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Promotion of the village model in rural areas: an educational guide

Caitlin Herdrick
University of North Dakota

Samantha Kraus
University of North Dakota

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Promotion of the Village Model in Rural Areas: An Educational Guide

By
Caitlin Herdrick, MOTS & Samantha Kraus, MOTS

Advisor: Nicole Harris, MOTR/L

A Scholarly Project
Submitted to the Occupational Therapy Department
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This Scholarly Project Paper, submitted by Caitlin Herdrick and Samantha Kraus in partial fulfillment of the requirement for the Degree of Master of Occupational Therapy from the University of North Dakota, has been read by the Faculty Advisor under whom the work has been done and is hereby approved.

Nicole Harris, MOT, OTR/L

Signature of Faculty Advisor

2/7/2018

Date
PERMISSION

Promotion of the Village Model in Rural Areas: An Educational Guide

Department Occupational Therapy

Degree Master of Occupational Therapy

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ABSTRACT

Background: The Centers for Disease Control (CDC) reports that the adult population will double the population of Americans aged 65 years or older during the next 25 years to 72 million (2013). The increasing age of baby boomers will have a significant impact on healthcare resources and available housing options. This will have a drastic effect on rural dwelling elderly individuals and their access to the healthcare and other resources. Many aging individuals want to remain in their homes, communities, and social circles. Remaining in one's home is more cost effective, compared to skilled nursing and assisted living facilities (Baernholdt, Yan, Hinton, Rose, & Mattos, 2012). An ideal model that allows elderly individuals to age in place is the village model. The village model is an innovative consumer-driven approach that aims to promote aging in place through a combination of member supports, service referrals, and consumer engagement, and access to healthcare resources and professionals (Scharlach, Graham, & Lehning, 2011). Village members continue to live in their own home and follow a membership model, where the model is financed by member dues rather than fee for service. There is significantly limited research in regard to the implementation of a village model program within rural communities and associated data. This can be attributed to the overall “newness” of aging in place, and the village model along with the unfamiliarity with these concepts (Scharlach, Graham, & Lehning, 2011).

Purpose: The purpose of this scholarly project was to develop an educational program plan on the village model that can be used by occupational therapists, and other health professionals. In other words, this program will educate health care professionals on the benefits, costs, and services associated with the village model, and will offer steps for future implementation in rural areas. The educational materials that will be utilized for this program include a lesson plan, PowerPoint presentation on aging in place, the “2030 problem,” and the village model, a brochure further defining the village model, and a post-survey to be completed after the session. The village model will require extensive education to healthcare professionals, in order for this program to be implemented into rural areas.

Methods: The developers of this program reviewed the literature to determine; (1) the growing age of the United States (US) population; (2) the importance of familiarizing individuals with the benefits of aging in place; (3) the increasing demands the aging population will have on health care resources; and (4) the definition and services associated with the village model. After a thorough review of the literature, the researchers established a need, and created the products to address this need.

Conclusions: The results of the literature review led to the development of Promotion of the Village Model in Rural Areas: An Educational Guide. This program serves as a resource to provide education to healthcare professionals on the “2030 problem,” aging in place, and the village model. The structure and objectives of the session addresses the “2030 problem,” while offering a potential solution, in the form the of the village model.
CHAPTER I

Introduction

The Centers for Disease Control (CDC) reports that the adult population will double the population of Americans aged 65 years or older during the next 25 years to 72 million (2013). The increasing age of older adults will have a significant impact on healthcare and will require increased medical resources. The rapidly aging population will affect the availability of rural long-term care and assisted living facilities. Therefore, alternative rural housing options, communities, and services need to be developed to accommodate the increasing needs of the older adults. Many of these aging individuals want to remain in their homes, communities, and social circles, instead of being institutionalized in a skilled nursing facility. Remaining in one's home is more cost effective than moving for older adults. This concept of aging at home is referred to as aging in place. An ideal model that allows elderly individuals to age in place is the village model. The village model is an innovative consumer-driven approach that aims to promote aging in place through a combination of member supports, service referrals, and consumer engagement, and access to healthcare resources and professionals (Scharlach, Graham, & Lehning, 2011). Village members continue to live in their own home and follow a membership model, where the model is financed by member dues rather than fee for service.
Incorporating an aging in place program with an emphasis on the village model would help accommodate for the increases in the elderly population’s needs such as caregiver assistance, social activities, quality of life enhancement, and access to medical providers within the community (Knickman & Snell, 2002). All resources would be readily available in the community and individuals would be able to age in place with other older village members. There is significantly limited research in regard to the implementation of a village model program within rural communities and associated data. This can be attributed to the overall “newness” of aging in place and the village model and the unfamiliarity with these concepts (Scharlach, Graham, & Lehning, 2011). Additionally, many of these models have been implemented into urban areas where health care resources are readily available. Research is needed to identify the benefits, costs, and usefulness of implementing the village model within rural communities.
CHAPTER II

Literature Review

This literature review looks at the growing age of the United States (US) population, the importance of familiarizing individuals with the benefits of aging in place, the village model, and the increasing demands on health care. With the associated aging population, the desire to remain home and age in place, rural vs. urban aging, the justification as to why occupational therapists (OT) should be the educators and advocates for this program, and the significance of implementing a program centered around social learning theory and the OT model of Ecology of Human Performance (EHP).

Growing age of the U.S. population

The age of the population in the U.S. is rapidly growing, increasing healthcare demands due to age-related changes and illnesses. The average number of people older than 65 years is expected to increase from 35 million to an estimated 71 million in 2030, and the number of people older than 80 years is expected to increase from 9.3 million to 19.5 million in 2030 (U.S Census Bureau, 2013). The increasing aging population will place many demands on healthcare including costs, facilities, and resources. The rapid growth in the number of older persons, coupled with continued advances in medical
technology, is expected to create upward pressure on health and long-term care spending (Jacobzone & Oxley, 2002). The “2030 problem” involves the challenge of assuring that sufficient resources and an effective service system are available in the year 2030, when the elderly population is twice what it is today (Knickman & Snell, 2002). It is becoming more popular for older individual to want to remain in their home. In order to meet the demands of the aging population, it is crucial that other housing alternatives are identified. Therefore, providing education on the topics involved with aging in place and the village model would be beneficial. Educating individuals on details of this program and the justification for it would help implement this program within rural areas, where resources are limited or scarce.

