

GOVERNMENT OF THE DISTRICT OF COLUMBIA OFFICE ON AGING



Modernization of the District's Senior Wellness Centers

prepared for B.B. Otero Deputy Mayor for Health and Human Services

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Executive Summary

The District of Columbia's first senior wellness center opened in 1985. The purpose of the center was to provide nutrition counseling, consumer education, and physical fitness. That model did well to meet the needs of seniors nearly thirty years ago. However, as the senior population evolved over the years, the senior wellness centers were not updated to meet the more complex needs of seniors in the District. Today, through a partnership with community-based organizations, the District of Columbia government operates six centers that are based on an antiquated model that fails to attract a diverse participant base representing the population of seniors in the District. Other issues include the limited hours of operations that are not conducive to the schedules of the working senior and an inflexible and obsolete lunch program. The inadequate staffing capacity and insufficient programming adversely impacts the senior wellness centers' ability to enhance the seniors' quality of life. In addition to limited program offerings, Wards 2 and 3 do not have senior wellness centers. Lastly, there is a lack of coordinated services between senior wellness centers and the District of Columbia Office on Aging's (DCOA) lead agencies that provide social services, case management, and other services that help to maintain a senior's dignity.

This issue comes at a time when there is over 104,000 seniors living in the District of Columbia. These seniors are living longer and, consequently, are demanding a greater level of healthcare services because of chronic diseases. The failure to provide affordable health and wellness programs to these seniors could result in very costly medical expenses associated with emergency room visits, hospitalizations, and nursing home admissions. Moreover, there is a movement to assist seniors residing in nursing homes to transition back into the community. These transitions are only successful if the seniors have sufficient health and wellness programs that will help them to improve their abilities to perform self-care activities or activities of daily living.

In response to the issues, the Deputy Mayor assembled a meeting with community-based organizations' chief executives and executive staffs who operate the six senior wellness centers to gain their input on a vision for a more modern, efficient, and effective health and wellness model for the District's seniors. The organizations represented at that meeting were Mary's Center, VIDA Senior Center, Providence Hospital, Howard University, and East River Family Strengthening Collaborative. A subsequent meeting was facilitated by the Executive Director of DCOA with the chief executives, executive staff, and the directors of the senior wellness centers. Based on their expertise and a literature review on evidence-based health and wellness practices, this paper discusses two psychosocial theories establishing a framework for creating a modernized senior wellness center model and a number of recommendations.

The recommendations include expanding the hours of operations; reorganizing the senior wellness structure; bolstering health and wellness programs; enhancing staffing capacity; incorporating an electronic medical record; overhauling the congregate meal site; establishing intergenerational and civic engagement programs; enhancing leisure and education programs; creating a marketing strategy to attract seniors of diverse backgrounds to the center; accrediting the senior wellness centers; establishing the Technical Assistance, Training, and Evaluation Center at DCOA; and procuring an architect who can design the new senior wellness center.

This blue print would be used to build the Wards 2 and 3 senior wellness centers and modernize the six existing senior wellness centers. This paper includes a section on the budgetary implications of modernizing the District's senior wellness centers.

History of the District's Senior Wellness Centers

In 1985, the District of Columbia Government operated its first Senior Wellness Center (E. Nicholls, personal communication, January 14, 2014). The Center's function was based on a three-prong core curriculum of didactics in Nutrition and Consumer Education, Health Dialogues and Physical Fitness. Seniors received nutrition education and counseling from the nutritionists to establish healthy eating habits and therapeutic diet instructions as necessary. Healthy cooking demonstrations were conducted by nutritionists and often times in partnership with class participants who had a special need or interest. The noontime meal program was not included in the original plan of operation. The initial paradigm of the senior wellness center was designed to teach the seniors self-awareness and self-responsibility in all areas pertaining to their health in mind, body and spirit.

Consumer education, health dialogues, and program planning included sessions with instructors and professional experts who addressed issues of financial literacy, personal safety, management of medical/health issues and other topics germane to seniors (E. Nicholls, personal communication, January 19, 2014). Physical fitness sessions were scheduled so that each senior could work out twice a week. These programs are good, but need enhancement and greater sustainability in rendered services. The fitness module is not conducive for seniors who have demanding schedules and need the flexibility to work out when it is convenient for them.

Today, the District of Columbia Government operates six senior wellness centers with the most recent one opening in the fall of 2011. Although the two most recent senior wellness centers are located in multi-level buildings, they appear to have the same delivery framework as the first four centers. That is, a large multipurpose room, congregate meal room, fitness equipment room, aerobics room, office space, and a men's parlor. The District of Columbia has not made any attempts to renovate or restructure the senior wellness center model to attract more seniors to the centers.

