access to health care and other services (Bragg Leight, 2003). There are fewer family members to assist

older adults with remaining independent in their homes, resulting in higher disability rates and declining health.

As a result of increasing life expectancies, individuals, families, caregivers, communities, the health care system, and service providers are facing the added burden of chronic health problems. As health and physical functions decrease, the ability to accomplish activities of daily living decreases and the need for services increases for both urban and rural elders. These services are important for disease and disability prevention and health promotion. They also assist in achieving good health, independence and quality of life (Goins & Krout, 2006).

General Health of Rural Residents

Several factors impact the health of people and their communities including economic resources, level of income and education, access to health care, and environmental quality (Blumenthal, 2002). Rural residents are more likely to be white, have lower education and income levels, and carry no health insurance. The proportion of rural adults that have not completed high school is higher than that of urban adults. Higher socioeconomic status, including education, income and nonminority status, tends to be positively associated with health status (Jones, Parker, Ahearn, Ashok, & Variyam, 2009).

Rural residents have higher rates of age-adjusted mortality, disability, and chronic disease than urban residents (Blumenthal, 2002). They have been found to be less likely to engage in preventive behaviors such as seat belt use, Pap smears, mammograms, and immunizations. They are more likely to smoke and have poorer oral health. Both older and younger rural residents have been shown to have less than optimal nutrition, exercise, and sleep patterns as well as fewer dental checkups and physical examinations than urban dwellers (Bragg Leight, 2003). Rural

residents are also less likely to see their primary care physicians annually, thus compromising their health and possibly further exasperating existent chronic health conditions (Blumenthal, 2002). Additionally, rural residents have higher rates of occupation hazard-related injuries. Farming has one of the highest occupation fatality rates. Farmers are at higher risk for work-related lung diseases, noise-induced hearing loss, skin diseases, and certain cancers related to chemical usage and extended sun exposure (Jones et al., 2009).

There is a direct relationship between the way rural residents perceive their health and their willingness to seek help at the appropriate times. Rural residents tend to define their health using themes such as hardiness, independence, self-reliance, ruggedness, the ability to work, the ability to function, and the ability to perform tasks. Health has also been described as having no pain and having the ability to accomplish what needs to be accomplished (Bragg Leight, 2003). People living in rural areas have a tendency to ignore health problems until they are looking at critical health situations. As stated by Craig Klugman, an associate professor at the University of Texas Health Science Center, “Being sick is considered a moral failing” (cited in Woolston, 2010, p. 12).

The ability to take care of oneself is important as well, and the use of other treatments that do not require the supervision of traditional health care providers is often more appealing. This emphasis on self-reliance and an overall distrust of “outsiders,” however, has been shown to substantially affect health-seeking behaviors and health outcomes of rural residents. The consequences are seen with the declines in the health of rural residents and the financial costs of delaying treatment (Bragg Leight, 2003). For instance, Woolston (2010) found that “rural Americans spent over $9 billion on hospital bills in 2002 for problems that, if dealt with

immediately with basic medical care, would not have become a serious medical issue requiring a hospitalization" (p. 13).

Health of Rural Older Adults

Considering what is known about the health of the overall rural population, it is easy to assume that as they age, their health conditions will continue to worsen. Since rural America tends to have an older population, it is essential to understand the health of rural older adults, barriers to good health and consequently, their health care needs.

Hutchinson et al. (2010), in an article in *Rural Healthy People 2010,* described rural aging adults as having a higher number of chronic health problems than urban aging adults. They have higher rates of heart disease, respiratory disease, diabetes, stroke, mental illness, malnutrition, obesity, cancer and substance abuse (Goins & Krout, 2006). Deaths related to heart disease are highest for men and second highest for women who reside in rural areas. Diabetes has been shown to be "17% higher in rural areas than in urban areas" (Goins & Krout, 2006, p. 82). Mental illness in the older rural population is higher than in urban older adults. The "incidence of mental illness in rural adults is 9.4%, a more significant rate than urban adults" (Goins & Krout, 2006, p. 82). Data from the National Health Interview Survey in 2002 (National Archive of Computerized Data on Aging, 2011) showed that self-reported symptoms of depression are higher in rural areas than in urban areas. It is noteworthy that "rates for depression of women in rural areas are as high as 40% compared to 13-20% of women in urban areas" (Goins & Krout, 2006, p. 82). These chronic diseases and the resulting complications can prevent them from performing certain activities of daily living, putting them at greater need for health care services (Rogers, 2002).

Another area of concern for rural older adults that utilize medications for their health conditions is the use of large numbers of total medications and numbers of different therapeutic categories of medications. Polypharmacy and adverse drug reactions are more apt to exist in rural areas as a result of using multiple health care providers in different locations of varying distances and limited access to pharmacies and knowledgeable pharmacists. These drug risks are further exacerbated by difficulties in managing multiple medications and choices that individuals make to restrict their medication use due to costs (Goins & Krout, 2006). "Bessie" takes her medications on her own terms, according to her budget. As a result, Bessie's poor medication management could potentially cause her health to decline and her health care needs to increase.

Nationwide, rural elders are more likely to assess their health as being fair or poor as compared to urban elders (Roff & Klemmack, 2004). Self-assessed health is a critical measure because it is associated with mortality, quality of life, and other indicators of health status. In 2001, most people 60 and older assessed their health as good to excellent with urban elders reporting better health than rural elders. "Nearly 37% of rural elders reported their health as fair to poor, compared to 32 percent of urban elders" (Rogers, 2002, p. 30). With advancing age, self-assessments of health consistently decline. At "age 60-64 years, 40% of rural older adults reported excellent or very good health" (Rogers, 2002, p. 31). "By 85 and older, that number was only 21%" (Rogers, 2002, p. 31). Those in their 80s are more likely deal with more chronic disabilities and declines in functional health (Rogers, 2002).

Barriers to Good Health

Given the health of rural people of all ages, it is essential to understand the attitudes and needs of this population. As people age in rural areas, barriers that may or may not have been a

factor previously can now become huge barriers to people living in remote areas. Access to health care has become a troublesome problem all over the country but the challenges faced when attempting to connect patients with the right medicines, tests and procedures becomes more complicated the farther away people get away from major medical hubs in larger cities. A study by Woolston (2010) found that "life expectancies are actually declining in large swaths of rural America, a trend largely fueled by upswings in diabetes, cancer and chronic obstructive pulmonary disease" (p. 10*)*.

Ultimately, one will find that many of the barriers to good health are inter-dependent, meaning that a barrier to one will often lead to a barrier to another. Case in point, "Bessie" struggles financially and, unfortunately, her financial struggles prevent her from obtaining adequate health care, taking medications as prescribed and purchasing nutritious foods for optimal health. Ultimately, these barriers can affect Bessie's health and impede her ability to functional independently.

Poverty. Poverty in the United States is the most consistent predictor of disease and disability among vulnerable populations, including rural older adults (Bragg Leight, 2003). Poverty is associated with higher levels of diminished health and use of health care services. This is a considerable challenge to the health of rural older adults due to their lack of financial resources. Rural adults often have lower income levels and higher poverty rates than urban adults. The disparity between urban and rural poverty rates increases with age; over half of rural older adults 85 and older were poor or near poor. This is alarming in the fact that a higher proportion of rural elders are in the oldest-old category (85+) than is true in urban areas (Butler, 2006). Social Security benefits are significantly lower in rural areas. A study found that rural

Social Security beneficiaries received an average of $539 per month; urban beneficiaries received $60 more (Lohmann & Lohmann, 2005). Approximately 21% of the rural elderly are classified as poor as compared to 10.1% of the general population 65 years and older (Hutchinson et al., 2010). Nearly half of rural elderly live below 200% of the federal poverty level compared to about one third of the urban elderly population (Hutchinson et al., 2010). This increase in poverty in rural areas could be due to a lifetime of working for lower wages, part-time, or seasonal employment with limited pension coverage (Roff & Klemmack, 2004), therefore, allocating a smaller retirement income (Butler, 2006). At least two thirds of rural elderly poor are women (Lohmann & Lohmann, 2005). Women in rural areas have worked at lower rates than have urban women. Widowed or divorced women are more at risk due to inadequate pensions (Roff & Klemmack, 2004). "Bessie" has been left with only her husband's small Social Security income and no pension coverage, placing her in poverty and vulnerable to increased disability and disease common in this vulnerable population.