**Definition of Aging in Place**

The research consistently indicates that Americans, on the whole, prefer to stay in their own homes and communities throughout their lifespan (Greenfield, 2016). This concept of aging at home is referred to as aging in place. Aging individuals want to remain in their home, community, and social circle, instead of being institutionalized, or moving in with family due to fear of being a financial burden to caregivers and family members. There are many positives associated with aging in place such as maintaining residence, social circles, close proximity to family, less cost, and overall familiarity with the neighborhood and area (Greenfield, 2016). The positives identified with aging in place are related to community and socialization. A national survey conducted by American Association of Retired Persons (AARP) found that 73% of adults strongly agreed with the statement, “What I’d really like to do is remain in my current residence for as long as possible” (Keenan, 2010). Incorporating aspects of the village model into
an aging in place program would help address the community and socialization factors that contribute to successful aging in place.

**Definition of Village Model**

Villages are grassroots organizations that provide community dwelling older adults with a combination of nonprofessional and professional services, such as transportation, housekeeping, and companionship, as well as referrals to existing community services, and medical professionals (NCB Capital Impact, 2009). The village model allows members of the older population to remain in their home independently and not become a burden to their families. The World Health Organization Global Network of Age-Friendly Cities and Communities Program identified eight domains associated with the village model: social participation; civic participation and employment; respect and social inclusion; community support and health services; communication and information; transportation; housing; and outdoor spaces and buildings (Scharlach, Davitt, Lehning, Greenfield, & Graham, 2014). These domains are the foundational aspects that the village model is structured around. The village requires its members to pay a yearly fee for unlimited access to the eight domains. In exchange for membership dues, participants gain access to an array of social, educational, and recreational activities, assistance with driving, housekeeping, medical services, and other support services (Scharlach et al., 2012).

The Village Model is a social initiative that emphasizes member involvement and service access, to help communities to become more age-friendly, and further enhance quality of life through aging in place (Scharlach et al., 2014). By doing this, they are not having to enter into a long-term care facility such as a skilled nursing home (SNF), or
assisted living. Villages and other social organizations may have untapped potential for enhancing their members’ ability to age in place consistent with the goals of age-friendly initiatives, while also promoting constructive changes in the overall community (Scharlach et al., 2014).

Currently, there are 160 operational villages in the United States, 78% are freestanding and 23% are within a larger organization (Graham, 2016). However, the village model is only being implemented in larger urban areas where there is a higher population and resources are more readily available. For older adults living in rural communities in the United States, there are many challenges associated with aging in place and program implementation such as isolation from larger communities, lack of transportation, sparse resources, and limited age-appropriate housing options (Bongaarts & Zimmer 2002). Due to the lack of available resources and isolation, offering these services associated with the village model would be extremely beneficial to the aging rural populations, further justifying the need for this program.

**Desire and benefits of aging at home vs. in facility**

According to a study conducted by the AARP, 90% of people age 65 and older would prefer to stay in their own homes and communities as they get older, and not relocate to a nursing home or assisted living facility (Khalfani-Cox, 2017). The estimated average cost of residence in a skilled nursing facility (SNF) or an assisted living facility can range from $250-$300 per day depending on the location, type of room (private vs. semi-private), and services provided. This is equivalent to roughly $8000/ per month. These rates will only increase with the growing U.S. elderly population and potential shortage of institutions. The yearly rate for noninstitutionalized long term care (village
model) is roughly $1200 (Lehning, Scharlach, & Davitt, 2017). The village is significantly less expensive compared to institutions, and the aging individual is able to maintain their residence and remain active within their community. According to Marek et al. (2005), individuals in the aging in place programs, demonstrated significantly better clinical and cost outcomes when compared to similar individuals in nursing homes. Additionally, aging in place persons improved in the overall measures of cognition, depression, incontinence, and activities of daily living (ADL). The individuals who chose to age in place, had significantly improved physical and cognitive factors which could be contributed to a higher quality of life and overall satisfaction. Therefore, the aging in place individual's immediate community and social support, played a crucial role in these improved physical and cognitive factors as well.

One of the many components of the village model is to promote social opportunity and engagement throughout the community. Villages promote social engagement by organizing social events, parties, group activities, and educational classes, while promoting independence, and social networking through the community (Graham, Schlarch, & Price, 2014). There is substantial evidence that social engagement and active community participation promote a number of salutary outcomes, including better health and well-being, enhanced recovery from illness, and overall quality and satisfaction with life (Emlet & Moceri, 2012). All of these social and community aspects are integrated into the overall program structure of the village model. In summary, the village model helps support community dwelling individuals by providing them with many positive impacts that may help reduce social isolation, increase confidence in aging and further increase quality of life, health, and independence (Graham, Schlarch, & Price, 2014). The
social and community aspects of the village model along with the overall cost of this
program, further justifies the needs and benefits this program could offer to rural
individuals.

**Rural vs. Urban Aging**

The proportion of people over 65 years of age is significantly higher in rural areas
than in urban areas, and these numbers are expected to sharply increase within the next
decade (Baernholdt, Yan, Hinton, Rose & Mattos, 2012). There are a multitude of
reasons as to why older adults chose to move or remain in their rural communities such as
the small town feeling, safety, scenery, cost, more land, and overall sense of feeling
connected (Dye, Willoughby, & Battisto, 2011). Therefore, many rural counties are
becoming naturally occurring retirement communities (NORCs). Unlike retirement
communities, SNF’s, and assisted living, NORCs are not designed specifically for older
residents as compared to urban areas (Baernholdt et al., 2012). In other words, these rural
areas are not equipped with the necessary resources to promote healthy aging in place, as
compared to urban communities, where resources are more readily available.

