Rural Promising Practice Issue Brief:
Geriatric Walking Clinic: Meeting Rural Veterans Where They Are

Executive Summary

In 2015, the U.S. Census Bureau reported that roughly 50 percent of U.S. Veterans are over the age of 65 (9.3 million out of 18.8 million).[1] Given the high number of elderly Veterans, it is crucial to provide needed support to promote healthy aging and lower the risk of potential negative health outcomes for this population.

Regular physical activity is an essential component of healthy aging because it provides primary and secondary prevention of chronic diseases, disabling conditions, and chronic disease risk factors.[2] In addition, adults who walk regularly experience an increased fitness level, decreased body weight, lower percentage of body fat, and improved resting diastolic blood pressure.[3] Older adults who remain physically active as they age experience an increase in overall functional health, a lower risk of falling, and improved cognitive health.[4]

The Centers for Disease Control and Prevention (CDC) recommends that older adults participate in at least two and half hours of brisk walking each week.[5] However, many older adults do not meet the recommended physical activity requirements. Several reasons are reported for limited physical activity among adults, including lack of motivation, safety concerns, and no personal fulfillment from exercising.[5]

To increase physical activity in older Veterans, the Central Arkansas Healthcare System (CAVHS) established the Geriatric Walking Clinic, a home-based self-paced exercise program. The program specifically targets rural, elderly Veterans who have chronic conditions and a sedentary lifestyle. This program uses a comprehensive approach to assess, educate, and motivate older Veterans to commit to a regular regimen of walking with an overall goal of progressing to longer walks and increased levels of fitness. The Geriatric Walking Clinic provides follow-up to Veterans through phone calls and uses various technological tools to motivate Veterans to achieve their personal goals and overcome setbacks.

Who Can Use This Rural Promising Practice?

A registered nurse with the support of a physician and medical support assistant can adopt this program. At the CAVHS, the Geriatric Walking Clinic provides motivational counseling and goal setting for Veterans to increase their physical activity, which can be used by ambulatory care facilities. In addition, this program can also be administered through telehealth programs to provide support to individuals living in rural communities. To effectively implement a telehealth program at rural locations, the program team would need a nurse champion and telehealth technician at each site to support the program.

Findings suggest that the use of motivational counseling within a primary care setting increases physical activity.[6] In addition, there is preliminary evidence to support telephone-based interventions to promote an increase in walking behavior.[7]

Need Addressed

A sedentary lifestyle results in deleterious effects on physical and mental health that can result in increased health care costs for patients and health care systems. Adults over the age of 60, on average, spend 80 percent of their time participating in sedentary activities, representing roughly eight to twelve hours of their day.[8]

Walking is a low-risk activity associated with many health benefits and can be conducted without the need for additional equipment. According to one study, older adults participating in regular walking activities demonstrate improvements in sleep patterns and quality.[2] Another study found that older adults engaging in regular walking behaviors reduced pain and improved function for individuals experiencing arthritis in their knees.[2] Lastly, another study found that physical activity reduced cognitive decline in older adults as they aged.[2]

Despite strong evidence for improved health outcomes associated with walking, patients are not routinely counseled on increasing physical activity in clinical settings. Currently, the U.S. Department of Veterans Affairs (VA) health care system and many non-VA facilities do not have readily available programs to address inactivity among older Veterans, including walking assessments, motivational counseling and goal setting, or providing walking/exercise prescription. The Geriatric Walking Clinic differs from other existing programs, including VA's MOVE! Weight Management Program, in that it emphasizes an active lifestyle, targets Veterans aged 60 years and older, and provides a comprehensive assessment of physical function.

Implementation

The Geriatric Walking Clinic is an individualized home-based, self-paced exercise program for Veterans aged 60 years and older. This program targets sedentary Veterans who are willing to start walking regularly for health promotion. Veterans are provided with a walking prescription tailored to their self-identified goals, perceived barriers, support system, and physical condition. The program team empowers Veterans to set a personal walking goal using motivational counseling. In addition, the Geriatric Walking Clinic enrolls "Walking Buddies," which may include spouses, children, or neighbors, along with the Veteran to develop a support system to increase walking and sustain the behavioral change.