Access to appropriate health care. The barriers will be discussed related to access to appropriate health care: health care costs, rural hospitals, physician and other health care worker shortages, and homecare and hospice

Health care costs. With higher poverty rates in rural areas, accessing proper health care can be financially difficult. Studies indicate that there are higher rates of those uninsured in rural areas than in urban areas (Ziller & Lenardson, 2009). Even those that are working often lack health insurance due to the employment structure in rural areas. These areas tend to have smaller employers, lower wages, and a greater prevalence of self-employment.

Although older Americans are the only sector of the United States population that are practically guaranteed health care coverage, many find themselves struggling to afford their health care costs. Older adults spend more on their health care now than their predecessors did prior to the Medicare program establishment in 1965. Since then, “health care spending has more than doubled from 11% to 23%” (Butler, 2006, p. 26). The Department of Health and Human Services estimated that “in 2006, on average, a 65-year-old spent about 37% of a Social Security check on Medicare premiums, co-payments, and out-of-pocket expenses” (Butler, 2006, p. 26). This is “expected to grow to approximately 50% by 2021” (Butler, 2006, p. 26).

While health care costs are a concern for most elders, these costs can become particularly burdensome for rural low-income elders. Rural older adults are more likely to be enrolled in Medicaid and they are more likely to use Medicare as their sole source of health insurance. About 10.1% of rural elderly receive Medicaid benefits as compared to 8.2% of urban elderly (Mueller et al., 2006). “Forty-five percent of rural older adults receiving Medicare do not have prescription drug coverage” (Butler, 2006, p. 26). “Total individual annual health care expenses for rural elderly are 18% higher than for individuals in urban areas” (Butler, 2006, p. 26). This situation is exacerbated by the higher rates of chronic health conditions found more frequently among older rural adults than their urban counterparts (Butler, 2006).

Rural hospitals. Another barrier faced by rural older adults is the capabilities of their local rural hospital and the absence of high-tech inpatient and diagnostic services (Iezzoni, Killeen, & O’Day, 2006). The smaller, more dispersed hospitals in rural areas, as compared to urban areas, make providing services more expensive due to the complex logistics and difficulties of achieving economies of scale. With the tendency for rural communities to be

poorer, more diverse, have limited economic opportunities and higher numbers of seniors, providing services is increasingly difficult (Matthews, 2002). Many rural hospitals simply cannot afford to keep their doors open. In 2007, according to the American Hospital Association, the number of rural hospitals had dropped 10% in the last decade (cited in Kelley, 2010).

Currently, the rural health care model tends to focus on providing primary care and emergency care locally due to the fact that small patient volumes will not support a full-service hospital. Often times, patients are referred to a larger, regional health care center for more specialized care when needed. With higher financial and travel-time costs, rural residents may substitute local generalists for specialists, or reduce their use of health care altogether (Jones et al., 2009).

In the 1980s and 1990s, the Medicare Prospective Payment System (PPS) and the hope that managed care would expand prompted many hospitals, rural facilities included, to delve into other services, namely home health care. Others went further and added long-term care services. In 1997, the Balanced Budget Act (BBA) resulted in decreased payments to rural hospital supportive and skilled services. Together, the BBA and lower Medicare reimbursement payment for home health and long-term care services have made it challenging for rural hospitals to stay afloat. Financial pressures have made it hard for rural hospitals to develop and carry out administrative and clinical systems that are fundamental in an integration strategy (Goins & Krout, 2006). Despite the great need for health care services in rural areas, due to higher concentrations of older people and higher incidence of chronic health conditions, there are

financial pressures to reduce health services even further by adopting "limited-service" models for rural hospitals (Butler, 2006).

On top of service limitations, many rural hospitals are finding major renovations or even replacements are needed, although these construction projects are often unaffordable for small hospitals. Operating losses at many small hospitals have left facilities in disrepair and medical equipment outdated. These factors have contributed to a loss of patients and physicians to tertiary hospitals. The local economy and the health of residents in these communities are jeopardized. "Employment from health care services, mainly hospitals, may represent 10-20% of total employment in rural communities" (Glasser, Peters, & MacDowell, 2006, p. 59). With a decrease in services, the possibility of job loss is greater, further impairing the already sluggish economy in rural areas.

Furthering the snags facing many rural hospitals is that technology is often not current and up to date. In Scobey, Montana, a small rural town in northeastern Montana, Dr. Donald Sawdey is the only physician in the town's medical clinic. Dr. Sawdey does not have anesthesia, does not perform colonoscopies, and is not set up to deliver babies, procedures many assume can be done anywhere. With the help of silent auctions, private donations and a federal grant, the clinic will finally get a CT scanner. "I could do a lot more if I had more equipment," says Sawdey (cited in Woolston, 2010, p. 12). He admits that he does not have the necessary instruments considered essential for modern medical care. Many people in this area must travel to Billings Montana; a 360-mile drive one way, for necessary testing that cannot be done locally (Woolston, 2010).

Physician and other health care worker shortages. Not only do rural hospitals find it hard to keep their doors open because of financial issues, they also have a hard time recruiting and retaining qualified health care professionals. Studies have well-documented the lower proportion of health professionals in rural areas than in urban areas. This may be due to smaller population bases and lower patient volume and the inability to support these personnel (Goins & Krout, 2006).

The most notable health care worker shortage in rural areas appears to be with in the area of physicians, a shortage more apt to develop in rural areas. “Only 10% of physicians practice in rural health care settings” (Goins & Krout, 2006, p. 85). In 2000, there were 119 physicians per 100,000 population in rural areas, compared with 225 physicians per 100,000 population in urban areas (Mueller et al., 2006). “In March of 2010, it was estimated that it would take nearly 17,000 more physicians to fill the gaps nationwide” (Woolston, 2010, p. 11).

Practicing rural medicine can be hard on physicians. They are twice as likely to work solo and may carry a heavier burden when providing care. Many cannot get away to attend continuing education classes needed to remain up to date on caring for a diverse population. Rural physicians see more patients per day than urban physicians, work longer hours. and have fewer options for sharing financial and logistical costs when treating the under-insured and uninsured (Ziller & Lenardson, 2009). They also make about $20,000 less per year than their big-city counterparts (Woolston, 2010) and have limited peer support (Goins, Kategile, & Dudley, 2002). All of these challenges may contribute to dissatisfaction in practicing rural medicine and intensify the problem of rural physician recruitment and retention.

The effects of rural physician retention are noted by the previously mentioned Scobey physician, Dr. Sawdey, who has been at the Scobey Clinic since 2007. Sawdey stated, “They’ve had a new doc here every year or year and a half. That kind of turnover destroys the health care system” (cited in Woolston, 2010, p. 11).

One of the issues that face rural health care providers is the financing of care in rural areas due to the inequities in reimbursement rates for rural providers. Reimbursement rates through Medicaid or Title III are low and service providers fear that accepting contracts with these programs will cause them to lose money. It is worth noting again that rural elderly have higher enrollment rates in Medicaid and are less likely to have a supplemental health insurance. Although the reimbursement inequities are starting to be addressed, inequities still exist. Meanwhile, the new health care reform law is attempting to address the problem of physician shortages by offering a 10% bonus to doctors who treat Medicare patients in rural areas as well as offering additional funding for rural hospitals (Woolston, 2010).

Nurses, social workers, therapists, and in-home support workers are also necessary for a successful health care system in the United States. Unfortunately, these workers too, are in short supply in rural communities. Salaries are higher and working conditions are more favorable in urban areas, making urban employment more advantageous. Many of the support workers that do work with rural seniors do not have the proper training to do so and fail to appreciate the differences in working with this vulnerable group. Special attention needs to be paid to the heterogeneity of rural seniors and the plethora of ethnic and cultural backgrounds, lifestyles, risk factors and personal, economic and environmental resources that influence their decisions (Goins & Krout, 2006).