Many of the issues facing rural seniors are the same ones facing rural America:
long distances, provider shortages, increased expenses for rural healthcare resources and
limited access to recent technological advances (Ewing, 2014). Therefore, access to
quality rural health care is very limited and extremely costly. This can be attributed to
significant provider shortages in rural areas. While 20% of Americans live in rural areas,
only 9% of America’s doctors practice there (Winter, 2009). In other words, many
doctors and other health providers would rather work in a more urbanized area due to the
benefits, accessibility of resources, and lure of city life (Winter, 2009). Additionally,
many of the rural areas with these provider shortages are extremely isolated, have increased demands and aging populations, limited resources, and potential for burn-out due to the demands of practicing in a rural setting (Kumar, 2016). Meeting the healthcare demands of the aging rural populations, could be extremely difficult which could potentially lead to institutionalization due to lack of available resources within the individuals chosen community.

The village model could help address some of these barriers and limitations experienced by rural aging in place individuals. That is, the village model would allow its members access to daily or weekly health care providers, and other necessary resources such as housekeeping, and home health. This further justifies the needs that could be addressed by implementing this program, especially within rural communities.

**Justification for OT**

Occupational Therapists (OT) have the appropriate skill set to implement and oversee educational programs to inform community dwelling rural individuals on the benefits of the village model. Occupational therapy practitioners utilize their understanding of the aging process to enable older adults to participate in meaningful activities in their desired environment given their individual abilities and personal attributes (Clark et al., 2011). OT’s can offer their unique perspective on aging as they are educated on age-related changes, developmental milestones, necessary tools to optimize home environments and can provide numerous community resources through advocacy. The researchers believe that having an OT educate this specific population on the village model or supervising this program would be beneficial due to their education, experience and overall abilities. OT’s also have the skills necessary to identify barriers
associated with aging and offer their experience and expertise as to why this program would be beneficial. Collaborating with other medical professionals, will allow the OT to gain additional perspectives, and insight, which would be beneficial in creating educational programs. However, in more rural areas there are limited to no health care providers. This is something that would have to be considered prior to implementation.

**Adult Education Theory: Social Learning Theory**

“The foundation of adult learning theory is the combination of two main ideas, andragogy and self-directed learning. Andragogy focuses on the basic principles of adults as learners. Self-directed learning states that adults take responsibility for their own learning, through which they achieve a deeper understanding of themselves (Sanchez, 2017)” This theory identifies the importance of adults being able to recognize how they best learn, and the independence associated with it. Adults need to be aware of how they best learn, retain material, and problem solve. Understanding how adults learn, will be the first step in the implementation of an aging in place village model program. Having this understanding and structuring an educational session around this will be beneficial. That is, developing an education program that is easy to read, and understand will better inform the target population about the benefits of aging in place and the village model program.

**Target Population**

The target population for this educational program on the village model is occupational therapists, students, and associated health professionals. The overall goal of the program is to provide education to these professionals about the village model in hope of future implementation in rural areas of Wyoming. With the education materials
provided, the health professionals can then reuse them to educate others. Education on the village model will be the first step. Once individuals are more aware of the proposed future influx of the aging population and the severe lack of resources, the village model can be implemented as a solution.

**Ecology of Human Performance Model**

The Ecology of Human Performance (EHP) model developed by Winnie Dunn, states that a person does not exist in a vacuum; the physical environment as well as social, cultural, and temporal factors all influence an individual’s behavior (Dunn, Brown, & McGuigan, 1994). The EHP framework specifies the relationship between a person, context, task, and performance. All concepts are important, but the emphasis is on how they relate to one another (Hinojosa, Kramer, Brasic & Royeen, 2017). The core constructs of EHP consist of the person, task, and context. The person is the center of the framework. Each individual has their own unique set of variables that will influence the tasks chosen and task performance. The tasks are objective sets of observable behaviors that allow an individual to accomplish goals (Hinojosa, Kramer, Brasic & Royeen 2017). The last core construct is the context. This refers to the set of interrelated conditions that surround the person. The context can provide both supports and barriers to performance (Hinojosa, Kramer, Brasic & Royeen 2017).

A unique feature of the EHP model in occupational therapy is its inclusion of five intervention approaches including; establish/restore, adapt/modify, alter, prevent, and create (Dunn, Brown, & McGuigan, 1994). The establish intervention approach focuses on person factors and aims to improve the person’s skills. The adapt or modify approach requires occupational therapists change aspects of the context to make adjustments to task
features (Hinojosa, Kramer, Brasic & Royeen 2017). This could include teaching individuals how to use adaptive equipment. In the alter intervention approach, the therapist focuses on the context and tries to find the best match between the person's abilities and the contexts available (Hinojosa, Kramer, Brasic & Royeen 2017). Prevention interventions are designed to preclude the development of problems. Therapist using this intervention are avoiding possible negative outcomes in the future. The last intervention approach is create. In this intervention the focus is on creating circumstances that support optimal performance for all persons (Hinojosa, Kramer, Brasic & Royeen 2017).

The EHP model was selected as a framework to consider the effect of context on an individual’s performance range. The model supports inter-professional collaboration and is not strictly for use by occupational Therapists. The core constructs and the intervention approaches can be applied across human service professionals and provide a common, non-discipline-specific language. It is because of this, that the model would be a fitting guide in implementing an educational program of the village model to other health professionals.

Limitations

Implementing the village model into rural areas of Wyoming will have its challenges. Additional training for health practitioners including doctors, nurses, pharmacist, social workers, and occupational therapists will be required to promote best practice and use. Educational materials will be developed to address lack of knowledge on the village model and will be used as a foundation for future implementation. Scheduling educational sessions where the proposed program plan will face difficulties.
These difficulties include time demands, and overall “newness” of the village model concept. There are several factors to consider when implementing educational programs and materials to address the aging population and the development of the village model in rural Wyoming.

