

White Paper to Address Aging Population Needs and Caregiver Shortages in Rural America

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1.0 Introduction

Pearl proposes a solution that encourages initiatives that address the needs of rural elderly through implementing supportive care and remote monitoring while addressing the health care shortages of the rural US. This white paper outlines the Executive Order issued by President Trump Promoting Agriculture and Rural Prosperity in America, the needs of rural aging, rural health care shortages, and a solution that:

- Delivers supportive care and remote monitoring to elderly rural populations that enhance quality of life and enhance opportunities to age at home.
- Reduces health care costs through mitigating unnecessary ER, hospital, and nursing home admissions.
- Addresses the scarcity of supply and growing demand for health workers among rural continuing care communities and other health care providers such as hospitals, home health agencies, physician practices, and community health partners.
- Provides rural communities with viable, sustainable jobs, apprenticeships, and career pathways for its citizens.

2.0 Executive Summary

On April 25, 2017 President Trump issued an Executive Order on Promoting Agriculture and Rural Prosperity in America. The order states that it is in the national interest to promote American agriculture and protect the rural communities where food, forestry, and many forms of energy, traditional and renewable, are cultivated and extracted. It is in the national interest to ensure that regulatory burdens do not unnecessarily encumber agricultural production, harm rural communities, constrain economic growth, hamper job creation, or increase the cost of food for Americans and our customers around the world.

The Executive Order also created an Interagency Task Force on Agriculture and Rural Prosperity. The Task Force is charged with legislative, regulatory, and policy changes to promote American agriculture, economic development, job growth, infrastructure improvements, technological innovation, energy security, and quality of life in rural areas. The order also seeks to:

- (i) remove barriers to economic prosperity and quality of life in rural America;

- (ii) advance the adoption of innovations and technology for agricultural production and long-term, sustainable rural development;
- (iii) strengthen and expand educational opportunities for students in rural communities, particularly in agricultural education, science, technology, engineering, and mathematics;
- (iv) empower the State, local, and tribal agencies that implement rural economic development, agricultural, and environmental programs to tailor those programs to relevant regional circumstances;
- (v) respect the unique circumstances of small businesses that serve rural communities and the unique business structures and regional diversity of farms and ranches, and
- (vi) ensure access to a reliable workforce and increase employment opportunities in agriculture-related and rural-focused businesses.

Within 180 days of the date of this order, the Secretary of Agriculture, in coordination with the other members of the Task Force, will submit a report to the President recommending the legislative, regulatory, or policy changes to support rural economic development, job growth, infrastructure improvements, technological innovation, energy security, and quality of life.

This White Paper addresses two of the most vexing challenges of rural communities: job creation and the need for expanded health care capacity focused on the aging rural populations. This paper reviews existing research on the scope of these needs, and a proposed solution that leverages public and private resources to expand health care capacity and create sustainable jobs and career pathways.

3.0 Background and Research

Challenges of Rural Aging Population

John A. Krout, Gerontologist and Founding Director of Ithaca College of Gerontology Institute authored a 2006 publication titled, *A Service Delivery to Older Adults: Research, Policy, and Practice*. In this publication, he argues that aspects of rural communities that impact the aging populations negatively include:

- smaller and less-dense populations;
- less-differentiated social, economic, and organizational institutions;
- fewer service options;
- diverse socio-demographic profiles;
- traditional values and cultural traditions; and
- fewer resources to address the needs of older adults.

It is important to note that two-thirds of the nation's 3,142 counties are rural and include well over 50 million persons.

Researcher David Strauth published a 2015 article in the *Journal of Rural Health* titled, "Barriers to Health Care Increase Death Risk for Elderly" ([Link](#)). The research confirms some of the unique challenges facing older populations in rural or remote areas who have less access to physicians, long distances to travel for care, and tendency towards lower socioeconomic and educational levels. The research reflects health problems that might have been impeded with earlier, more timely treatment.