Problem

Due to the lack of innovation, the District of Columbia is confronted with an antiquated senior wellness center model that is not meeting the health and wellness needs of a changing population and diversifying group of seniors (Lawler, 2011). For example, the three-prong approach to wellness that has been used since 1985 appears to be an ineffective model at increasing the number of active seniors at the center as it lacks a focus on socialization (Coberley, Rula, & Pope, 2011). Centers that are able to establish social networks and connections between seniors are more likely to retain current senior participants and recruit new ones who are actively engaged at the centers. Such centers do more than simply tackle health and wellness; they help seniors to combat social isolation, which presents a variety of physical challenges for seniors (Anderson, et.al, 2003).

The antiquated senior wellness center model is plagued with a lack of diverse participants, limited hours of operations that are not conducive for the working senior, and an inflexible and obsolete lunch program. Moreover, the staffing capacity at the senior wellness centers is not conducive to the delivery of quality health and wellness services nor does it offer a cadre of other programs and services to enrich seniors' quality of life. The lack of staffing is adversely impacting the types and number of programs and services that the center can offer on any given day. Not only is there a lack of programming at the six existing senior wellness centers, but Wards 2 and 3 do not have a senior wellness centers. Moreover, there is a breakdown between the senior wellness centers and DCOA's lead agencies for coordinating senior services.

Although there are over 104,000 seniors in the District of Columbia, there are approximately 2,700 seniors participating in service offerings at one or more of DCOA's six senior wellness centers. The majority of these individuals are African Americans, while other ethnicities, including Asians and Pacific Islanders, Latinos, and Whites, are greatly underrepresented at the centers. The lack of cultural diversity and social activities serve as an impediment to attracting more seniors to the center. Data from DCOA's (2012) needs assessment revealed that LGBT seniors describe senior wellness centers as an unfriendly and unwelcoming atmosphere. In addition to the inability to attract seniors from these different groups, senior wellness centers have faced the difficult task of increasing its membership with the baby boomers for a number of reasons (Lawler, 2011). As seniors are living longer with many of them having chronic diseases, there is an opportunity for the District of Columbia to position itself to more effectively serve this population.

Baby Boomers Underserved at the Senior Wellness Centers

Many baby boomers, and older seniors, who remain in the workforce, are unable to frequent the majority of the senior wellness centers during normal business hours of 8:30 AM to 5:00 PM to take advantage of free health and wellness programs that could improve their lives (Lawler, 2011). Other centers have limited extended hours such as opening until 8:00 PM two days a week; however, this is not sufficient for an individual who prefers to work out five days a week. Unfortunately, this means that they would have to pay memberships at local gyms, which reduce their income to pay for prescription drugs, food, transportation, and other expenses. Or, for those seniors who are unable to pay for gym membership dues, they forego the opportunity to exercise, which could adversely impact their overall health. According to the Centers for Disease Control and Prevention (2011), seniors can exercise on the treadmill and the elliptical machine and take aerobics classes to prevent or alleviate the ailments associated with cardiovascular disease, high cholesterol, high blood pressure, diabetes, arthritis, osteoporosis, and stroke. Moreover, aerobic exercises strengthen the seniors' immune system, which means that they will be healthy, active, and productive rather than being sick at home. Lastly, aerobic exercise strengthens people's heart and their body's ability to supply oxygen throughout their body, which helps them to function properly, while burning calories and reducing body fat.

Beyond the limited hours of operations, DCOA's current health and wellness delivery model does not meet the needs of baby boomers. According to SB&A and Brooks Adams Research (as

cited by Becker, n.d.), who researched 500 senior centers across America, it was indicated that baby boomers value individuality and want to do it their own way. Baby boomers do not appreciate catered services, which is the foundation of DCOA's current congregate meal program. The study also revealed that baby boomers are demanding a greater level of wellness programming than what is currently being offered so that they can live a longer life. More specifically, baby boomers wanted exercise equipment as their top choice followed by fitness programming as their second request.

Ineffective Staffing Levels Lead to Lack of Programming

Further analysis of the six senior wellness centers reveal a number of areas that should be addressed in an effort to increase the overall service delivery model. The current center staff make-up is two full-time equivalents (FTEs) and contracted fitness instructors and consultants, which include the site director. Some centers have been fortunate to have volunteers to bolster their operations. Based on the increasingly growing senior population in the District of Columbia and the demand for greater diversity of health and wellness programs, the current staffing model is inadequate to meet the community's needs. Moreover, the programs and services are not consistent from one senior wellness center to the next. Some senior wellness center operations provide more health and wellness services than other centers. Lastly, evidence-based health and wellness programs, such as the Chronic Disease Self-Management Program (CDSMP) and the Falls Prevention Program, which can improve the overall health of seniors, are not fully being implemented or evaluated to determine the quality of health of each senior participant. According to the National Council on Aging (2013), CDSMP is a savings of \$714 per person in emergency room visits and hospital utilization and a \$364 per person net savings in program costs. Another area for consideration is program assessment. There is not an evaluation system in place to determine how these facilities contribute to lower hospital admissions/readmissions and how these centers can prolong healthy living in the community as a means to avoid nursing home placement.