**Conclusion**

The US population is aging, resulting in increased healthcare costs, demands, and over-crowding at institutions. This increasing population will affect the availability of rural long-term care and assisted living facilities, further validating the importance of identifying alternative rural housing options, to better accommodate the aging population. Many of these aging individuals want to remain in their home for a multitude of reasons. An ideal model that allows elderly individuals to age in place with the necessary health care resources is the village model. In summary, this literature review looked at the growing age of the US population, the importance of familiarizing individuals with the benefits of aging in place, the village model, and the increasing demands on health care with the associated aging population, the desire to remain and age at home, rural vs. urban aging, the justification as to why OT’s should be the educators and advocates for this program, and the significance of implementing a program centered around social learning theory and the OT model of EHP.

Based on the literature reviewed, a gap was found, suggesting there is limited healthcare and long term-housing resources for the aging in population. The proposed project has been developed from this literature review to implement an educational program plan on the village model that can be used by occupational therapists, and other health professionals. To begin to address these issues and the gap, the first step includes
education. Education materials will be designed that can be used to teach students and health professionals about the discussed dilemma and the village model as a solution. The village model will require extensive education to be completed first and this program plan will assist in this step. This project will allow collaborative and education to simultaneously occur.
CHAPTER III

Methodology

For the purpose of this scholarly project the activities and methodology are described in detail throughout the methodology and product chapters. The project developers, Caitlin Herdrick and Samantha Kraus, first performed a review of literature. Through the review of literature utilizing the American Journal of Occupational Therapy, and Harley E. French Library of the Health and Sciences a significant gap in the available research and literature was identified for viable options for placement of the growing number of aging adults. There is a significant portion of the US population that is aging and considered to be older adults. Healthcare resources are already limited and will become even more scarce over the next several years. This will result in a large portion of the US not having the resources they need to attend to age related changes and other medical needs. Through reviewing the literature and identifying a gap, the project developers have acknowledged the village model as a potential solution to help solve the “2030 problem” and identify other aging in place programs. The village model, provides older adults with a variety of services, which will help promote quality of life, access to resources and successful aging in place. The village model is an organization that provides community-dwelling older adults with a combination of
nonprofessional and professional services, such as transportation, housekeeping, and companionship, as well as referrals to existing community services, and medical professionals (NCB Capital Impact, 2009). Establishing the village model in rural areas provides a solution for older adults with limited resources to be able to stay home and still receive services to meet their medical needs. Two theories were introduced during the literature review to act as a guide while designing educational tools regarding the village model and program implementation.

The theories include the Ecology of Human Performance (EHP) and Social Learning Theory. The EHP model was chosen to guide inter-professional collaboration while focusing on the specific needs of the older adult. Social Learning Theory was used as a foundation to build appropriate and relevant materials to guide educational sessions on the 2030 problem and the village model as a solution. The educational tools developed by the project developers are anticipated to be used in a variety of educational settings including; in-service meetings, poster presentations, committee gatherings, student presentations, and informational meetings for health professionals. The tools were developed using these theories to be used to educate health professionals on the importance of the village model.

The program will consist of a group based interactive educational session that allows for the health professionals to learn about the village model and the potential for future implementation. The materials and products utilized for these sessions include a lesson plan for the educational session, PowerPoint presentation on aging in place, and the village model, brochure on the village model and offered services, local resource handout for the area (housing options, home health, meals on wheels), and a course
evaluation that will be given to class participants at the end of each educational session, to provide feedback and comments. A future product implementation will be a blog, where health professionals and other individuals are able to communicate with others in regard to the village model. These materials will be available for health professionals to utilize for future program implementation, and for providing information to rural community dwelling individuals.
CHAPTER IV

Products

The product includes:

• Lesson Plan

• Power Point Presentation on the Village Model

• Brochure

• Resource Handout for Older Adults

• Course Evaluation
Lesson Plan: Aging in Place and Village Model Presentation

- **Introduction** (prior to starting presentation)
  - Please introduce yourself (brief background)
  - Relation to topics of Aging in Place and the Village Model
  - Encourage audience members to ask any questions or clarification throughout the duration of the presentation

- **Questions:**
  - Please ask audience the following questions:
    - How many of you, know what Aging in Place is?
    - Are you familiar with the “2030 Problem?”

- **Objectives for Aging in Place:**
  - Understand aging in place
  - Identify differences between urban and rural aging
  - Identify the benefits of aging in place
  - Understand the “2030 Problems”
  - Determine potential solutions for the “2030 problem”

- **PowerPoint presentation on Aging in Place:**
  - Please see slides, and attached notes for presentation
  - Continuously encourage audience members to ask questions

- **Break Time**
  - After the completion of the Aging in Place portion of the presentation please provide a 15- minute break

- **Questions:**
  - Prior to starting the Village Model portion of the presentation please ask the following questions:
    - How many of you, know what the Village Model is?
    - If you have heard of it, where/whom did you hear about it from?

- **Objectives for the Village Model:**
  - Understand the Village Model and services included
  - Rural Village Model implementation
  - Medical services provided by the Village Model
  - Funding of the Village Model
• Health benefits of the Village Model

• **PowerPoint presentation on the Village Model:**
  o Please see slides, and attached notes for this portion of the presentation
  o Remind audience to ask questions, or for clarification throughout duration of presentation

• **Conclusion:**
  o Ask audience if they have any concluding questions in regard to the presentation
  o Please pass out and ask audience to fill out post-survey
    - Presenter will collect surveys
  o Encourage audience to view materials (brochure, resources hand-out)
    - Located in the front of the room
  o Thank audience for coming to this presentation and active engagement
    - Remind audience that if they wish to utilize the materials and PowerPoint to contact the presenter or developers of the content
    - Contact information on PowerPoint

*This lesson plan/outline may be duplicated for educational and informational purposes*
Welcome to our presentation! Today we will be talking about Aging in place, the 2030 problem, and the village model. Please feel free to ask any questions throughout the duration of this presentation.

Presenter(s) please provide brief background on yourself and your relation to this topic prior to starting!
The objectives that we hope to accomplish by the end of this section of the presentation on aging and place is:
1.) define aging in place
2.) identify differences between urban and rural aging
3.) identify the benefits of aging in place
4.) recognize the significance of the 2030 problem
5.) determine potential solutions for the 2030 problem
What is Aging in Place?