"Health care is harder to access in rural areas, and this helps us better understand the extent of the problem," said Leah Goeres, a postdoctoral scholar who led the research at the Oregon State University/Oregon Health & Science University College of Pharmacy. "Many physicians do the best they can in rural areas given the challenges they face," Goeres states. "But there are fewer physicians, fewer specialists, and a higher caseload. Doctors have less support staff, and patients have less public transportation. A patient might need to wait months to see a doctor, and drive significant distances. Adverse effects can increase from taking multiple medications. These are real barriers to choose and access, and they affect the quality of care that's available."

Goeres further notes that in the aged populations, illness can lead to more illness and quickly spiral out of control. A patient in an urban setting might receive prompt treatment for a mild ulcer, whereas the same person in a rural setting might have to wait while the condition worsens and may even lead to cancer.

Health Care Shortages in Rural Areas

According to the 2012 *National Rural Health Association (NRHA) Policy Brief, "Health Care Workforce Distribution and Shortage Issues in Rural America"* ([Link](#)); "The health care labor shortage in the United States has been widely documented and is expected to last for the foreseeable future." Areas with higher proportions of low-income and minority residents, such as rural areas, tend to suffer most from a lower supply of healthcare professionals. The following factors were identified as causes of this inequity by the National Rural Health Administration:

- **Education**
 - The current healthcare education system tends to be urban-centric.
 - Access to training and education programs may be limited in rural areas for people who want to pursue careers in healthcare.
 - Providers trained in urban areas may not be prepared for the challenges of working in rural communities.
 - Urban areas draw people away from rural areas. Students in rural areas may have to travel or relocate to an urban location for health professions coursework.
- **Rural Demographics and Health Status**
 - Rural populations often have higher rates of chronic illness, which creates more demand for health care services.
 - Rural areas tend to have higher proportions of elderly residents, who often require more care.
- **Rural Practice Characteristics**
 - The current healthcare system is designed around face-to-face contact. Often, patients from rural communities, must travel longer distances or forego care.
 - Telehealth hasn't been adopted yet in some rural areas which is further hampered by lower rates of access to high speed internet service.
 - There are frequently fewer opportunities for career advancement.
 - Understaffing can create increased workloads, longer shifts, and less flexibility in scheduling.

Impact of Caregiver Shortages

An article written by Judith Graham titled “Severe Shortages of Home Health Workers Robs Thousands of Proper Care” ([Link](#)), published in *Kaiser Health News* in 2017, cited that the impact of caregiver shortages resulted in thousands of patients denied admission into nursing homes over the last year because of insufficient staffing. People living with disabilities have been injured or gone without meals because caregivers are not available. As many as 30 percent of direct support staffing positions for people with severe developmental disabilities are vacant.

Direct care is one of our nation’s fastest-growing occupations, with an additional 1.1 million projected jobs available in this sector during the decade 2014–2024 to meet our nation’s caregiving needs. Direct care will represent the nation’s largest occupation by 2020, surpassing five million workers. We will need more direct care workers than nurses or teachers from grades K–12.

4.0 Large Steps to Conquer the Challenge

The Solution Pearl Interactive Network proposes is a twofold solution:

- Implementation of Supportive Care and Remote Monitoring for elderly rural populations that provides 24-hour response and care navigation.
- Workforce development initiatives aimed at narrowing the gap of health workforce shortages.
- The goals of the Supportive Care and Remote Monitoring and the health workforce Initiatives we propose are:
 - Deliver supportive care and remote monitoring to elderly rural populations that enhance quality of life and enhance opportunities to age at home.
 - Reduce health care costs through mitigating unnecessary ER, hospital, and nursing home admissions.
 - Address the scarcity of supply and growing demand for health workers among rural continuing care communities and other health care providers such as hospitals, home health agencies, physician practices and community health partners.
 - Provide rural communities with viable, sustainable jobs, apprenticeships, and career pathways for its citizens. While this paper addresses a need to create jobs and provide health care in rural areas, it is important to note the challenge of one subset of rural populations: veterans. According to a May 20, 2015 *Military Times* article titled, “Despite the numbers, rural veterans lack attention, resources” ([Link](#)), 5.6 million veterans are living in rural regions of America, and make up more than 11 percent of the total veteran population. Veterans in rural areas are generally older (median age 62) than the overall veteran population (median age 40), and more likely to own their own homes, but less likely to have easy access to a variety of federal health care and employment offerings.