Homecare and hospice. Given that there are higher numbers of chronically ill older adults in rural areas and that advanced age continues to be associated with an increased need for assistance and long-term care services, it is imperative that services be available to assist them in remaining at home. Recent studies show that one in four families are providing assistance to an older family member (Goins & Krout, 2006). In rural areas, this is even more evident as caregiver support provided by family and friends becomes crucial due to the lack of formal home- and community-based services. Additionally, issues of limited service access and lower reimbursement create care barriers for rural elders and complicate the delivery of assistance programs for their informal caregivers (Buckwalter, Davis, Wakefield, Kienzle, & Murray, 2002).

In rural communities, cultural values and norms, as well as the belief that families should take care of their own matters, influence how elder care services are accepted. Family members and neighbors are often the ones filling service gaps by providing direct and indirect care services for poor, socially isolated, underserved, frail and chronically ill elders in rural communities (Buckwalter et al., 2002). Spouses, adult children, and/or other extended family members are more likely to be caring for an aging family member. Spouses are more apt to be the care provider but are also more likely than adult children to have adverse health effects as a result of their caregiving duties (Goins & Krout, 2006). Again, with the out-migration of adult children to urban areas, the number of family members able to provide care to rural older adults is reduced. With these changing demographics, rural older adults will likely have fewer options when it comes to the presence and availability of informal caregivers (Goins & Krout, 2006).

Regrettably, distance is cited as the biggest problem facing caregivers and care recipients. The estimated 7 million Americans providing long-distance care to older adults in the United States usually rely on the support of another family member, friend, or neighbor who lives in the area of the care recipient (Goins & Krout, 2006). Distance can be a barrier when accessing neighbors as well and may put the rural elderly at a disadvantage when it comes to informal caregiving. Since rural elders may have less access to their adult children or other family and may have less opportunity to create strong bonds with friends and neighbors, "fictive kin" relationships are often developed. Fictive kin are not related but are given the same rights and responsibilities as a family member would have. "Bessie's" fictive kin is her neighbor, since her only family is miles away. They check in on her when able and often do odds and ends that Bessie is unable to do for herself. It is estimated that 5-10% of rural elders receive informal assistance from a friend or neighbor (Goins & Krout, 2006) and there is a higher prevalence of fictive kin in rural areas than in urban areas. Furthermore, demographics indicate that there may be more peer caregiving in rural areas than in urban area due to a lack of middle-aged adults (Goins & Krout, 2006).

As the literature has indicated, rural elderly are more likely to be considered low-income than their urban counterparts and they are more likely than urban elders to have multiple chronic conditions, therefore leaving them at a higher risk of being institutionalized due to the inability to care for themselves. Rural clients are more likely to have long-term care needs versus the urban clients who will need more post-acute care. Rural home health care clients tend to have more ADL and IADL disabilities, more intractable pain, more neuro/emotional/behavioral status problems, terminal conditions, and more chronic conditions than urban clients. Rural clients are

less likely to have met their goals at discharge and have a poorer prognosis long-term (Hutchinson et al., 2010). The inability to remain independent without appropriate services and support in the community leads rural areas to rely more heavily on nursing facilities (Mueller et al., 2006). Home care services have proven to be valuable by nurturing an environment in which people are encouraged to maintain their independence and self-management while avoiding the expense and discomfort of institutionalization (Nelson & Stover Gingerich, 2010), although nationwide, the use of formal services by rural elders is low. An analysis of national data by the Center on an Aging Society in 2005 (cited in Goins & Krout, 2006), found that a majority of rural older adults with limitations relied solely on informal sources for assistance. Many of the service options available to rural older adults are modified versions of services designed for urban areas. These options may not be accepted by rural seniors, therefore discouraging the use of formal services. Other factors that discourage use of formal services include lack of knowledge about services, economic inability to pay for the services, and eligibility constraints (Goins & Krout, 2006).

It is also important to consider another difficulty that hinders rural older adults from using formal community and home-based services and that is the welfare stigma that it produces. The attitudes and values of rural adults can make it harder to accept and to provide in-home services, particularly supportive services. Many rural seniors stick to the philosophy of self-care and self-reliance. They turn only to the formal system when they cannot care for themselves any longer or are exhausted. The circumstances and responses to these conditions are different for each person (Goins & Krout, 2006). The stigma against formal services is an example how

health care workers need to be properly trained to deal with the special circumstances that challenge older rural adults.

The barriers that rural home care agencies themselves face, impact community- and home-based services to rural older adults. States that are mostly rural have fewer home health agencies in total. Agency size increased as the area became less rural. The number of patients receiving care and the number of visits per patient increased as the agencies became less rural (Vanderboom & Madigan, 2008). With the home care industry changing, the smaller, rural agencies are finding it difficult to remain financially afloat. The results are the sale or modification to larger home care operations that may not have the "hometown" obligation to provide rural care. Rural areas are more likely to be served by small, hospital-based, nonprofit home care agencies, which have smaller operating margins than urban agencies. With a smaller census of clientele in rural areas, the added burden of managing expenses while providing services to patients in outlying areas exists. Often, these smaller agencies are the only home care assistance provided in a large region, therefore increasing traveling times and other operational expenses while decreasing staff productivity. With the rising cost of mileage and travel time and the loss of productivity while staff members are in travel, managing expenses intensifies.

Rural home care agencies also have the challenge of obtaining adequate staffing to provide services. When staffing is not available, care cannot be provided often resulting in unnecessary and expensive inpatient stays or delays in services. (It is important to note that timely receipt of home and community-based wellness services is important in maintaining the health and independence of older adults). Since rural home care agencies have lower operating margins, they are unable to compete with the wages and benefits of larger home care

organizations in the area. This can affect the staffing of nurses, home health aides, and therapy staff further compounding the problems of limited access to reimbursement for therapy services under the current Medicare structure (Nelson & Stover Gingerich, 2010). Higher costs with lower reimbursement may jeopardize the ability of rural providers to provide an appropriate number of visits needed to stabilize a client suffering from acute illnesses. Additionally, rural home health care is susceptible to payment changes because of travel times for staff in rural areas, increases in mileage costs and reductions in the number of visits that can be provided by a health care provider in one day (Vanderboom & Madigan, 2008), making access to community services unstable.

Home health agencies in rural areas differ in organization structure and provision of services than urban home health agencies. Rural home health agencies are likely to be smaller, more sparsely located, likely to use home health aides to do more of the work and less likely to offer ancillary services, including social services (Hutchinson et al., 2010).

In addition to lack of home care services available to rural areas, hospice services are also an important service that is needed in rural communities. End-of-life care should be available to rural residents, as most terminally ill and dying people prefer to remain at home or in their communities (Wilson et al., 2006) although rural Medicare beneficiaries are less likely than their urban counterparts to use hospice care (Virnig, Ma, Hartman, Moscovice, & Carlin, 2006).

Hospices in rural areas face many of the same challenges as home care agencies do due to their location and size of their population area. "Over 1.7 million Medicare beneficiaries die each year, with rural beneficiaries accounting for almost one-fourth of the deaths" (Casey, Moscovice, Virnig, & Durham, 2005, p. 363). In a study done by Virnig et al. in 2006), it was

estimated that 2,900 ZIP codes in the United States are not served by hospices. Only 76% of rural counties non-adjacent to a metropolitan ZIP code are served by a hospice indicating the availability of hospice is strongly correlated with level of urban influence (Virnig et al., 2006).

A recent study used Medicare Administration data to examine the nature and extent of urban/rural differences in hospice use and key factors that may influence the use of hospice services in rural areas. The study found that "geographical location and population density are important factors influencing use of hospice services by Medicare beneficiaries. In rural areas, declining rates of hospice use were associated with lower population density and greater distance from urban areas" (Virnig et al., 2006, p. 1293). "This study also found that a significant proportion of hospices in rural areas have low patient volumes, leaving them vulnerable to financial instability stemming from a small number of high-cost patients" (Virnig et al., 2006, p. 1293).