- “Aging in Place” is simply a matter of preserving the ability for people to remain in their home or neighborhood as long as possible (Ball, 2014).

This concept of aging at home is referred to as aging in place. Aging in place is simply a matter of preserving the ability for people to remain in their home or neighborhood as long as possible. Aging in place is becoming more and more popular for elderly individuals.
Aging in Place Initiative

- A national survey conducted by American Association of Retired Persons (AARP) found that:
  - 90% of people age 65 and older would prefer to stay in their own homes and communities as they get older, and not relocate to a nursing home or assisted living facility (Khalfani-Cox, 2017)
  - This initiative has become increasingly popular due to the “2030 problem”

- The research consistently indicates that Americans, on the whole, prefer to stay in their own homes and communities throughout their lifespan (Greenfield, 2016). A national survey conducted by American Association of Retired Persons (AARP) found that 73% of adults strongly agreed with the statement, “What I’d really like to do is remain in my current residence for as long as possible” (Keenan, 2010).

- The aging in place initiative has become increasingly popular due to the 2030 problem, which will be discussed in more detail later on in the presentation.
Benefits of Aging in Place

- There are many positives associated with aging in place:
  - Maintaining residence
  - Social circles
  - Close proximity to family
  - Decreased cost
  - Familiarity with the neighborhood and area

- Aging individuals want to remain in their home, community, and social circle, instead of being institutionalized, or moving in with family due to fear of being a financial burden to caregivers and family members.

- There are many positives associated with aging-in place such as maintaining residence, social circles, close proximity to family, less cost, and overall familiarity with the neighborhood and area (Greenfield, 2016).

- The positives identified with aging-in place are related to community and socialization.
The estimated average cost of residence in a skilled nursing facility (SNF) or an assisted living facility can range from $250-$300 per day depending on the location, type of room (private vs. semi-private), and services provided. This equivalents to roughly $8000/ per month. These rates will only increase with the growing U.S. elderly population and potential shortage of institutions.

These prices will vary depending on services provided (therapy), location, and room type- private rooms are more expensive compared to shared rooms.
The proportion of people over 65 years of age is significantly higher in rural areas than in urban areas, and these numbers are expected to sharply increase within the next decade (Baernholdt, Yan, Hinton, Rose & Mattos, 2012).

There are a multitude of reasons as to why older adults chose to move or remain in their rural communities such as the small town feeling, safety, scenery, cost, more land, and overall sense of feeling connected (Dye, Willoughby, & Battisto, 2011).

Therefore, many rural counties are becoming naturally occurring retirement communities (NORCs) unlike retirement communities, SNF’s, and assisted living, NORCs are not designed specifically for older residents as compared to urban areas.
Access to Rural Healthcare

- Access to quality rural healthcare is very limited and costly
- Significant provider shortages in rural areas:
  - 20% of Americans live in rural areas, only 9% doctors practice there (Winter, 2009).
  - Isolation of communities
  - Increased demands and aging populations
  - Limited resources
  - High risk of practitioner burn-out

- Access to quality rural healthcare is very limited, and significantly more costly compared to urban areas this leads to wide-spread provider shortages in rural areas

- While 20% of Americans live in rural areas, only 9% of America’s doctors practice there (Winter, 2009).

- In other words, many doctors and other health providers would rather work in a more urbanized area due to the benefits, accessibility of resources, and lure of city life.

- Additionally, many of the rural areas with these provider shortages are extremely isolated, have increased demands and aging populations, limited resources, and potential for burn-out due to the demands of practicing in a rural setting
Demands on Healthcare

- This aging population will place many demands on healthcare including:
  - Costs
    - Due to limited medical resources
  - Facilities
    - Overcrowding in long-term care facilities
  - Resources
    - Limited availability of health professionals
    - Decreased insurance funds for medical expenses
  - This will create upward pressure on health and long-term care spending

- The increasing aging population will have a significant impact on the healthcare demands in general
- This includes increased costs due to limited medical resources
- Overcrowding in long-term care facilities
- Limited availability of health professionals and decreased insurance funds for medical expenses
- These demands need to be addressed to ensure quality access to healthcare for aging individuals
Growing age of the U.S. Population

- The average number of people older than 65 years is expected to increase in 2030 to an estimated 71 million, and the number of people older than 80 years is expected to increase to 19.5 million in 2030 (U.S Census Bureau, 2013).
  - This population increase is called the “2030 Problem”
  - “2030 Problem” will affect:
    - Housing options
    - Medical resources
    - Medicare and private insurance funds

- The age of the population in the U.S. is rapidly growing, increasing healthcare demands due to age-related changes and illnesses. The average number of people older than 65 years is expected to increase from 35 million to an estimated 71 million in 2030, and the number of people older than 80 years is expected to increase from 9.3 million to 19.5 million in 2030 (U.S Census Bureau, 2013).

- This population increase is termed the “2030 problem” which will be explained more in depth on the next slide

- This problem will greatly affect housing options, medical resources, and Medicare/private insurance funds for elderly individuals
The “2030 Problem”

In other words, the 2030 problem addresses the shortage of available resources to the elderly population such as housing, Medicare funds, and access to healthcare, and other services.

In order to accommodate the needs of this population, alternative sources need to be identified to prevent this problem from occurring.

In the year 2030 the current population of older adults in the US will double, this will create pressure on healthcare, as older adults suffer from age related changes and require increased healthcare services.

The older adult population will be retiring creating extreme loses in the workforce.