A. Pearl Supportive Care and Remote Monitoring Program

Pearl's Supportive Care and Remote Monitoring (SCRM) Program integrates remote health and activity monitoring, telehealth, socialization, patient engagement, and care coordination with dedicated 24/7 remote care coordinators into a comprehensive solution.

This innovative Supportive Care and Remote Monitoring System, proactively reduces costly critical and catastrophic events by active care management, coupled with technology that provides alerts for aberrant vital signs or environmental activities. Inherent in our Supportive Care and Remote Monitoring Model is the recognition that rural aging populations are increasingly more diverse, and our remote care coordination staff and clients will need to customize its approach based on the diverse needs of the populations we are addressing.

The ultimate goals of the Supportive Care and Remote Monitoring program are:

- Tailored care management, and increased patient engagement that enhance quality of life and enhance opportunities to age at home.
- Reduce health care costs through mitigating unnecessary ER, hospital, and nursing home admissions.

Diagram #1

This diagram depicts the integration between the vital sign and environmental monitoring system to a 24/7 remote care coordination contact center. In addition to responding to monitors and alerts, the remote care coordinators confirm that health care arrangements are delivered by home makers, nurses, transportation providers, and social workers. Remote care coordinators are selected based on the ability to respond to alerts, coordinate care and develop a personal, emotional connection with clients.