In addition to the lack of programming, the current senior wellness center buildings are not adequate for expanding health and wellness programs and services at the capacity that is warranted to meet the demand of the senior community. All centers have rooms to host a congregate meal program, aerobics class, strength training/weight room, computer training, and arts and crafts. Several senior wellness centers have one large room for the aerobics class and strength training equipment. This layout is not conducive to individual self-guided exercise without having to be interrupted by an aerobics class. In one center, the aerobics room is so small that the center is unable to accommodate additional people for a class.

Beyond the need to have larger senior wellness centers, Wards 2 and 3 do not have senior wellness centers. As some seniors have no mode of transportation or limited access to it, the lack of senior wellness centers in close proximity to their residences serves as a barrier.

Fragmented System

An examination of the interrelationship between senior wellness centers and other DCOA Senior Service Network providers reveals a system that is disconnected and fails to serve the whole person. DCOA's Senior Service Network is a model of fragmented service providers working in silos and is not connecting seniors to other service providers who can improve the seniors' quality of life. For example, the DCOA administers the Hospital Discharge Planning Program that is designed to identify vulnerable seniors in hospitals and help them to secure the necessary health and social services needed once the individual returns home. However, these individuals are not being systematically connected to the senior wellness centers to improve their quality of life. Moreover, the senior wellness centers are not connecting seniors to the lead agencies for case management service when these seniors experience a life altering challenge such as a spouse dying or helping them to protect their homes from foreclosures. Such disconnects leave the seniors experiencing unnecessary stress as they navigate a broken system in search of assistance.

Recommendations

In response to the issues discussed in the aforementioned section, the District of Columbia Office on Aging and its community-based organizations of senior wellness center operators are recommending a number of strategies to deliver evidence-based health and wellness services and ancillary programs to seniors across the District of Columbia of all ages and diverse backgrounds. Based on the literature, in creating this health and wellness model, one must take into consideration the psychosocial aspects of seniors' lives because they directly impact the physical health of seniors (Alteras, 2006). Theorists Erik Erikson and Robert G. Peck have done extensive research on psychosocial development and seniors and their research is being applied to establish a health and wellness framework for the District's seniors.

Erikson (1982) posits that personality development begins at birth and goes through a series of eight hierarchal ordered stages. Maturity is the last stage of Erikson's model and at this stage; he posits that seniors experience a psychosocial conflict between ego integrity and despair. At this stage in one's life, the individual experiences a sense of mortality, which could be a result of retirement, death of a spouse, or the changing role in the community. Based on Erikson's work the subsequent sections will discuss a number of recommendations that could help seniors as they cope with these various challenges in their lives that could make them vulnerable to social isolation, poor health, and an increased likelihood of hospitalizations and nursing home admissions. In addition to Erikson's theory, Peck's theory provides further insight to the psychosocial aspects of a senior's life.

Peck (1968) subdivides Erikson's final stage into middle age and old age. The premise of Peck's theory is one's physical strength and youthful looks diminish with age. Moreover, with age, one may have chronic diseases that are causing aches and pain. In this phase of one's life, he can become depressed because of their physical situation or value life and the accumulated wisdom to help others such as youth through an intergenerational program. The senior could also choose to learn new skills such as a foreign language or using new technology. These activities, which

enable seniors to be active and experience self-satisfaction, will be further discussed as recommendations in the sections below.

In applying these two models, it is apparent that a focus simply on health and wellness is not sufficient in ensuring that the senior wellness centers meet the psychosocial needs of the seniors. Instead, the delivery model for the centers should address a variety of challenges that a senior may experience during their golden years including raising grandchildren, aging in place, and the death of a spouse. Moreover, to enhance participation, seniors should be able to choose among a range of health promotion options that meet their needs, abilities, and limitations (Miller & Iris, 2012). This strategy could also attract more seniors to the center. Other strategies are expanding the hours of operations; establishing four core divisions within each senior wellness center; developing a District-wide senior wellness center marketing strategy; attaining accreditation for the senior wellness centers; establishing the technical assistance, training, and evaluation center at the DCOA; and producing building redesign.

Hours of Operation

According to Lawler (2011), as the customer base of senior centers change, leadership must modify the range and time of service offerings. This aligns with the feedback that DCOA has received from senior wellness center operators and participants. It is recommended that senior wellness centers expand the hours of operations from 6:30 am - 8:00 pm Monday through Friday and offer Saturday hours from 10:00 am - 3:00 pm. By expanding service hours, working seniors such as baby boomers are able to exercise prior to going to work. Evening hours could be dedicated to a variety including, but not limited to, social programming, educational workshops, aerobics or spinning classes, and community meetings.