Recent studies that examined hospice costs and revenues found that small rural hospices are likely to have expenses that are not adequately covered by the current Medicare payment system (Casey et al., 2005). Due to their low volume, small rural hospices are more vulnerable to financial difficulties resulting from trends across the entire hospice industry such as late referrals and declining lengths of stay. There are fewer patients to spread fixed costs and an increased vulnerability to financial problems from high costs of very isolated cases, since Medicare per diem reimbursement is based on average costs for a hospice caseload. Small hospices are also less likely to benefit from economies of sale in purchasing prescriptions and medical supplies (Casey et al., 2005).

In addition to covering large geographic areas and lack of appropriate reimbursement, rural hospices also face challenges in physician shortages, high physician turnover, and large numbers of patients obtaining care outside of the local community. This makes coordinating patient care difficult for hospices. Rural hospices may also compete with nursing homes, home health agencies, and hospitals in the service area for staff and patients depending on the hospice's organizational structure and local health care market (Casey et al., 2005).

Home-based hospice care can be demanding as well. Recruiting and retaining staff can be complicated but it is a daunting task for rural hospices to provide staffing to accommodate fluctuations in patient census and to provide coverage 24-hours per day, seven days a week. Staffing challenges are exacerbated by the shortages of nurses, social workers, and other health care professionals in a rural setting. Low patient volumes often do not allow rural hospices to fund full-time positions, and those that cover large areas may have a hard time finding staff to travel long distances. Hospice workers may be at a higher risk for burnout and compassion fatigue in rural areas, especially when boundaries between their work and personal lives are intertwined (Casey et al., 2005).

Since there tend to be higher rates of illness and chronic conditions in the rural elderly, the use of community- and home-based services will continue to be important now and in the future. Rural home care and hospice care have unique challenges that need to be overcome to provide independence and comfort to rural elders in their homes.

Nutrition

The ability to access proper health care is of great importance for rural communities but good nutrition is just as important in health promotion and disease prevention, especially for

maintaining independence and a quality of life in older adults. The socially isolated rural older individuals are of particular concern due to the fact that many of them practice poor dietary behaviors as well as mismanage chronic diseases, lack consistent health care insurance, and have a general mistrust of health care services (Thomas, Ghiselli, & Almanza, 2011). The fact is that chronic disease tends to be more imminent in older rural adults and any nutritional risks have been shown to correlate with functional decline. This, in turn, can lead to prolonged hospitalizations and poor treatment outcomes (Zulkowski & Coon, 2004) and, in turn, functional decline and loss of independence. Optimal nutrition is essential in facilitating recovery yet it is often a neglected area (Sahyoun, Anyanwu, Sharkey, & Netterville, 2010). According to Tai-Seale and Coleman in *Rural Healthy People 2010*, “nutritional disorders with complications and comorbidities are the ninth most frequent diagnostic category among hospitalized rural elderly Medicare beneficiaries” (p. 115).

Food choices are influenced by competence of personal and community resources, level of food security, and health factors. It also involves decisions made on convenience and quality of food (Goins & Krout, 2006). Research has shown that adequacy of food resources is associated with diet. Rural communities have poorer access to supermarkets and healthy foods and typically have to pay more for their food (Sharkey, Johnson, & Dean, 2010). Finances also influence food choices and quality diets. Balancing financial demands that often include health care, prescription drugs, transportation, utilities and higher food prices, at times, leaves little to work with when buying food. Additionally, personal resources must often be used to respond to expected and unexpected expenses. At times, food is not at the top of the list of expenditures (Goins & Krout, 2006). For “Bessie.” getting to the grocery store in the town four miles away is

a hard enough task. When she is able to make this trip, she finds that the selection of foods and availability of certain items is poor. She pays more for the foods at this grocery store than she would if she could shop in the town 16 miles away; however, Bessie is not able to navigate her way to this town and has to settle with the nearest grocery store. Her food choices are inadequate because she is spending more and getting less with her limited budget.

Older adults may also have functional impairments that limit their ability to acquire, prepare, and eat food that is available. Some households may not have the means to properly store or prepare food correctly. Some may not know how to shop for and/or prepare healthy foods (Goins & Krout, 2006). Others may not understand how to eat independently, acquire dietary assistance when needed, or attend appropriate social environments that increase food intake (Thomas et al., 2011).

Additionally, some adults may have poor dentation and oral health that make it hard for them to properly chew or swallow (Quigley, Hermann, & Warde, 2008). Often, poor nutritional status is compounded by the presence of a chronic illness (Zulkowski & Coon, 2004). Medical conditions and medications can interfere with eating and nutrition, therefore decreasing nutritional gain from foods (Goins & Krout, 2006).

A number of rural older adults admit that they do not have enough to eat. They do not have the money to purchase food, especially healthy food, and experience times when there is no food in their homes and no food stamps to buy food. There is an attitude that they will just "make do" in order to save money, compromising food purchases and nutritional needs (Goins & Krout, 2006). Older adults with lower incomes report that when they did not have enough food to eat or money to buy food, they adopted practices such as seeking free food, eating cheaper

meals, eating smaller meals or skipping meals altogether (Sharkey, 2008). Often times, rural adults have certain values and beliefs that can affect their nutrition including practicality, efficiency, work, honesty, patriotism, deep religious commitment, social conservatism, a mistrust of government and strong independence, leading to a lack of utilization of services that are available in rural areas (Gains & Krout, 2006).

Family, friends, and neighbors are important in assisting rural older adults in maintaining their nutrition. They can help in providing direct sources of food as well as transportation and money to obtain food. Rural elderly rely on family for shopping and cooking assistance more than do urban elders. Yet again, the increased distance and structural barriers in rural areas can make it difficult for family and friends to provide these services (Goins & Krout, 2006).

Proper nutrition for all older adults is important however, nutrition for rural older adults is crucial due to the barriers encountered in accessing nutritious foods. The Food Stamp Program and the Elderly Nutrition Program are two federal programs intended to support community nutrition resources. A 2003 Current Population Study indicated a smaller percentage of rural elders than urban elders participated in the Food Stamp Program and since 1999, average participation rates have continued to fall (United States Census Bureau, n.d.). Additionally, high numbers of older adults received only the minimum monthly food stamp benefit. Unfortunately, nutrition programs designed for older adults through the Older Americans Act, such as home-delivered meals and congregate meals, reach only a fraction of the older population and less in rural areas (Goins & Krout, 2006).

Incidentally, rural older adults are at a higher risk for obesity than their urban counterparts (Tai-Seale & Coleman, 2010). Obesity is associated with individual and multiple

chronic conditions such as diabetes, hypertension, heart disease and overall decline in function, negatively impacting physical and functional capabilities, therefore lower levels of health status. Moreover, rural adults are less active in their spare time and have a higher fat and calorie consumption and exercise less (Casey et al., 2008). With limited access to supermarkets and appropriate foods, it can be a struggle to obtain foods needed for a healthy diet (Sharkey et al., 2010). This can exacerbate the burden of obesity and the other chronic medical conditions.

There is evidence that living in rural areas presents challenges to maintaining a healthy weight. Among these challenges are cultural and structural limitations that negatively affect diet and exercise. Rural areas may have fewer choices in places to exercise with fewer sidewalks and fewer exercise facilities (Tai-Seale & Coleman, 2010). People may not feel safe from traffic while walking or biking in rural communities because of fewer and poorer-quality sidewalks and/or higher traffic speeds on rural roads (Casey et al., 2008). Evidence has also suggested that rural residents are not as compliant with dietary recommendations. This may be reflective of a rural preference for a reliance on non-professional health advice, less social support for compliance or less confidence in the recommendations of qualified rural health professionals (Tai-Seale & Coleman, 2010).

In addition, poor access to qualified nutrition professionals can negatively affect the diet of rural residents. In rural areas, nutritionists are hard to recruit and retain. This leaves other health care professionals who may not be qualified or have the time to teach proper dietary recommendations to rural communities (Tai-Seale & Coleman, 2010).

Transportation

There are obvious challenges in meeting the many needs of rural older adults. Research has suggested that rural areas face significant difficulty in developing and sustaining effective home- and community-based services as well as appropriate nutrition and nutritional services. Transportation, however, stands as one of the most difficult barriers to appropriate health care. In examining access to health care and health care participation, rural residents voice that one of their major concerns is limited transportation availability (Acury, Preisser, Gesler, & Powers, 2005). Transportation is important because it connects people to meaningful social interaction and to goods and services for sustaining life (Sook Park et al., 2010).