Initially, the Geriatric Walking Clinic was run by a physician, registered nurse, and health science specialist. An advisory group of specialists assisted with the development of a comprehensive safety and physical assessment. However, to make the clinic fiscally sustainable, the Geriatric Walking Clinic was gradually transitioned to a nurse-led program with a physician's oversight. After this change was made, the clinic added a medical support assistant for scheduling and making motivational phone calls. In addition, after the Geriatric Walking Clinic was expanded to rural Community-Based Outpatient Clinic (CBOCs), a nurse champion and a telehealth technician at each additional site were added to the team. The nurse champion is a clinic nurse who typically has a portion of time assigned to the Geriatric Walking Clinic (~0.1 Full-time Equivalent (FTE)) to conduct the portion of the initial assessment that needs to be done in-person, such as gait speed and setting up the pedometer. A telehealth technician helps with scheduling the visits. In some clinics, the telehealth technician was able to do the assessments after training, eliminating the need for a nurse champion.

Each Veteran is assessed by the program nurse to determine whether he/she can safely participate in the program. Due to the low risk of injuries associated with walking, the program team developed a three-tier screening process, allowing the nurse to provide more targeted oversight to Veterans with pre-existing conditions and high risk factors. The initial assessment was heavily focused on risk detection, a baseline physical activity assessment, and comprehensive gait and balance assessment. The Geriatric Walking Clinic team was able to streamline the assessment and retain only the absolutely necessary components, reducing the time required for assessment from 45 to 15 minutes.

During the initial assessment, Veterans complete physical performance tests, including gait speed, six-Minute Walk Test, Timed Up and Go test, and Berg Balance Scale. Veterans also complete a short survey that provides information regarding social support, barriers to exercise, response to physical activity, and usual activity level (measured by the Community Healthy Activities Model Program for Seniors). After the baseline assessment is completed, the program nurse works with Veterans to set realistic goals. Based on a Veteran's current physical condition and perceived barriers, the program nurse helps the Veteran develop a walking plan. In addition, the Veteran receives educational materials regarding safe walking, a daily step log, information regarding follow up calls, and appointments for follow-up visits. To monitor a Veteran's daily steps, the program provides a pedometer.

For the first week after the initial visit with the Geriatric Walking Clinic, the Veteran is instructed to follow his/her normal daily routine, which is used to establish the baseline for the Veteran's physical activity levels. The following week, the Veteran is instructed to follow his/her own walking plan. Between clinic appointments, Veterans are followed weekly through phone calls from the nurse or medical support assistant, who provides motivational counseling and collects step data to determine progress and set new walking goals. The nurse may consult with the Veteran's primary care provider to resolve barriers related to medical problems, including pain or poor blood sugar control.

At the six-week follow-up appointment, the nurse reviews the pedometer log and repeats outcome assessments, including the physical performance testing and the participant's survey. After the six-week follow-up appointment, the Geriatric Walking Clinic provides one follow-up phone call each month and Veterans have an in-person follow-up appointment at three, six, nine, and twelve months. For Veterans enrolled in the Walking Clinic, a high percentage continue to be engaged in the program after two years. Of those Veterans who were

surveyed, 79 percent strongly agreed that this program improved their motivation to walk on a regular basis.

The current Geriatric Walking Clinic model has been refined over the last several years to develop a lean, sustainable model. The changes include moving to a nurse-run program and allowing the Veterans to enroll in the program for up to two years. After the initial visit, the in-person follow-up appointments are scheduled for two, six, 12, 18, and 24-months. Additionally, the monthly phone calls were established to follow up with Veterans in the program.

Promising Results

The Geriatric Walking Clinic provides motivational counseling to Veterans and has demonstrated a positive impact on health outcomes for Veterans who participated in the clinic. More than 450 Veterans and their "walking buddies" have benefited from participating in the Geriatric Walking Clinic. The program team estimates that the program could result in health care savings of up to $1.5 million per year for every 1,000 enrolled Veterans. The Geriatric Walking Clinic demonstrates all the criteria to be a Rural Promising Practice.

The program demonstrates each of the criteria necessary to be a Promising Practice:

Increased Access: The Geriatric Walking Clinic is a home-based program that allows Veterans to exercise in their homes or local communities. The program uses multiple modalities to increase interactions with Veterans, including My HealtheVet, secure messaging, phone calls, and the phone tree automatic messaging system. These interactions are used to encourage and motivate Veterans to exercise and meet their walking goals.

Many Veterans in rural Arkansas must travel approximately 128 miles to reach the VA Medical Center. Using telehealth, these Veterans, on average, save approximately 82.4 miles per telehealth appointment. In addition, the Geriatric Walking Clinic was successfully expanded to all CBOCs in the Central Arkansas Veterans Healthcare System. The expansion of the program to all local CBOCs has reduced the number of miles Veterans travel by 106,939 miles within one year.

Evidence of Clinical Impact: At the six-week follow-up appointment, the program team demonstrated a substantial improvement in intermediate measures, including physical functioning, health outcomes, and quality of life. Long-term adherence to the program may help prevent falls, decline in health, and the need for long-term care.