Organizational Restructure

It is recommended that each senior wellness center establish standardized programs and services with a minimum threshold and types of personnel that would improve health outcomes. The system would include the Health and Wellness Division, Intergenerational Division, Civic Engagement Division, and the Leisure and Education Division (Aday, 2003) (See Appendix A). These divisions serve as the core of the senior wellness centers, which will help center directors with maintaining consistent quality core services across senior wellness centers. Programs that promote social connection and develop a community or social network among their members may be better able to encourage continued, active participation, not just enrollment, and could improve participant outcomes (Christakis & Fowler, 2008; Cobb, Graham, & Abrams, 2010; Coberley, Rula, & Pope, 2011).

Health and Wellness Division.

The purpose of the Health and Wellness Division is to administer health prevention and management of chronic diseases and falls prevention programs (Aday, 2003). In realizing this goal, it is recommended that all senior wellness centers administer evidence-based health and wellness programs and services that could positively impact lower hospital readmissions and

prevent premature nursing home placements (Coberley, Rula, & Pope, 2011; Lawler, 2011). The District's senior wellness centers can play a pivotal role at lowering hospital readmission rates by ensuring that vulnerable seniors who are discharged from hospitals are connected with DCOA's Hospital Discharge Planning Program as a resource for coordinating their post acute care including visits to the wellness center. There are various articles citing the numerous benefits of health and wellness programs on improving seniors' health and reducing healthcare costs.

Nguyen et al. (2008) conducted a study of Medicare Advantage fitness center participants and observed that there was a 2.3% decrease in the percentage of individuals admitted to a hospital after two years in the fitness program as compared to those who were not in the program. Another study revealed a slightly higher percentage decrease in hospitalizations of 3.8% for participants in a senior fitness program as compared to those who did not participate in the program. Based on the research of Leveille and colleagues (1998) of a senior center-based wellness program, there was a significant difference after 12 months for hospitalization between participants and non-participants. Those who participated in the program had 33 hospitalization days as compared to 116 days for non-participants. It is evident that health and wellness programs have a significant, positive impact at keeping seniors healthy and saving healthcare costs.

In addition to the benefits of improved health and reduced healthcare costs, health and wellness programs have proven to be effective at enhancing physical functioning, emotional health status, and quality of life (Goetzel, et al., 2007). In another study on health and wellness programs, it was revealed that participants experienced improved energy level and improved emotional health (Munro, 2004). In the Department of Veterans Affairs' health coaching program, veterans demonstrated a greater increase in rapid gait speed as compared to those participating in a usual care control group (Morey, 2009). Phelan and colleagues (2004) examined the effect of a senior center-based health promotion program on activities of daily living (ADL) and study results revealed that there was a greater likelihood of improvement in ADL after 12 months in a health and wellness program. ADL is the difficulty for one to perform self-care activities such as bathing and dressing. Such physical limitation increase the risk for hospital admission, nursing home admission, and death (Branch & Jette, 1982; Manton, 1988; Mor, Wilcox, Rakowski, & Hiris, 1994)

Other research reveals that falls prevention exercise programs include balance training, gait and functioning training, strengthening exercises, flexibility, and endurance (Sherrington et al., 2008). El-Khoury and colleagues (2013) examined 17 studies of 4,305 seniors to determine whether fall prevention exercise programs for seniors are effective in preventing falls. According to their literature review, research reveals that fall prevention exercise programs for seniors reduce the rates of falls and prevent fall-related injuries in seniors living in their homes. Data revealed that there was a 37% decline in falls resulting in injuries, a decline of 43% for severe injuries related falls, and a 61% decline for fractures resulting from falls. It was also revealed that falls prevention programs improve balance, cognitive functioning, and the speed and effectiveness of protective reflexes (Nevitt & Cummings, 1993; Quant, Maki, Verrier & McIlroy, 2001). Protective reflexes is extending one's arm or grabbing an object to break the fall.

Based on the positive impacts of health and wellness programs, it is recommended that the District's senior wellness programs be designed to help seniors adopt or maintain healthy behaviors, reduce health-related risks, and optimize care for health conditions. Activities under this division include, but are not limited to, aerobic, strength training, Senior Olympics, senior games, dancing, drug management education, senior lunch program, Commodity Supplemental Food Program, nutrition counseling, healthy cooking demonstrations, healthy eating and other health education courses, massages, nail and cuticle treatment, health screenings, ADL assessment, and independent skills training (Aday, 2003). Seniors interested in personal training and coaching can receive such services for a nominal fee.

Chronic Care Model.