The financial burden on social security.
This table shows the increasing age of the elderly population, between 2030 and 2050 there is a projected 135% increase of elderly individuals aged 65 years or older
Solving the “2030 Problem”

- To meet the long-term care needs of these aging adults, these factors should be addressed:
  - Public policy
    - Insurance and payments
  - Social changes
    - Altering cultural view of aging
  - Identifying alternative aging services both urban and rural
    - Village Model
    - Other Aging in Place Models

- The 2030 problem can be solved, to meet the long-term care needs of the aging population

- This can be done by:
  - Changing public policy: advocating for increased insurance coverage
  - Social changes: altering the cultural view and stigma associated with aging
  - Identifying alternative aging services in both urban and rural areas: the Village Model and other aging in place models, could help combat most of the issues associated with the 2030 problem
Now we will transition into the village model, which will help address some of the issues associated with the 2030 problem and the potential demands that will be placed on the healthcare system.
Objectives
- Define the Village Model and services included in this program
- Recognize the need for rural program implementation
- Identify the provided medical services
- Recognize the available funding for the Village Model and associated costs
- Determine the health benefits of this model

The objectives that we hope to accomplish by the end of this section of the presentation on the village model is:
1. define the village model and services included in this program
2. recognize the need for rural program implementation
3. Identify the provided medical services
4. Recognize the available funding for the village model and associated costs
5. Determine the health benefits of this model
What is the Village Model?

The village concept aims to support the medical, functional, emotional, social, and spiritual needs of older adults living in the same community (village to village network, 2014).

- Villages are grassroots organizations that provide community-dwelling older adults with a combination of nonprofessional and professional services, such as transportation, housekeeping, and companionship, as well as referrals to existing community services, and medical professionals (NCB Capital Impact, 2009).

- The village model allow members of the older population to remain in their home independently and not become a burden to their families.
The world health organization (WHO) identified eight domains associated with the foundations of the Village model:
1.) Social participation: one of the main emphasis of the village model is on social engagement, which further increases overall quality of life
2.) Civic participation and employment; this model allows its members to volunteer in the community and provides employment opportunities for members
3.) Respect and social inclusion; social engagement and inclusion is a priority of the village model
4.) Community support and health services; members in this model gain access to health services such as home health, and telehealth
5.) Communication and information;
6.) Transportation; members are offered transportation to doctors’ appointments, or other obligations such as grocery shopping, post office
Three main reasons for the creation and startup of the village model were identified:

- Past caregiver experience: many elderly individuals have had negative experiences associated with caregivers (lack of care, inattentiveness, laziness resulting in pressure ulcers, theft).
- The popularity and desire to age in place and remain in one home/community while aging.
- Remaining independent in living and not burdening family with extra responsibilities.
- Another reason for the startup for the village model, is that this model can help combat most of the issues surrounding the 2030 problem.
Some of the services provided by the village model:

- Village social events: charities, groups, parties, volunteer opportunities
- Educational sessions: on various topics or hobbies, technology use
- Transportation: transportation to/from Doctors appointments, grocery store, post office
- Companionship: the village model offers a companionship service, in which members are able to become companions, or have someone else be a companion to them. This allows them to socialize with others, or have someone to talk to
- Referrals to medical services: access to home health (OT, PT, nurses, CNA’s, housekeeping)
- Legal/financial assistance: professional help managing finances, re-arranging wills
- Housekeeping, garden, home repair, technology, assistance, pet care: access to individuals who can assist with home repair, handy work,
Medical Services Provided

- **Home Health**
  - Certified Nursing Assistants
  - Nurses
  - Occupational Therapists
  - Physical Therapists
  - Social Workers
- **Telehealth**
  - Rural dwelling-individuals
- **Transportation to medical services**
  - Physicians
  - Specialists
  - Laboratory

- These are the medical services provided by the village model, however, the more medical services utilized the higher cost of membership for that individual.
- Home health services include CNA;s, nurses, occupational therapist, physical therapists, and social workers, these professionals can provide direct services or communicate through telehealth.
- The village model provides access to telehealth, which will allow rural-dwelling individuals the ability to communicate with nurses, doctors, and therapies, rather than driving to see them.
As of 2016, there are 160 operational villages in the United States. 78% are freestanding, which means they are their own entity and are not receiving funds/aid from other programs/agencies. 23% are a program within a larger organization, such as private social service agencies, retirement community agencies, and various other services such as public health, home health agencies, and senior centers. Currently there are only 160 operational and registered villages in the United States. Majority of these villages are located in more urbanized areas, no villages currently exist in the states of Idaho, Montana, Wyoming, Utah, Nebraska and North Dakota. 78% of the village are free standing, which means they are their own entity and are not receiving funds/aid from other programs/agencies. 23% of the operational villages are a program in a larger organization, this means that they receive funding/aide from other agencies, and many of these villages must follow the larger organizations guidelines in order to receive funding. These larger organizations can include private social service agencies, retirement community agencies, and various other services such as public health, home health agencies.
The majority of these villages are located in more urbanized areas such as the eastern and western coast.

Currently there are no operational or in-development villages in the states of Idaho, Montana, Wyoming, and North Dakota,

This can be due to the decreased population and per-capita population.

Many of these states are also very rural, with decreased resources which can also make it more difficult to implement a village.
The yearly rate for noninstitutionalized long-term care (village model) is roughly $1200 (Lehning, Scharlach, & Davitt, 2017), however, this does not include additional services.

The village is significantly less expensive compared to institutions, and the aging individual is able to maintain their residence and remain active within their community.

The overall cost of the village model is significantly less expensive compared to long-term care faculties, additionally village members have access to the same resources and health professionals that could be found in an institution.
Village Finances

- Budget Sources
  - 44% from membership fees
  - 22% from individual donations
  - 12% from grants and private foundations
  - 9% fundraising events
  - 6% business or corporate donations
  - 5% government grants or contracts

Data from: Graham, 2016
Health Benefits of the Village

- Health impacts of the village model:
  - 8% physical health improvements
    - Villages don't focus on health
  - 17% reported increased access to healthcare
- Quality of Life
  - 47% of village members reported increased quality of life due to:
    - Increased socialization
    - Remaining in their community
    - Increased volunteer opportunities
    - Companionship

- Individuals in the aging in place programs such as the village model, demonstrated significantly better clinical and cost outcomes when compared to similar individuals in nursing homes (Marek, Popejoy, Petroski, Mehr, Rantz and Lin, 2005),

- Additionally, village member persons improved in the overall measures of cognition, depression, incontinence, and activities of daily living (ADL). The individuals who chose to age in place, had significantly improved physical and cognitive factors which could be contributed to a higher quality of life and overall satisfaction.