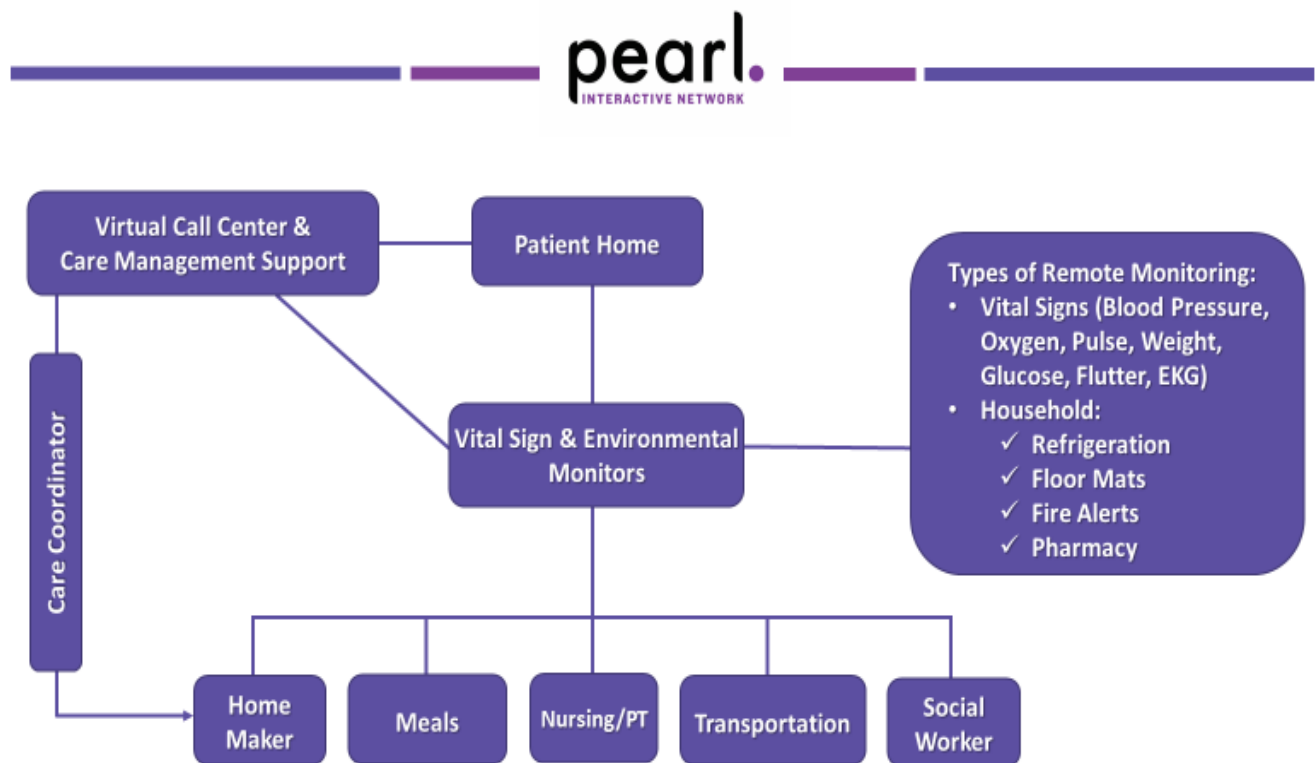


Diagram #2

The supportive care and remote monitoring technical platform offers multiple capabilities including environmental sensors, vital sign monitoring, and video conferencing to support aging in place.



B. Workforce Development Through Collaborative Community Partnerships

Among the functions of the workforce development firms would be to conduct workforce surveys among community employers to assess the depth of health workforce needs both current and within the next five years, coordinate with state agencies, colleges, employers and key stakeholders to develop road maps for creating a workforce to meet the health care shortages, coordinate with community agencies to recruit and educate health care workers, tap into nontraditional workforce venues that access disadvantaged, under-utilized and marginalized rural populations such as Temporary Aid to Need Families (TANF), veterans, military spouses and people with disabilities, and to deploy aptitude and skill testing to assure strong job match and final placements. Finally, deliver ongoing coaching and mentoring to assure success of job candidates as they navigate health care career pathways.

Our workforce development partners will demonstrate success in meeting key milestones on tasks that could include:

- Coordination with public/private stakeholders
- Workforce Surveys
- Recruiting Initiatives
- Skills and Aptitude Testing
- Training Program Coordination
- Creation of Job Road Maps
- Career Coaching
- Job placement

5.0 The Partners Team Collaboration

The Supportive Care Remote Monitoring, and Workforce Development Initiative consists of three partners - Pearl Interactive Network, national continuing care retirement communities, and workforce development firms.

A. Pearl Interactive Network (Pearl)

Pearl Delivers Supportive Care and Remote Monitoring, and Project Management. The Pearl Project Manager coordinates efforts between the Supportive Care and Remote Monitoring Program, the national continuing care retirement communities, and the workforce development firms. The Pearl Project Manager will monitor the Supportive Care and Remote Monitoring for success in meeting program milestones such as patient onboarding and Supportive Care and Remote Monitoring project launches, coordination with the continuing care retirement communities for access to patient populations for inclusion in the Supportive Care and Remote Monitoring Program. The Pearl Project Manager also monitors and oversees the workforce development firm for success in meeting key milestones on tasks that could include:

- Coordination with public/private stakeholders
- Workforce Surveys
- Recruiting Initiatives
- Skill and Aptitude Testing
- Training Program Coordination
- Creation of Job Road Maps
- Career Coaching
- Job Placement

B. The Continuing Care Retirement Communities Partners

The Continuing Care Retirement Communities are defined as retirement communities with accommodations for independent living, home health, assisted living, and nursing home care offering residents a continuum of care. As a partner for the Supportive Care and Workforce Development Model the CCRCs provides the following:

- Home based or facility based clients for the Supportive Care and Remote Monitoring model
- Internal project managers to coordinate both the patient SCRM onboarding and workforce liaison between the CCRC and the workforce development firm.
- Data on position openings over the next five years. Data would include:
 - Position descriptions
 - Level of education
 - Types of degrees and certifications for various labor categories
 - Detail on skill levels and aptitude
 - Volume of openings by year
 - Salary levels by length of service
 - Career pathways
- Provide open job requisitions to the workforce development firm for positions that could include the following job titles:
 - Nurse RN
 - Nurse LPN
 - Activity Director
 - Life Enrichment Leader
 - Cook
 - Home Care
 - Driver
 - Food Server
 - Social Worker
 - Physical Therapist
 - Client Support Specialist
 - Medical Records Support
 - Janitorial
 - Personal Care Assistants
 - Dietary Aids

C. Workforce Development Partner

Our workforce development partner would provide the following functions:

- An analysis by geographic location of the number of health care worker requirements currently, and within the next 5 years. The analysis would determine health workforce hiring needs of CCRCs, hospitals, health insurance carriers, physician practices, VA centers, nursing homes, and home health agencies.
- Coordination with traditional and non-traditional referral agencies with a focus on accessing non-traditional workforce including individuals receiving public benefits, veterans, disabled veterans, people with disabilities, military spouses, and immigrants.
- Screening applicants for skills, motivation, aptitude, and potential barriers to employment.
- Develop an asset map to identify local health care-related training programs, and curriculum gaps based on workforce survey results of health workforce needs by region.
- Coordinate with employers and local training providers to determine additional health care-related certificates and degreed training programs that may need to be developed.
- Critical training on cultural competence would be emphasized, recognizing the diversity in both the residents and workforce residing in rural areas.
- Develop an employment road map for job candidates entering entry level health care positions.
- Assign career coaches that support job candidates as they navigate new jobs, new skills training, and career pathways.
- Coordinate with state agencies such as the Department of Health and Human Services, Department of Aging, Department of Medicaid, and Department of Veterans Affairs to assure stakeholder access to various funding sources.

6.0 Benefits of this Model

By fully integrating the Supportive Care and Remote Monitoring and health workforce development initiatives using the three partners that include Pearl, workforce development firms and national continuing care retirement communities, meaningful benefits will be realized by individuals, communities, and tax payers.

Who Benefits

- Rural elderly and family members wanting to maintain quality of life with the dignity of staying home.
- Rural residents struggling to locate meaningful employment and career pathways.
- State governments challenged with:
 - Economic development in rural areas.
 - Employment of populations currently disengaged from the workforce, including those receiving public benefits, veterans, disabled veterans, military spouses, and people with disabilities.
 - Improved control of Medicaid program dollars through avoidance of unnecessary hospital, emergency room and nursing home admissions.
 - Enhanced quality of home care for beneficiaries.
 - Providing real choice for aging citizens.
- Continuing care retirement communities, hospitals, clinics, physician practices benefit from a workforce with higher retention rates and less turnover. Further, the model we created provides detailed plans for accessing workforce over the next 5 years.
- Home Care Workers gain because:
 - Opportunities are created to advance along career ladders.
 - Access to flexibility in employment.

7.0 Road Map Conclusions

A May 4, 2011 article titled “Health Care Workforce Shortages Critical in Rural America” by the *Council of State Government* ([Link](#)), stated that more than 60 percent of the health care shortages reside in rural areas. The challenges outlined in this white paper will not be solved overnight. It is the contention of this white paper that an innovative solution that combines supportive care and remote monitoring focused on rural aging populations coupled with a multi-pronged workforce development initiative that harnesses the strength of public/private collaborative partnerships could address the health care delivery challenges endemic in US. rural communities.

It is the recommendation to the Trump Administration to encourage, through congressional appropriations, funding that would support demonstration projects that address the qualitative and quantitative costs of rural aging while at the same time addresses the ever-increasing health care shortages in the rural US. We believe the answers lie with the combination of tele-health initiatives coupled with public/ private initiatives.