In an analysis done by Rosenbloom (2009), it was found that most older adults are licensed drivers and almost ninety percent use a private vehicle as their primary source of transportation (Flaherty, Stalvey, & Rubenstein, 2003). This reliance on private vehicles is represented by the increase in licensing rates for older adults (Rosenbloom, 2009).

Rural seniors have a much higher rate of vehicle ownership than urban seniors however, with ownership come the costs of running and maintaining the vehicle as shown in “Bessie’s” story. While Bessie owns a vehicle, she is unable to afford the insurance and the upkeep for the vehicle. Although owning a vehicle may create the impression of more freedom and independence, it does not necessarily mean that getting around is any easier. Rural seniors may still have a hard time traveling the longer distances and, as many seniors experience, are not able to drive at night, encounter decreased color sensitivity and increased sensitivity to glare and other age-related diseases (Johnson, 2002). If medical attention is needed at an urban medical center, traffic may complicate driving (Goins & Krout, 2006). As a result of these age-related

functional decreases, many older adults must restrict their driving, or give up driving altogether. They must then rely on others for their transportation needs (Wright, 2008).

Many people assume that older adults who face mobility problems or must quit driving will be served by public transportation or special demand transportation services. Research indicates that this is not the case, and that neither public transportation nor special demand transportation services come anywhere near meeting the needs of the country's aging population (Rosenbloom, 2009).

Locating a satisfactory mode of transportation poses a problem for non-drivers. Difficulty finding suitable transportation could be due to the unavailability of public transportation or taxis, needing or wanting to take trips in which walking is not a practical option, and/or being unable to find drivers to take them where they need to go (Sook Park et al., 2010). Some rural communities may have public transportation services but are restricted to certain areas of the community that may not encompass servicing rural areas. Many smaller towns lack services such as physicians' offices, shopping centers and banks and require residents to travel longer distances to obtain such services and because of this, transportation costs tend to be higher being that trips are typically longer (Goins & Krout, 2006). Of the population in rural areas, 40% have no public transportation services available to them and 25% of the rural population has insufficient transportation (Sook Park et al., 2010). In rural areas where there is no public transportation, taxi services are rare or are extremely expensive (Sook Park et al., 2010). Even if there is a public transportation system available, unease regarding safety, personal security, flexibility, reliability, and comfort concerns exist in older travelers (Rosenbloom, 2009).

The link between health care and transportation services is critical as our health care system struggles to keep older adults healthy and functional, particularly in rural areas. Optimal care is hindered when there are obstacles to transportation access in rural areas. Scheduling transportation around appointment times is difficult when it needs to coincide with doctor's orders, for example, a fasting laboratory test (Green-Hernandez, 2006). In a study of rural residents' use of cardiac rehabilitation programs, it was shown that only a small percentage of eligible rural patients initially enrolled in the program, and an even smaller number completed the 36-week prescribed rehabilitation. Study participants indicated that absence of transportation, the distance to facilities, hazardous roads and harsh weather conditions were barriers to their use of the program (Bragg Leight, 2003). Such structural barriers that come with living in rural areas along with individual disadvantages combine to present some major challenges in transportation for rural older adults (Sook Park et al., 2010). Furthermore, missed health-related physician visits could mean poorer health outcomes (Wright, 2008).

Although basic services such as doctor appointments and grocery store trips get the most attention and financial support, quality of life activities such as visits to friends, church and the library are also just as important. These activities are important in sustaining independence and life enrichment (Goins & Krout, 2006). "Older adults do not make more than 5% of their trips for any kind of medical purpose," which indicates the importance of quality-of-life activities (Rosenbloom, 2009) and implies that absence of transportation can impair quality of life by decreasing personal independence, access, choice and opportunities, and in turn, can lead to social isolation (Flaherty et al., 2003).

Even if paratransit and public transportation options are available, older adults may have problems accessing them due to limited mobility, decreased health and poverty (Wright, 2008). Accessible transportation is especially important for seniors with physical and mental limitations that make it difficult to see, hear, lift, walk, or climb, making independent use of public transportation difficult. These are often the impairments that cause them to quit driving in the first place. Some seniors find it difficult to walk to the curb or stand at a bus stop and wait. Often they cannot climb the steps to get on the bus or van. At times, the person providing the transportation will assist the senior in and out of the car, to the door, and will accompany them to their destination. This can be extremely expensive and cost prohibitive for the senior (Goins & Krout, 2006). The need to make reservations days in advance is not always practical as there are times when issues are of a more urgent nature. The possibility of having to sit and wait for the bus can be unappealing. The buses are not always on time, making the rider late for the appointment. Many riders simply do not want the hassle of having to navigate the public transportation system.

As an alternative, mobilizing family, friends, and neighbors and volunteers have an important role in helping rural elderly access health care as well as being a low-cost way to provide supportive transportation. This can be a challenge, however, due to the fact that many seniors do not have local family and many of their friends or neighbors are just as physically or mentally challenged as they are (Goins & Krout, 2006). In a study done in 2001 by Taylor and Tripodes, it was found that respondents that did not live in households with a licensed driver encountered significantly more problems in accessing health care than those who lived with a licensed driver. Additionally, unmarried individuals encountered more problems than married

individuals and men depended more on their spouses to provide transportation than did women. Thus, a social support network and reliable transportation can be positively associated with health care access and utilization (Wright, 2008).

The increased reliance on private vehicles has made it hard to sustain a mass public transportation system. Public transportation relies on economies of sale to sustain business, which is not always possible in rural areas where there are fewer people (Wright, 2008). When rural transportation projects were initiated, they were meant to be self-supporting; support was provided by fares from riders, contracts with public and private groups and operating subsidies by state and local governments. At this point, few have succeeded at becoming self-supporting. Most rural passenger systems require some fare contribution but this has not been successful due to low demand for service and the rural seniors' inability to pay for transportation services. The Older Americans Act does not allow charging even a small fee making it even more difficult to recover any operational costs (Goins & Krout, 2006).

The lack of a trained labor pool has inhibited rural transportation services as well. Workers are paid low wages and many times their job requires needed skills, such as bus mechanics and the operation of wheelchair lifts. Buses and vans tend to be under-maintained, warranty work is inconvenient, and securing settlement for warranty work is often difficult. When a vehicle breaks down, it often has to be towed hundreds of miles or trailered a long distance. Disagreements arise when deciding who pays for the transportation replacement vehicle or warranty issues. Often seniors accessing public transportation do not feel their options accommodate their needs, including their emotional concerns and physical needs (Goins & Krout, 2006).

Chapter III: Recommendations

From reviewing the literature, it is evident that because multiple barriers may prevent rural older adults from accessing health care, their future can be uncertain and daunting. Clearly rural aging and the barriers encountered by rural older adults are matters that need to be further examined and understood by dedicated professionals and advocates. There is an obvious necessity to bring awareness to the needs of this diverse population by means of education and research. It is also important to view the complete picture of rural aging. By doing this, we see that there is not a "one size fits all" solution to fixing the problems encountered by rural elderly. It is also apparent that many of these barriers are interconnected and solving one still may leave barriers to others.

Therefore, in making recommendations based on the literature review it is necessary to address the needs and problems and possible solutions on two levels. First, in a broad-based, general sense relating to the programs and policies that cover a multi-faceted range of possibilities for improving rural elder care, and then at the specific areas of need discussed in the literature review.

To address these issues, health care professionals, caregivers, and the government must begin by recognizing the heterogeneity of rural communities and have a commitment to abolishing the stereotypes and myths that exist. Rural communities are not one size fits all when it comes to planning and implementing solutions to health care barriers. The problems affecting rural health care, such as longer traveling time and higher out-of-pocket expenses, often require solutions that are different from those of urban areas (Rogers, 2002) and will differ from one rural geographic location to another. Rural health care workers and caregivers need to consider

to these differences when working with rural elderly and policy makers must be aware of the special circumstances rural elderly face when creating or changing policies that will affect them. (Iezzoni et al., 2006).