Veterans who participated in the program demonstrated a substantial improvement in their overall physical function, including, on average, a 9.4 percent improvement in a six-minute walk, seven percent improvement in the Timed Up and Go test, and five percent improvement in gait speed. Among those with poorly controlled diabetes (Hemoglobin A1c (HgbA1c) ≥ 8), there was an average decline of 1.7 percent in HgbA1c within three months.

Customer Satisfaction: The Geriatric Walking Clinic conducted a Veteran satisfaction survey with a response rate of more than 96 percent. The survey found that the participants rated the Geriatric Walking Clinic a 4.3 on a scale of 1 to 5 (with 5 representing highly satisfied and 1 representing least satisfied) related to improved awareness, increased motivation, applicability of the advice provided by the team, and overall satisfaction.

Office of Rural Health
Rural Promising Practice Criteria

Increased Access: Measurable improvements in access to care and/or services. Examples include reduction in distance traveled to care, reduction in wait times, improved care coordination, and reduction in missed appointments.

Evidence of Clinical Impact: Positive results on outcomes of importance to rural Veterans based on evaluations conducted during the implementation of the program and at the end of the pilot period.

Customer Satisfaction: Increased patient, provider, partner, and/or caregiver satisfaction.

Return on Investment: Improvement in health system performance by 1) reducing the per capita costs of health care, 2) improving or at least maintaining health outcomes, and/ or 3) positively impacting the health care delivery system.

Operational Feasibility: Implementation is feasible, and known barriers and facilitators of success could easily be shared across implementation sites.

Strong Partnerships and/or Working Relationships: Inclusion of VA and/or non-VA partners to maximize intervention efficacy.

Return on Investment: The cost of maintaining the Geriatric Walking Clinic is determined primarily by the staffing costs required to operate the clinic and the fixed costs associated with pedometers and educational materials. Based on the Geriatric Walking Clinic team's experience, the program cost is approximately $1,000 per Veteran enrolled in the clinic per year to cover staffing costs of the nurse and medical support assistant and the fixed costs associated with pedometers.

Although full financial return on investment is still being calculated, below is the outline of potential savings based on nationally published cost reduction estimates:

Gait speed: On average, Veterans enrolled in the Geriatric Walking Clinic experienced a clinically meaningful improvement in gait speed of 0.14 meters per second (m/s) by the end of three months. Based on published research, medical cost savings associated with a 0.1 m/s improvement in gait speed may be as high as $1,200 annually.[9]

Based on the assumption that 1,000 Veterans participate in the Geriatric Walking Clinic, the total estimated savings for gait speed improvements could be as high as $1,200,000.

HbA1c: The Geriatric Walking Clinic receives high number of referrals of older Veterans with type II diabetes. Roughly, 28 percent of the participants had diabetes. Of the 28 percent of Veterans with type II diabetes, 47 percent had HgbA1c of greater than eight (approximately 13 percent of the entire population). Among these patients, there was an average decline of 1.7 percent in HgbA1c within three months. Cost savings per one percent reduction of HgbA1c is approximately $950 per year.[10]

Based on the assumption that 1,000 Veterans participate in the Geriatric Walking Clinic, the total estimated cost saving would be $209,950 per year.

This number is estimated by the following formula: 13 percent of estimated participants with a HgbA1c higher than 8 x 1,000 participants x 1.7 the average decline in HgbA1c x $950.00 = $209,950/ year.

Weight loss: In the Geriatric Walking Clinic, Veterans experienced an average weight loss of three pounds, or 1.3 percent. Research demonstrates that every one percentage point of weight loss is associated with a $256 decrease in total health care cost.[11]

Therefore, the estimated cost savings for weight lost is approximately $332,800 per year.

Operational Feasibility: The Geriatric Walking Clinic demonstrated operational feasibility and successfully overcame barriers encountered during the implementation phase; these barriers are further identified in the Adoption Consideration section. The clinic has been expanded to additional locations, including the San Antonio VA Medical Center and via telehealth to the CAVHS CBOCs, which include Hot Springs, Conway, Pine Bluff, Searcy, El Dorado, Russellville, and Mountain Home.

Strong Partnerships and/or Working Relationships: The Walking Clinic established strong collaborations with local clinical services, such as Primary Care (including CBOC staff), Geriatrics, Cardiology, Hematology/Oncology, and MOVE!. These collaborations provided the clinic with referrals, prepared Veterans to participate in an exercise program, and reinforced the Veterans' adherence to a walking plan. The program also made strong partnerships with community centers and senior centers in local communities so that Veterans could walk safely at those facilities as needed.