In establishing the Health and Wellness Division, it is recommended that a Chronic Care Model (CCM) serve as the foundation. Wagner and colleagues (2001) developed the model to differentiate between the needs of patients with chronic disease versus a previous model designed for episodic care. CCM draws upon evidence-based interventions with the objective of encouraging high-quality chronic disease care. The model includes the following components include the community, the health system, self-management support, delivery system design, decision support and clinical information systems. Under this model, there are productive interactions and mutual trust between providers and the informed seniors who play an active role in their care (Oprea, et al., 2009)

Since 2001, the Chronic Care Model has been validated for the care of patients with asthma, congestive heart failure, diabetes, and bipolar disorder (Wagner, et al., 2001; Robert Wood Johnson Foundation, 2010). Due to the success of this model in improving health outcomes, the American Association of Diabetes Educators has endorsed the model (Dancer & Courtney, 2009). According to one study, patients who maintained planned visits of 30 minutes with their NP realized an improvement in their glycemic control, lipid management, and hypertension control (Boville, et al., 2007). The goals of the visit for the patients were to achieve healthy lab test results and initiate medication intensification.

In another study examining the impacts of the Chronic Care Model on seniors' health, Stock and colleagues (2008) established three groups. The CCM was applied as the intervention for one group, the second group of seniors received care from a primary care physician supported by care managers, and the third group of seniors received care from a primary care physician, but did not have care managers. The study results revealed that seniors who participated in the CCM maintained their health-related quality of life (HRQL) over time while seniors receiving traditional care experienced a decline in their HRQL. The researchers concluded that an interdisciplinary team CCM approach may have a positive impact on HRQL in the senior population.

Thus, it is recommended that the District's senior wellness centers establish an interdisciplinary team approach to coordinate and integrate health and wellness as a focal point to maintain seniors' HRQL (Alteras, 2006). The team includes a nurse practitioner, physical therapist, life concierge (to eliminate the stigma associated with the term social workers and one receiving a

government handout), massage therapist, and a pharmacist (See Appendix A). This approach ensures that the senior wellness center offer a holistic environment that meet the varying needs of a diverse senior community. The nurse practitioner (NP) would be responsible for leading the development and delivery of programs and services that support healthy aging. The NP will conduct health assessments and monitor the seniors' health. They will also link seniors to practitioners at hospitals, physician practices, dental practices, and other health services settings. The physical therapist would be instrumental in helping seniors who had suffered a recent stroke, fall, or other issues that have adversely impacted the seniors' ADL. Life concierge would be instrumental in working with seniors, especially those who experienced a recent death or some other life altering situation. The life concierge would connect the senior to DCOA's lead agencies for additional services that extend beyond his expertise. The massage therapist would provide seniors massages by appointments only. The pharmacist would provide seniors with medication therapy management, which is useful for optimizing drug therapy and improve therapeutic outcomes for seniors.

The center, the seniors, and their family members represent half of the Chronic Care Model while the health system makes up the other half of the model. To ensure continuity of service, it is recommended that the senior wellness centers enter into collaborative agreements with physician groups that would address medical care. This model is beneficial to every senior whether healthy and active or those who are less active. Every senior participant at a center will have a health and wellness plan to manage their health and the staff at the center will provide professional consultations to help each participant reach and his/her goals.

Shared Care Plan.

A recommendation to help seniors manage their health, especially if they have chronic diseases, is to purchase a Shared Care Plan (SCP) web-based internet tool. SCP is an evidence-based personal health record for people to track and manage their health in concert with their healthcare providers (AHRQ, 2006). All senior wellness center participants could benefit from this technology, especially if they have chronic diseases. Moreover, through a coordinated effort involving DCOA's Hospital Discharge Planning Program and the senior wellness centers, seniors being discharged from hospitals would be encouraged to participate in the shared care plan to begin improving their quality of life. Based on the literature, this tool has been effective at achieving positive outcomes for people.

For example, Mitton and colleagues (2007) evaluated 37 patients who were enrolled in a shared care plan, which included comprehensive biopsychosocial assessment, early intervention, health education, and self-management. The researchers collected and assessed both quantitative and qualitative data over the course of 12 months. According to the study's results, there was a 51% decline in the number of days in a hospital, 32% decline in emergency department visits, and a 25% decline in hospital admissions. Further data revealed that total acute service costs, excluding program costs, were reduced by 40% per person. The researchers concluded that policy initiatives incorporating a shared care model should be considered as an effort to improve patients' outcomes.

In response to the positive outcomes of this study, it is recommended that the District's senior wellness centers incorporate this tool within its delivery model. Seniors would be able to complete their health/wellness profile in the Shared Care Plan by pen or online. The plan records the following information: personal profile, self-management goals, health and wellness goals, medications, allergies, chronic diagnoses, decision on advance directive, and the names of their healthcare practitioners.