Evidence from the current literature suggests that education concerning issues in rural aging is vital to those that work, live and govern in rural areas. With a heightened awareness of available programs and services, consumers and community members of all ages would be more apt to recognize that the provision of important programs for the aging is an investment as a whole for the health of their community, present and future. As a bonus, the population at large would benefit, as well as those most in need of services for the elderly.

The framework for educating communities is already in existence because of established agencies such as public health departments, Area Agencies on Aging, senior centers and county extension offices. By forming educational partnerships, these agencies can collaborate to share resources and information. These partnerships have the ability to educate large numbers of people in various ways. Whether it is providing education to rural caregivers, advocating to the government for continued or increased funding for programs, or assistance in finding programs and resources for those in need, these agencies have an important task in educating and supporting rural community health for the elderly. It is also important that these programs be maintained to allow appropriate education to continue and expand. These programs can provide rural communities with a chance for preventive health education, accessible health care and the satisfaction of good health as well as empower rural vulnerable populations to better manage and prevent health problems. Local leaders must take ownership of local programs and services available and be involved in the creating community solutions for community problems (Butler

& Kaye, 2003). Creating a community bond with a common goal in mind can create a strong network of rural health care workers and foster a sense of teamwork.

Another possibility that deserves to be further examined is the role of rural ministry. Most churches in rural areas are small enough that clergy and church parishioners are going to know one another and keep updated on other members' lives. Education to parishes illustrating how to identify isolated rural elderly and what resources are available to them can be a great tool to outreach to those persons. Additionally, parish nurses could be trained by public health nurses to outreach to rural elderly church members. They can also assist in identifying and guiding care for rural older adults and support family members that are caring for a rural family member (Goins & Krout, 2006).

Interestingly enough, there are seminary programs tailored to meet the specific needs of rural communities in America. Given the unique circumstances of rural communities, it should be possible to include coursework within a rural ministry seminary program assisting clergy in recognizing the importance of working closely with available resources in rural communities to ensure their rural older church members' needs are met spiritually and physically (Goins & Krout, 2006).

While education is important, funding rural programs is just as important as well. Inadequate funding seems to be one of the central issues at hand, with programs for rural services losing funding all the time. Taking money from assistance programs will have a negative effect on the health of an already extremely vulnerable group of people. It is imperative that politicians, local, state, and federal, understand the consequences of averting funds away from these rural services. It would seem that allocating money for these programs now will save

money in the long run. To get needed services, older rural adults are heavily reliant on public entitlements such as the Older Americans Act, Medicare, Medicaid, and Social Security. These entitlements sustain rural communities by giving them the financial support they need to endure and are safety nets which provide protection of health and income. Restraining Medicare, Medicaid, and Social Security will have an unhealthy effect on rural communities as these programs offer them a sense of security. These alterations may be felt throughout rural communities and have a negative effect on their ability to access appropriate health care and other services. Some may choose not to seek health care assistance at all.

Another principal concern is the lack of adequate organizational resources to develop and sustain programs aimed at meeting the multifaceted long-term care and social needs of rural communities. Current policies and resources do not adequately address the challenges of rural communities such as low population density, increasing community diversity, lack of infrastructure, and ongoing service demands. These difficulties are surpassing the supply of resources needed to meet the escalating demands (Goins & Krout, 2006). In Daniels County of very rural eastern Montana, 30% of the population is age 60 and older and 13.2% of the elderly are considered to be in poverty (Brengle, 2011). Of those age 60 and older, 117 receive some kind of assistance through the AAA under the Older Americans Act (Brengle, 2011). The Area Agency on Aging has limited resources in such a rural area and cannot afford to staff their own nurse however, the county health nurse works closely with the medical community and Adult Protective Services to determine the needs of the county clients (Brengle, 2011). With 30% of the population at age 60 and older, it is imperative that services and programs be available to them. It is also essential that with the few resources that are available in Daniels County, that

health care workers partner together to prevent and overcome barriers to proper health care. Daniels County anticipates that its elderly population will continue to grow. Currently, their aging plan includes expanded services for congregate and home delivered meals, home health and respite services, a senior center and transportation. Since Daniels County is decreasing in numbers of younger people, it is expected that many seniors will be caring for other seniors. This has prompted a desire to create a senior companion program. The major concern, however, is maintaining existing services to the elderly in Area I without an increase in federal funding and maintaining the allotment of one-time only State funding while the need for services keeps growing as the elderly population grows (Brengle, 2011).

A focus on health and wellness in rural areas, not just treating illness is an appropriate approach to overcoming barriers to health care. In rural communities, this approach includes providing services through local providers as appropriate, bringing providers into the community on a scheduled basis, linking to providers in distant urban areas, and integrating health care services with other sectors (such as human services) that can contribute to individual and community well-being (Mueller, 2009). Rural residents need to be able to access an entire continuum of care, which is not always available in rural areas. Local primary care physicians, however, should have a strong relationship with specialist in urban areas, who will in turn coordinate care with the local provider. Rural areas should also have the ability to access non-physician primary care providers such as nurse practitioners and physicians assistants. Telehealth has become a solution for many rural areas. With the use of telehealth, services such as pharmacies, mental health, and specialist visits are able to occur. Advances in telehealth should be used to redesign the health care delivery system so that essential services that are local

are protected and preserved, even in places unable to support high-cost providers (Mueller, 2009).

Many states have initiated community health partnership where a wide range of services are available such as medical inpatient, outpatient, health-related services; a multidisciplinary team for care coordination; consumer involvement in decision making; and emphasis on preventative services and quality improvement. This is a patient-centered model where a primary care provider serves as the "leader" of a team that includes social workers, nurses, and other professionals caring for individuals. Essentially, the client is at the center of the team, engaged in directing his or her own care and participating in decisions to form a plan of care.

Focusing on a collaboration model, which emphasizes enhancement of communication among community-based agencies and the health care delivery system, has been successful for many communities. Collaboration models benefit from the strengths of rural areas, which have great resources such as dense social networks, social ties of long duration, and people with shared life experiences. Successful collaboration integrates these ties and sense of place to develop an effective structure for delivering health care services and public health education (Galambos, 2005).

Overcoming Barriers to Health Care in Rural Areas

Poverty

With high numbers of rural elderly in poverty, it is important for communities to be proactive in reaching out to assist vulnerable people. Assisting rural older adults in finding additional benefits can provide them opportunities to visit the doctor, buy better food, and access

transportation in hopes that the goal of better health can be achieved. Better health can means healthier communities and less financial strain on government resources.

Rural elderly residents, however, may find it harder to ask for assistance due to their strong beliefs in self-sufficiency. Local agencies and community organizations may find that extra time and effort is needed in order to get the word out about available programs and services, keeping in mind the unique needs and characteristics found in working with rural older adults.

Additionally, since rural residents tend to rely more on informal levels of service in keeping with strong self-reliance trends, providers might want to consider this when marketing their services. Distance and financial limitations may require greater efforts toward cooperation between agencies and programs.

Perhaps census data could be useful in targeting elderly people, specifically rural elderly. Using the combined resources of community partnerships such as Area Agencies on Aging, county extension offices, public health departments, medical clinics, and potentially even churches and schools, the opportunity to reach as many people as possible is there through mailings, phone calls, and word of mouth. Many elderly people do not know about programs they may qualify for such as Medicare, Medicaid or Supplemental Security Income (SSI), veteran’s benefits or other special programs.

Furthermore, state, county, and local health and human services caseworkers for entitlement programs provide program information and eligibility criteria, as well as conduct client intake and assessments related to SSI, Medicaid, and welfare. At this point, these

caseworkers can make referrals to appropriate agencies for services such as transportation or nutrition programs.

Access to Appropriate Health Care

Health care costs. While rising health care costs are becoming an issue for all ages of the population, they are particularly burdensome to rural elderly. Health care is not always available financially to a rural population that tends to be older and poorer.

A large segment of the rural population is dependent on public health programs such as Medicare and Medicaid. These programs are under scrutiny as the government looks for ways to reduce funding for these programs as a way to reduce the national debt. Unfortunately, funding cuts to programs that rural elderly are extremely dependent on can produce undesirable results: less than adequate care and worsening health conditions.