Adoption Considerations

For facilities considering adopting the Geriatric Walking Clinic, key adoption considerations include: 1) leadership and provider support; 2) staffing needs; 3) telehealth resources; 4) Veterans engagement; and 5) training.

Leadership and Provider Support: To establish the Geriatric Walking Clinic, the program team will need to gain facility leadership and provider support. By gaining facility leadership support, the program team will be able to establish a walking clinic within the facility's scheduling system and develop consult templates for referrals. In addition, by gaining provider support, the Geriatric Walking Clinic will be able to establish a steady referral process for Veterans to participate in the clinic.

The Geriatric Walking Clinic conducted targeted outreach to providers to increase support and referrals to the program. For example, the program team conducted education to providers, clinicians, and CBOC staff. They also provided academic detailing with providers one-on-one. The program team reached out to services by attending grand rounds, presenting at monthly staff meetings, and attending CBOC staff meetings.

Staffing Needs: After much refinement, the current Geriatric Walking Clinic staffing model consists of a full-time registered nurse and half-time medical support assistant. This staff supports five sites in CAVHS, including the Geriatric Walking Clinic based in North Little Rock, and four CBOCs (Hot Springs, Searcy,

Conway, and Russellville) via telehealth. As the program was expanded to CBOCs, the team added a nurse champion and telehealth technician at the remote locations. For future facilities considering implementing a Geriatric Walking clinic, the absolute minimum staff needed to support one site is 0.2 FTE nurse and 0.1 FTE medical support assistant.

At the CBOCs, the program encountered barriers related to staffing issues and turnovers. To address these challenges, the program team will need to identify a strategy to reduce the potential impact to continuity of services, including identifying potential backfills for key program roles.

Telehealth Resources: For facilities who wish to implement telehealth clinics at CBOCs, the facility will need to consider the resources needed (e.g., clinical video telehealth equipment), availability of appointments, and the staffing needs to facilitate the telehealth appointments. In addition, the program team will need to work collaboratively to establish regularly scheduled time to conduct telehealth appointments that meets the needs of patients and the program team.

Veterans Engagement: To increase participation in the Geriatric Walking Clinic, the program team promoted the clinic through booths and kiosks, brochures, electronic billboards, and success story videos. The Geriatric Walking Clinic also developed innovative approaches to keep participants engaged throughout the program. One approach includes potential incentive rewards to promote adherence to the program. While some participants wished to receive text messages rather than phone calls from the Walking Clinic program team, this was not a capability. This and other mechanisms for communication and engagement should be explored in the future.

Geriatric Walking Clinic Participant Feedback

"I have lost 37 pounds since I started this program. It's the best thing that has happened to me."

"I increased my six-minute walking time by 1,000 feet in six weeks. I love this program. Walking is addictive!"

"It gives me more endurance so I can do more things."

Conclusion and Next Steps

The Geriatric Walking Clinic is highly effective in improving physical performance and quality of life, which may help to prevent falls, declines in health, and the need for long-term care. Overall projected savings for maintaining the clinic for 1,000 enrolled Veterans is approximately $1.5 million. The program was shown to have a high satisfaction rate. The Geriatric Walking Clinic program can be implemented in any VA Medical Center or CBOC. This program can also be delivered successfully using telehealth.

The program team is available to train providers at other VA Medical Centers and CBOCs who are interested in implementing a walking clinic. The Geriatric Walking Clinic program team is well positioned to disseminate the program nationally with readily-available toolkits and training materials. Currently, the Geriatric Walking Clinic targets Veterans aged 60 years and older; however, this program could be expanded to every Veteran with age-specific modifications as needed. The Geriatric Walking Clinic provides a unique health promotion that focuses on increasing physical activity through motivational counseling and empowering Veterans to increase their walking behavior.

Available Resources

The pilot program administrators of this Rural Promising Practice created several resources to aid in its replication at other sites of care, which are available upon request. They include:

- Geriatric Walking Clinic toolkit and training manual
- Consult template

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To Learn More

The Rural Promising Practices initiative is overseen by the U.S. Department of Veterans Affairs (VA) Office of Rural Health (ORH) as part of its targeted, solution-driven approach to improving care for the 3 million Veterans living in rural communities who rely on VA for health care. As VA's lead advocate for rural Veterans, ORH works to see that America's Veterans thrive in rural communities. To accomplish this, ORH leverages its resources to increase rural Veterans' access to care and services. To discuss implementing a Rural Promising Practice at your facility or to learn more, visit **www.ruralhealth.va.gov** or email **rural.health.inquiry@va.gov**

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