Café.

According to Lawler (2011), senior centers need to provide seniors with food and choices that appeal to them as elders instead of treating them as children at a school lunch room. This has also been cited by Silver (2001) who posited that the flexibility in food choices and serving times are essential to improving participation at food sites. This recommendation calls for an overhaul of DCOA's current congregate meal program into a restaurant style dining, salad and sushi bars or whatever food preferences desired by the seniors. An example of a model that could be considered is the Mather Lifeway Cafés in Chicago, Illinois. At these cafés, seniors can enjoy delicious, made-to-order breakfast or lunch. Seniors can also purchase healthy meals to go for dinners and weekend meals.

Intergenerational Division

Through partnerships with D.C. Public Schools (DCPS), Junior Achievement, Metropolitan Police Department Youth Advisory Council, and other youth enrichment programs, the senior wellness center can establish intergenerational programs (IG). The purpose of these programs is to unite awesome and caring seniors with energetic and bright children enrolled in DCPS's Early Childhood Program and other grade levels. Activities could include seniors reading to the children reading to the seniors, seniors serving children lunch and snacks, and simply providing them with quality time that is absent in some children's homes. Other IG programs could include art programming, gardening, oral history, grandparent support group, and IG enrichment programs targeted at exposing high school and college students to programming and services at the senior wellness center.

Civic Engagement Division

The purpose of this division is to facilitate meaningful volunteer and paid opportunities allowing seniors to be a positive contributor in their communities, which will enhance their overall emotional wellbeing (Aday, 2003; Lawler, 2011). According to several studies, establishing and bolstering opportunities for continued civic engagement exhibits a strong positive association with seniors' physical health and functioning, life satisfaction, subjective wellbeing, and mortality (Baker, Cahalin, Gerst & Burr, 2005; Butrica & Schaner, 2005; Glass, Mendes de Leon, Marottoli & Berkman, 1999; Hinterlong, 2006; Martinez, Crooks, Kim & Tanner, 2011). Thus, it is recommended that the primary role of the Civic Engagement Division is to help seniors to be actively engaged in their communities.

An ideal approach for seniors is to serve as volunteers by donating their professional skills to the senior wellness center and the surrounding communities as a peer leader in the Chronic Disease Self-Management Program, community advocate, workshop facilitator, and mentor. The division would also be instrumental in establishing a senior village and members of the center would automatically become members of the village. Senior villages are community-based organizations helping people to remain in their homes by linking them to services such as transportation, buddy program, homemaker service, and small house repairs. Senior villages rely on volunteers and vendors offering discounted services for seniors. For those volunteering their time, time banking would be an ideal model for recording the volunteers' hours (Time Banks, n.d.). Time bank promotes civic engagement by incentivizing seniors with earned time credit for donating their time.

Leisure and Education Division

This division would organize travel opportunities and educational offerings that add value to the seniors' intellectual capacity (Lawler, 2011). Educational workshops could include retirement counseling and workshops, college courses, foreign languages, computer classes, wills and advance directives workshop, grief counseling, horticulture therapy, community gardens, lecture series, art history, folklore, book club, college courses, creative arts, music groups, arts and craft, knitting groups, woodworking, and painting (Aday, 2003). According to several studies, these educational offerings yield positive results for senior participants.

For example, in one study of 20 seniors participating in the Arts, Health, and Seniors Program in Vancouver, British Columbia, seniors connected with their communities through participation in art making (Moody & Phinney, 2012). This is in stark contrast to those seniors who experience social isolation because of the lack of community involvement and having no family members living or living near them. In the program, professional artists collaborated with the seniors to create artistic products or performances which related to relevant issues in their communities. Seniors were able to display their work publicly at various venues including the city library. The participants' family members, friends, and others came to see the displays, which was a great feeling for seniors who perceived themselves as being a positive contributor to society.

In another study measuring the impacts of music programming on the quality of life of healthy older adults, it was revealed that program participants perceived improvements in some aspect of their quality of life (Sole and colleagues, 2010). Music does not only improve the quality of life of seniors, but there are also other benefits. In another study, Trombetti and colleagues' (2011) research revealed that a 6-month music-based multitask exercise program improved gait under dual-task condition, improved balance, and reduced both the rate of falls and the risk of falling among seniors.

Marketing Strategy

According to Anderson (2003), almost all of the programs and centers identified as emerging models are moving away from the term senior center as it is posited that it prevents them from attracting the broad range of older adults needed to maintain vitality and diversity. Instead,

centers are actually dropping the word, "senior" and just calling the center by its name. Therefore, Model Cities Senior Wellness Center in Ward 5 would be called Model Cities. This strategy could be useful in attracting baby boomers and older seniors who currently are not comfortable with the term seniors.