Health care reform legislation should strengthen these public programs that rural elderly so desperately depend on. It is suggested that the ultimate health status of rural people has much to do the health insurance coverage. Insurance that provides better coverage at a lower cost results in more health care services. Thus, health care reform should not only focus on making health care more affordable for rural elderly but should also emphasize health promotion, preventive care and health and wellness resources.

Physician and other health care worker shortages. The changes to Medicare and Medicaid not only affect health care costs for consumers, but changes to these programs affect recruitment and retention of rural physicians. Since reimbursement rates are lower in rural areas, promoting rural medicine can be challenging. Given this situation, a commitment from

communities, government, and medical schools is the key to developing an adequate and sustainable rural physician workforce (Rourke, 2010).

Rural medicine does not have the glamor and appeal that medicine in urban areas provides. Rural physician burnout rate is high, reimbursement rates are lower, and the professional connections are not as strong as in urban areas. The question is how do rural areas recruit and retain rural physicians? Medical education can play an important role in the recruitment and retention of rural physicians. Unfortunately, most medical schools are concentrated in urban settings. Upon graduation, most graduates leave to urban areas leaving only an insufficient number of graduates going to rural areas.

It has been found that medical students that come from rural areas are much more likely to return to their rural backgrounds upon graduating, yet students from rural areas face many difficulties and tend to be under-represented in medical schools due to the fact that urban students are more likely to have parents that are urban, wealthier, and more highly educated. In response to this, medical schools and the government must continue to implement strategies to make medical school a fair opportunity for rural students and urban students alike (Rourke, 2010). Together, the government and medical schools can implement programs using premedical school outreach education preparatory courses; admission policies that recognize the diversity of geographic backgrounds and experiences; and provide tuition and scholarship support to make medical school more affordable (Rourke, 2010).

One such program is the popular WWAMI program. The WWAMI Medical Education Program is a cooperative with the Washington medical school and the states of Washington, Wyoming, Alaska, Montana, and Idaho (Uken, 2010). It is designed to make medical education

accessible to students in the mostly rural Pacific Northwest by sharing existing facilities and personnel in universities and communities in the WWAMI states. Each participating state designates a specific number of medical school seats. These are supported through a combination of appropriated state funds and student tuition which covers the full cost of medical education. This allows for publicly supported medical education in states where there is no freestanding medical school and also allows WWAMI students to pay in-state tuition. First year students who enter the program are enrolled in the University of Washington School of Medicine but take their first year of medical school basic science courses in their home states. After their first year, they join their classmates at the U of Washington Seattle campus (Uken, 2010). The program has three goals: To make public medical education accessible to residents in the states of Washington, Wyoming, Alaska, Montana, and Idaho; encourage graduates to choose careers in primary care medicine and to locate their practices in rural areas of the Northwest; and to encourage talented students, especially minorities, in the WWAMI states to enter medicine (Uken, 2010). The WWAMI program is funded some through state dollars but with states trying to reign in ever mounted costs, the WWAMI program is in trouble.

The education that medical schools provide is fairly universal, however, much of what is learned can also be contextual. Rural areas have different demographic and geographic differences than urban areas. Social factors such as health, health status, disease, and illness patterns and the need to understand barriers to health care are important to bear in mind. Integrating a rural curriculum content and experiential learning within medical schools can help students to develop an understanding of rural people and their health care challenges. It can also encourage more students to make rural health care their practice of choice (Rourke, 2010).

One of the challenges many rural physicians face is the ability to access continuing education. Since they are often times the only physician available for many people, taking time off to attend educational programs is very hard. This prevents them from developing and maintaining the knowledge and skills required to work efficiently in rural areas where access to specialists is limited and often distant. Including rural physicians in student and resident teaching can encourage them to continually update their knowledge and skills. By developing outreach learning opportunities for students, residents and practicing physicians, medical schools can provide great learning possibilities for the student as well as reducing the need for practicing physicians to leave their practice (Rourke, 2010). The University of New Mexico encourages their second- and third-year medical students to obtain their state license, permitting them to work in the Locum Tenens Program. This program provides primary care practice relief emphasizing rural and medically underserved areas in New Mexico, allowing primary care physicians a chance to break away for continuing education, vacation, illness, or assistance while recruiting. Accessible, appropriate continuing education is considered essential to maintain skilled, competent health care providers (Jukkala, Henly, & Lindeke, 2008), therefore, making these formations of partnerships between university health professional schools and regional health care organizations, very important. They can also enable the coordination and advancement of education, research and health care for the entire region, benefiting the rural population (Rourke, 2010).

With the large numbers of rural elderly and the impending problems that seem to be growing and lurking in the future, education to upcoming professionals in fields such as social work, nursing, pharmacy and public health should be extremely important as well. It would be

beneficial to students looking at careers in the above professions to complete a college course within their specific curriculum dealing with rural aging. Colleges could offer more targeted classes for those students interested in working specifically in rural health care. Rural aging appears to be an important matter; enough that it should be offered as a course in many of the schedules of health care professional students. With the misconceptions many of us have of rural aging, classes can clear up these myths and can open up avenues to students that may have not even known about the problems in rural America.

Rural hospitals. Further exacerbating the problems of rural health care is the instability of rural hospitals. With low or narrow financial margins, rural hospitals do not have the ability to support investments in critical plant and technology upgrades. Medicare and Medicaid tend to account for most rural hospital revenues; however, Medicare and Medicaid reimbursement rates are generally below the actual costs of services provided. This leaves rural health care providers who depend on reimbursements from public programs financially stressed, in turn affecting available quality care for low-income and uninsured residents.

Again, health care reform should look at the financial strain affecting rural hospitals and health care settings. Any legislative and administrative decisions can result in declining hospital revenues. It is imperative that health care reform address the needs of rural hospitals (i.e., plant and technological), provide appropriate resources to allow expansion of health care facilities and address the changes to public health care programs that cause financial stress to rural families and health care providers.

Additionally, with improved technological advances, such as those offered through telemedicine, rural residents can have an improved quality of care, improved clinical outcomes,

more individualized health care approaches, improved access to practitioners, and more cost-efficient interventions. There are barriers, however, including the cost of technology resources and the availability and cost of broadband and high-level telecommunications technology. Health care reform legislation should address the cost disparities in rural hospitals in order to recognize the full potential of health information technology.

In 2003, a change in The Medicare Modernization Act allowed qualifying rural hospitals that take care of a large percentage of poor and elderly to qualify for the 340B Discount Drug Program (National Center for Health and the Aging, n.d.). This program allows qualified hospitals to gain pharmaceuticals at a reduced cost, therefore lowering the cost to their patients. The hope is these hospitals will use their savings to provide more services to their patients or expand services to more patients. Efforts from organizations, such as the Office of Rural Health Policy, assist hospitals in enrolling in this program.

Home care/hospice. Providing community-and home-based care not only allows rural elders to age in place but is more cost-effective than other institutional options such as nursing homes and skilled care facilities. Bringing services to the people that need them saves them their own and government dollars. This seems to be a more fiscally sensible approach as well as a more sensible approach from a human perspective.

State policymakers may want to reevaluate their current policies and reimbursement processes to support a shift to home-and community-based care services as these current policies may be outdated and written when institutional care was the more prevailing way to care for rural aging adults. They may also want to consider if finding qualified workers to work in home and community-based care due to the fact that rural elderly cannot always get the necessary care

to remain at home due. Policymakers should consider student loan reimbursement or scholarship programs to strengthen their workforce.

As previously mentioned, family member, friends, and fictive kin are often the ones caring for rural older adults in their homes. These caregivers are an important part of keeping rural elderly in their homes as long as possible. In some states, family and friends serving as caregivers are reimbursed through state funds. States may see reimbursement to family and friends a more fiscally advantageous approach by keeping the rural elderly in their homes rather than paying higher costs to have a person placed in an institution. Along those lines, states can help ease the burden of caregiving are workplace leave policies since many caregivers have to choose between work and caregiving. Furthermore, many family members may that work may take twelve weeks of unpaid leave annually to care for an aging relative under the Family and Medical Leave Act (FMLA). Unfortunately, not all workers are eligible for FMLA and the time may be used to care for only immediate family members. Sometimes it is not feasible for someone to take three months off of work without pay. Some states have enacted paid leave insurance programs that provide partial wage replacement for those eligible.