- One of the main focus of the village model is improving overall quality of life, this is accomplished by increasing socialization, volunteer opportunities, companionship, and remaining in the community, all of which, are foundational aspects of the village model

- The villages main focus isn’t on health but rather improving quality of life

- However, village members reported significantly increased access to healthcare services
Implementation of the Village Model

- The steps in the implementation process is:
  - Education and training for:
    - Health professionals
    - Students & community members
  - Gather and develop educational materials
    - Address lack of knowledge
  - Scheduling educational sessions
    - Rural locations
    - Relevant population

In addition to the steps listed on the slide the village to village network identifies several other steps for implementation of this model:

- Get together a group of people passionate about aging in their own homes and the Village concept: make sure they have expertise and time to share and that you will like working with them.
- Look at Villages across the country using the Village Map. Look at their websites to see what they provide. Find Villages in similar regions with similar demographics to see how to structure your own Village.
- Assess the desired community: conduct survey and focus groups.
  - Research the demographic of your area, gather reports or studies on aging or livable communities, determine the resources in your community, talk with all your social service and local government agencies to educate them of your Village concept, etc.
- Meet with the already existing agencies and get feedback on the idea and how to work together.
- Hold community meetings to engage other interested people to develop the Village. Identify the geographic area: Whole city, one or more towns or one or more neighborhoods.
Contact Information

Caitlin Herdrick, MOTS
Phone: (509) 641-2168
Email: cherdrick@gmail.com

Samantha Kraus, MOTS
Phone: (307) 277-4756
Email: sellis16@icloud.com

*This presentation may be duplicated for educational and informational purposes*
References


References (cont)


Aging in Place:

- The ability to live and age successfully in one’s own home, context, and community

- 73% of aging adults want to remain in their home rather than relocating to an assisted living facility, or skilled nursing facility (Keenan, 2010).

- By 2030, there will be a shortage of available resources to accommodate the aging population

- Aging in place and other models, can help address the “2030 problem”


Who We Are

About Us

Our mission is to educate the general public, health professionals, and aging individuals on the village model, and all the services this model provides.

Contact Us

Caitlin Herdrick, MOTS
Phone: (509) 641-2168
Email: cherdrick@gmail.com

Samantha Kraus, MOTS
Phone: (307) 277-4756
Email: sellis16@icloud.com

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The Village Model: What is it?

The Village model aims to promote aging in place through a combination of member supports, service referrals, engagement, and access to healthcare resources and professionals. Evidence suggest that 47% of village members reported increases in their overall quality of life due to their village membership and they were able to receive immediate medical care.

The village services:
- Village social events
- Educational sessions
- Transportation
- Companionship
- Referrals to medical services
- Legal assistance, financial assistance
- Housekeeping, garden, home repair, health care advocacy, technology assistance

“The village concept aims to support the medical, functional, emotional, social, and spiritual needs of older adults living in the same community (village to village network, 2014).”

Medical Services Utilized:
- Home Health
- OT, PT, CNA’s, Nurses
- Telehealth
- Transportation to medical services

Village Membership:
- Average Individual Membership yearly fee: $428.50
- Average Household Membership yearly fee: $527.93
- Discounted memberships for low income seniors
- Significantly less expensive compared to skilled nursing facilities, and assisted living facilities (Graham, 2016)
Resources for Older Adults in Casper WY

Meals on Wheels:
To assist the elderly and/or homebound people of Natrona County maintain their independence and integrity, as well as their physical and mental health in the dignity of their own homes and environments. Natrona County Meals on Wheels delivers nutritionally tailored meals via caring community volunteers.
- Contact Information: (307) 265-8659

Natrona County Senior Centers:
Their mission is to assist individuals aged 60 and older in Natrona County by providing or accessing community services and resources to maintain their dignity and independence using qualified and trained staff to help them meet their nutritional, educational, social, emotional, financial, and recreational needs.
Services Include:
- Provide nutritious meals
- Companionship
- Activities for the senior citizens of Natrona County
- WyHS (Wyoming Home Services)
- FCG (Family Care Giver Program) which offer in home services for those who need help with homemaking, personal care, and respite care for loved ones.

Locations in Casper:
<table>
<thead>
<tr>
<th>Location</th>
<th>Address</th>
<th>Phone</th>
</tr>
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<tbody>
<tr>
<td>Main Center</td>
<td>1831 E. 4th St. Casper, WY 82601</td>
<td>307-265-4678</td>
</tr>
<tr>
<td>Mills Center</td>
<td>401 Wasatch St. Mills, WY 82644</td>
<td>307-237-1317</td>
</tr>
<tr>
<td>Evansville Center</td>
<td>71 Curtis St. Evansville, WY 82636</td>
<td>307-315-6719</td>
</tr>
</tbody>
</table>

Home Health Care:
Helps adults, seniors, and pediatric clients who are recovering after a hospital or facility stay, or need additional support to remain safely at home and avoid unnecessary hospitalization. These Medicare-certified services may include short-term nursing, rehabilitative, therapeutic, and assistive home health care.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Casper In Home Care LLC</td>
<td>(307) 251-4432</td>
</tr>
<tr>
<td>Interim HealthCare</td>
<td>(307) 266-1152</td>
</tr>
<tr>
<td>Summit Home Health Care</td>
<td>(307) 333-4979</td>
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</tbody>
</table>
Casper Area Transportation Coalition CATC

Our mission is to provide low-cost, safe transportation to the general public including: Elderly men and women, Deaf or blind individuals, Disabled individuals. CATC offers low-income transportation services in the Casper, WY area. CATC is a nonprofit transportation provider that helps you get from point A to point B affordably in Casper, Evansville, Mills and Bar Nunn, Wyoming.

- Contact Information: 307-265-1313

**Wyoming Independent Living**

Wyoming Independent Living, Inc. (WIL) is dedicated to the philosophy that every person, regardless of disability, deserves to experience dignity, safety, health and personal independence. Services provided by WIL staff are consumer-oriented and individualized based on your personal goals.