Beyond the recommended name change, it is essential that DCOA market the program to local employers, churches, civic associations, ANCs, hospitals, and doctors' offices. This approach would ensure that the agency does a more effective job at increasing the number of seniors actively engaged at a wellness center. Messaging would include how the senior wellness centers can improve the health outcomes of each senior as each individual receives a health and wellness plan tailored to meet their personal goals.

Accreditation

To advance the quality of the senior wellness centers, it is recommended that each center pursue the National Senior Center Accreditation (National Council on Aging, 2013). This accreditation includes nine standards of excellence for senior center operations, which would hold each operator accountable for maintaining a high level of quality service. The standards include purpose, community, governance, administration, program planning, evaluation, fiscal management, records and reports, and facility. The benefits of attaining the accreditation are that organizations must maintain a written strategic plan and are better able to assess outcome measurements. Moreover, an accredited organization would position itself for receiving funding from private foundations.

D.C. Office on Aging

To ensure that the recommendations articulated in this white paper are fully implemented, it is critical that DCOA create the Technical Assistance, Training, and Evaluation Center for the District's Senior Wellness Centers (See Appendix B). By establishing this center, the agency will be positioned to identify best practices and assist senior wellness center providers with administering them. For evidence-based models that require training prior to administration, DCOA will ensure staff complete a train-the-trainer curriculum and subsequently train senior wellness center providers on administering the new models. Moreover, DCOA would be positioned to provide technical assistance, coordination, and oversight of services across the District to ensure consistency of services. Lastly, it is recommended that DCOA establish an evaluation component to assess the value of each division, program, and service at the senior wellness center.

The evaluation team will include a program director, lead scientist, epidemiologist, biostatistician, data manager, programmer, IT support staff, administrative support staff, and six data entry staff members. The team would assess seniors when they first join the senior wellness centers. Potential measurable indicators are height, weight, hand grip, walking, activities of daily living, memory, falls, lipid profile, thyroid hormone, blood count, blood sugar, memory performance, vision, advanced directives, eating habits, number of medications, hospital admissions, and number of visits to the senior wellness center and types of completed activities. Such an approach to data collection and analysis will ensure that investments are made in areas that have the greatest returns, while reinvesting dollars from programs that prove less effective. The evaluation team would also be instrumental in pilot testing new health and wellness services and programs.

Information Systems

It is recommended that DCOA acquire an integrated health and human services case management system that will enable all providers within the Senior Service Network to collect data on every senior accessing services from DCOA and its community-based partners. This approach will enable the agency to collect a wide range of utilization data, as well as electronically make referrals for customers. For example, a Hospital Discharge Planning Program social worker could electronically make referrals to community-based partners for seniors being discharged from hospitals. Moreover, DCOA would be able to track pertinent data to assess the value of the District's senior wellness centers.

Building Redesign

It is recommended that DCOA procures the services of an architect who can design the blueprint for a bright and modern senior wellness center with more space for health and wellness activities, a courtyard, intergenerational vegetable garden, meetings, arts and crafts, a restaurant, swimming pool, and so much more. The blueprint will determine the size of the capital budget for constructing the Wards 2 and 3 senior wellness centers and modernizing the six existing senior wellness centers.

Budgetary Implications

Appendices C and D include cost analyses for the staffing patterns of both DCOA and its community-based partners operating the senior wellness centers. The total full-time equivalent (FTE) for DCOA is 15 with a budget recommendation of \$1.5m. For the community-based partners, there is a recommendation for 31 FTEs and \$1.9m for each of the six existing senior wellness centers totaling \$11,552,648. This figure does not reflect contractual services such as security. Additional costs will be realized once the District opens the remaining two senior wellness centers. The cost of a new information system is approximately \$500,000 for implementation and \$250,000 for the annual user fee. The costs for the architectural design and capital budget are unknown at this time.

Conclusion

The District of Columbia is confronted with an antiquated senior wellness center framework that is inadequate to meeting the health and wellness needs of the District of Columbia seniors. Consequently, only 2.5% of the District's seniors are actively engaged at the city's six senior wellness centers. Based on a literature review, senior wellness centers add value to the seniors' quality of life when they include specific programming such as health and wellness, intergenerational, civic engagement, and leisure and education programs and services. The

review also revealed that it is essential that senior wellness centers hire clinical personnel who can assist seniors in managing their health. Moreover, health and wellness programs should be monitored and evaluated to determine their impacts in each community (See Appendix E). The findings of the literature review are presented as recommendations in this paper. As a next step, it would be beneficial to prioritize the list of recommendations to consider funding opportunities.