Nutrition. Part of allowing rural older adults to independent stay in their homes and remain healthy is providing proper nutrition. For many rural elderly, however, food is not always a necessity but it is a luxury.

Community programs are vital in maintaining people in their homes. The Meals on Wheels program is an example of a community-based service that delivers meals to homebound elderly as well as providing meals to senior nutrition sites. Meals on Wheels has also started The Rural Initiative. Due to increased cost, distance, time and labor, Meals on Wheels has had a hard

time reaching the rural elderly population. With The Rural Initiative, Meals on Wheels hopes to bring together people from a broad range of capacities including the nonprofit, corporate, public and academic sectors. The focus will be to discuss the issues facing nutrition and rural aging and to find solutions. The hope is that a model for the rural Senior Nutrition Program will be developed and implemented. It will also ensure enhanced capacity and sustainability of the program; the funding of pilot projects to test the model; and the use of the model nationwide.

Additionally, there are other programs available such as the SNAP program, formally known as the Food Stamp Program. SNAP is designed to help people make ends meet so that healthy food is affordable. There are income limits with this program but seniors are allowed to receive commodities and meals-on-wheels.

There are several programs available at local levels that can assist elderly in getting the food they need. For instance, the Food Commodity Program is offered through Action for Eastern Montana. This program provides a monthly 30-pounc box of food to persons age 60 and older who meet 130% of the poverty guidelines. Food banks are also a source of food for those that cannot make ends meet. Many times, local grocery stores will provide fruits, vegetables, milk, yogurt and other items that are must be sold by a certain date to be on their shelves to food banks to distribute. Perhaps food banks could consider having volunteers deliver some of these items to the rural elderly who cannot drive.

The use of these services depends on knowing what options are available. It is imperative that these programs market their availability to the community through health centers, hospitals and clinics, church organizations, public health departments, extension offices, senior

centers, and even grocery stores. The more people that know of available resources, the more they will be able to refer to appropriate agencies.

Transportation. The unavailability of transportation services prevents rural older adults from accessing the needed services and programs to allow them to live independent healthy lives. Transportation is often called the "tie that binds," meaning that it connects seniors to the essentials of life (Goins & Krout, 2006, p. 184).

Transportation should be considered a fundamental need for rural elderly. Providing low cost, accessible transportation is central to ensuring the needs of rural elderly are met. There are a variety of options that some states have implemented in an attempt to connect rural elderly with services they need, demonstrating promising innovative alternatives to provide transportation.

One such solution is the Transportation Reimbursement and Information Project of Riverside, California. This program is a non-profit, social assistance program that enlists the help of volunteer drivers/escorts. Riders have the ability to find their own drivers and the program provides reimbursement for mileage to the rider to give to the driver. By allowing the rider to find their own drivers, they feel more empowered to be involved in their ability to make decisions. Furthermore, it allows riders to be able to go where they need to go, without worrying about driving long distances or costly transportation (Goins & Krout, 2006).

Unfortunately, not every community is going to have the ability to provide such program solutions, such as the above, which are great examples of communities thinking outside of the box which is necessary when dealing with limited funding and community resources.

Community leaders, however, have the abilities to decide where funding is used. Education to community leaders can change their perceptions and lack of commitment by

outlining the benefits of providing transportation to rural seniors and clearly defining the needs and advantages of the services. Furthermore, to ensure the message is heard, it is important to make sure that the proper professional and political figures have understood and will feel compelled to follow through on the message.

Community leaders must fully understand the transportation needs of rural seniors and make a financial commitment to meet those needs. Due to the fact that funding is scarce for many communities, it is important for them to know what financing options are available to assist in beginning or expanding programs for transportation. Several grants are available through local, state and federal government agencies that can assist in transportation projects. Awareness of these funds is beneficial for communities as potential options.

Community leaders must also be encouraged to create transportation services that offer flexibility, expand beyond the immediate community and county, and are low cost since rural seniors tend to travel longer distances for longer periods of time. Creating transportation services that are friendly, flexible and cost efficient will profit many rural seniors attempting to access health care and community-based services.

Volunteer driver programs also have the potential to be successful in rural areas and will play an important role in the future in providing low cost transportation to rural seniors. To be successful, however, the program would depend on a community that is willing to design and develop the program as well as recruit, train and support drivers. This would require communities to take the time to research other successful volunteer driver programs and to understand the involvement of volunteer drivers.

Using volunteer drivers would be less costly and more efficient, a definite benefit for many rural seniors. With a volunteer program offering hopes of lower costs and high efficiency, rural seniors may be more impelled to access needed health care and community-based services that may not be as manageable with other transit options.

There are many programs that currently work on behalf of the rural population. Through this literature review, I found the website www.ruralhealthinfo.org. This website outlined many of the disparities that rural communities and rural elderly face. The Rural Health Information Hub, formerly the Rural Assistance Center, is funded by the Federal Office of Rural Health Policy and is a huge source of information on rural health issues and is committed to supporting health care and population health in rural communities. This website can help communities:

1. PLAN: The website provides toolkits and program models that show what works in rural communities. This aids interested communities in building effective community health programs.
2. DEVELOP: The website gives information needed to build, maintain, and improve services in interested. Their online library provides access to thousands of resources from organizations across the United States
3. LEARN: The website provides insight into the issues affecting rural America
4. CONNECT: The website connects communities to others who have passion and expertise in rural health issues. Their resources can help you identify organizations and experts on a variety of topics, as well as in your state.

Another beneficial program is the PACE (Program of All-inclusive Care for the Elderly). This program originally operated in urban areas but expanded in 2006 to serve rural areas. The

focus is to serve individuals 55 and older and who are eligible for both Medicare and Medicaid. PACE programs operate a PACE center that house multiple services under one roof including primary care, social work, personal care services, occupational and physical therapy services and meals. Each PACE program receives monthly payments from Medicare and Medicaid instead of fee-for-service reimbursement (Ewing, 2014)

On a more local level, though are the Area Agencies on Aging (AAA). Funding is provided to the Area Agencies on Aging, who then disperse the funding throughout their regions based on the needs of their population. Area Agency on Aging are crucial in ensuring the development of community-and home-based services in their communities. They do this by getting input from area consumers, service providers and others interested participants. The AAA develops a plan outlining the needs and recommendations based on the input. AAA also contracts with local service providers to deliver services such as Meals on Wheels, transportation and in-home services. They can also provide services such as Information and Referral/Assistance, case management, benefits/health insurance counseling and family caregiver support programs. Their goal is to help older adults and people with disabilities living with dignity and choices in their homes and communities for as long as possible.

Every single person should be afforded the ability to live independently and maintain control over their life as long as possible. It should not matter if you are rural or urban, poor or rich, healthy or unhealthy; we all deserve the same opportunities in life. The ability to age in place and remain in the setting of choice, usually the home, instead of being relocated to another community or long-term care setting, is directly related to the availability of resources and services to accommodate increasing disability and dependency. Ideally, as we age, we should be

able to remain in our setting of choice throughout our life span. This would be made feasible by a community that is able to meet the challenges to provide services and offer a flexible response to the changing needs of disability and dependency.

It is assuring that policy makers and care providers recognize that barriers to good health care in rural areas do, indeed, exist and that it is acknowledged a realistic approach must be used when dealing with this population. Policy makers and care providers, however, need help promoting funding and services to rural areas. They cannot go at this alone. For those that live in rural areas, aging in place is definitely a concept to consider. People in rural communities, young and old, need to educate themselves on their population trends. They need to be advocates for their community and for those that live in the community, presently and in the future. It is important to think outside the box. It cannot always be assumed that there will be money and services available to assist those in need, and therefore, communities will need to get creative finding ways to deliver services to their rural counterparts. Otherwise, what ails Bessie, will continue to ail “Bessie.”

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