Core Services provided without cost include:
1. Information and Referral
2. Independent Living Skills Training
3. Cross Disability Peer Support
4. Advocacy (Individual and Systemic)
5. Transition Services

- Contact Information: 307-266-6956
- Location in Casper: 305 West 1st Street
  Casper WY, 82601

**Brain Injury Alliance**

The main goal of Brain Injury Alliance of Wyoming is to support, inform, and assist persons with brain injuries and those around them. The alliance can provide one-on-one supports as well as group to help brain injury survivors cope and find encouragement.

- Contact Information: 307-237-5222
- Location in Casper: 123 West 1st St. Suite 400

**Mel’s Helping Hands**

Mel’s Helping Hands provides in-home care and senior assisted living services in Casper, WY and surrounding areas. Our compassionate elderly support professionals provide a
wide range of services that allow your loved one to live safely and happily in their own home. We’ll help your senior with all daily living tasks, including:

- Bathing
- Dressing
- Medication reminders
- Socializing
- Technology training
- Home safety
- Housekeeping
- Preparing meals
- Transportation to appointments
- Running errands
- Exercising

We’re not just companions—we’re an advocate for your loved one when you can’t be there. We won’t ever send a stranger to your loved one’s home. Each senior has two trained caregivers who know your loved one’s care plan and needs. We’re hands-on with our staff’s training, and our hiring process involves intensive background checks and trainings. From daily care to 24/7 in-home care, your senior will get attention and love when they need it most.

- Contact Information: 307-262-4891

**Additional Healthcare and In-home Service Companies**

- Anew Therapy, LLC
- Blue Envelope Health Fund
- Casper-Natrona County Health Department
- Casper VA Clinic
- Central Wyoming Senior Services- Community Based In-Home Services, Family Caregiver Program
- Central Wyoming Hospice and Transitions Program
- Community Health Center of Central Wyoming
- Frontier Home Health
- Frontier Hospice
- Healthcare for the Homeless- 12th Street Clinic
- Home Access & Accents, LLC
- Interim Healthcare of Wyoming
- Rocky Mountain Oncology Center
- Sharon’s Home Health Care
- University of Wyoming Family Practice Clinic
- Wyoming Independent Living Rehabilitation, Inc.
- Wyoming LIEAP Services
- Wyoming Wound Care and Physical Therapy
**Therapy/ Rehabilitation Services**

- Anew Therapy, LLC
- CareTrust IV
- Central Wyoming Therapy, LLC
- Elkhorn Valley Rehabilitation Hospital
- Frontier Home Health
- Interim Healthcare of Wyoming
- Life Care Center of Casper
- Lincare
- North Platte Physical Therapy
- Poplar Living Center
- Rocky Mountain Therapy
- Sharon’s Home Health Care
- Shriver Therapy Group
- Therapy Solutions
- Wind City Physical Therapy
- Wyoming Recovery, LLC.
- Wyoming Wound Care and Physical Therapy

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Participant Satisfaction Post-Survey

Thank you for your participation, we appreciate your time! Please answer the following questions anonymously, as we will use this information and feedback to improve future presentations and the material. When you are done please turn this sheet into the presenter.

1.) Did you find the information learned throughout the presentation useful and important? (please circle one)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>Somewhat</th>
<th>No</th>
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2.) Do you feel you have a better understanding of Aging in Place? (please circle one)

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<tr>
<th></th>
<th>Yes</th>
<th>Somewhat</th>
<th>No</th>
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3.) Do you feel you have a better understanding of the “2030 Problem” and the Village Model? (please circle one)

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<tr>
<th></th>
<th>Yes</th>
<th>Somewhat</th>
<th>No</th>
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4.) How likely are you to recommend this presentation to someone else? (please circle one)

<table>
<thead>
<tr>
<th>Unlikely</th>
<th>Likely</th>
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<td>1 2 3 4 5</td>
<td>6 7 8 9 10</td>
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5.) How likely are you to use the materials provided and present to others? (please circle one)

<table>
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<tr>
<th>Unlikely</th>
<th>Likely</th>
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<tr>
<td>1 2 3 4 5</td>
<td>6 7 8 9 10</td>
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6.) Are you interested in implementing the Village Model in a town near you? (please circle one)

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<th></th>
<th>Yes</th>
<th>Somewhat</th>
<th>No</th>
</tr>
</thead>
</table>

If yes, please explain:
7.) What information provided was most informative for you?

8.) Were there areas in which you wish there was more information available? If yes, please explain:

9.) Please leave additional comments and feedback:

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 CHAPTER V 
Summary

There are many sources of information detailing the “2030 problem” in which the U.S. population is growing in age and available healthcare and long-term housing resources are becoming less and less available and affordable. The researchers took the stance, that a potential solution to this problem is implementation of the village model into rural communities. The first step of implementation includes education and training on the village model. The goal of the researchers was to develop an educational program plan on the village model that could be used by occupational therapists, students, and health professionals. Educational materials were developed to address lack of knowledge on the village model and to be used as a foundation for future implementation. It is the hope of the researchers that the products developed will be used in all platforms to educate health professionals on the pressing “2030 problem” and the use of the village model as a solution. Upon completing this education session it is anticipated that implementation will occur with continued collaboration and education,

Throughout the design and development of the project, the researchers noted a few limitations. Implementing the village model into rural areas of Wyoming will have its challenges. Collaboration and checking in with those who are currently carrying out the village model will have to occur in order for new implementation to be successful.
Scheduling educational sessions with busy health professionals would be difficult due to time constraints. The village model concept is very new and lacks research, particularly in rural settings. Although limitations are possible the program is still very achievable and is a viable option for address the long-term housing needs for the aging population.
Lastly, due to the scope of this project the researchers were only able to begin the process of educating on the village model in a rural area. To implement the village model would require further research and program planning.

To overcome the limitations of this project, the researchers have developed recommendations. Significantly more research is needed regarding the benefits, and overall usefulness of the Village Model. All 160 operational villages are located in only urban areas. A recommendation would be further research into the village model in remote rural areas, specifically Wyoming. The village model is a very new concept and it is recommended that further education and research be completed to successfully implement in the future.
References


doi:10.1080/03601277.2010.515889