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Appendix A:

Senior Wellness Center Organizational Chart (Community-Based Structure)



Appendix B:

Senior Wellness Center Administration Organizational Chart

(District of Columbia Office on Aging Staffs)



Appendix C:

Cost Analysis for DCOA's Senior	• Wellness Center Staffing Pattern
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Title	Grade	Salary (Inc. 3% Increase)	FY 15 3% increase	New Salary - FY 15	27%	Total Cost to the Agency
	MS-					
Chief Administrator	14	\$113,000.00	\$3,390.00	\$116,390.00	\$31,425.30	\$147,815.30
Quality Assurance Officer	CS-14	\$98,893.00	\$2,966.79	\$101,859.79	\$27,502.14	\$129,361.93
Trainer/Technical Assistant	CS-12	\$64,375.00	\$1,931.25	\$66,306.25	\$17,902.69	\$84,208.94
Trainer/Technical Assistant	CS-12	\$64,375.00	\$1,931.25	\$66,306.25	\$17,902.69	\$84,208.94
Nutrition Officer	CS-14	\$98,893.00	\$2,966.79	\$101 <i>,</i> 859.79	\$27,502.14	\$129,361.93
Public Health Nutritionist	CS-12	\$64,375.00	\$1,931.25	\$66,306.25	\$17,902.69	\$84,208.94
Public Health Nutritionist	CS-12	\$64,375.00	\$1,931.25	\$66,306.25	\$17,902.69	\$84,208.94
	MS-					
Evaluation/Innovative Practices Officer	14	\$98,893.00	\$2,966.79	\$101,859.79	\$27 <i>,</i> 502.14	\$129,361.93
Lead Scientist	CS-14	\$87,661.00	\$2,629.83	\$90,290.83	\$24,378.52	\$114,669.35
Epidemiologist	CS-12	\$66,373.00	\$1,991.19	\$68,364.19	\$18,458.33	\$86,822.52
Biostatistician	CS-13	\$74,171.00	\$2,225.13	\$76,396.13	\$20,626.96	\$97,023.09
Data Manager	CS-13	\$74,171.00	\$2,225.13	\$76,396.13	\$20,626.96	\$97,023.09
Programmer	CS-13	\$74,171.00	\$2,225.13	\$76,396.13	\$20,626.96	\$97,023.09
IT Support	CS-12	\$64,375.00	\$1,931.25	\$66,306.25	\$17,902.69	\$84,208.94
Administrative Support	CS-9	\$43,181.00	\$1,295.43	\$44,476.43	\$12,008.64	\$56,485.07
Total FTEs: 15		\$1,151,282.00	\$34,538.46	\$1,185,820.46	\$320,171.52	\$1,505,991.98

Appendix D:

Cost Analysis for CBOs' Senior Wellness Center Staffing Pattern

Title	Salary	Benefits @12%	Total Cost to Wellness Center
Senior Wellness Center Director	\$95,000.00	\$11,400.00	\$106,400.00
Intergenerational Manager	\$50,000.00	\$6,000.00	\$56,000.00
Program Coordinator	\$40,000.00	\$4,800.00	\$44,800.00
Nurse Practitioner	\$120,494.40	\$14,459.33	\$134,953.73
Nutritionist	\$65,000.00	\$7,800.00	\$72,800.00
Café Manager	\$31,200.00	\$3,744.00	\$34,944.00
Chef	\$62,400.00	\$7,488.00	\$69,888.00
Server	\$20,488.00	\$2,458.56	\$22,946.56
Cashier	\$21,257.60	\$2,550.91	\$23,808.51
Psychologist	\$124,800.00	\$14,976.00	\$139,776.00
Physical Therapist	\$81,120.00	\$9,734.40	\$90,854.40
Life Concierge (3)	\$200,000.00	\$24,000.00	\$224,000.00
Massage Therapist	\$52,000.00	\$6,240.00	\$58,240.00
Pharmacist	\$116,584.00	\$13,990.08	\$130,574.08
Activities Coordinator	\$37,440.00	\$4,492.80	\$41,932.80
Fitness Trainers/Instructors (6)	\$249,600.00	\$29,952.00	\$279,552.00
Aesthetician	\$33,280.00	\$3,993.60	\$37,273.60
Civic Engagement Manager	\$50,000.00	\$6,000.00	\$56,000.00
Volunteer Coordinator	\$41,600.00	\$4,992.00	\$46,592.00
Leisure & Education Manager	\$50,000.00	\$6,000.00	\$56,000.00
Computer Instructor	\$49,920.00	\$5,990.40	\$55,910.40
Foreign Language instructor	\$43,680.00	\$5,241.60	\$48,921.60
Arts & Craft Workshop	\$33,280.00	\$3,993.60	\$37,273.60
Facilities Manager	\$50,000	\$6,000	\$56,000
Total FTEs: 31	\$1,719,144.00	\$197,273.28	\$1,925,441.28



Appendix E: District of Columbia Senior Wellness Center Logic Model