



LOWCOUNTRY AREA AGENCY ON AGING PROGRAM EVALUATION REPORT

ACKNOWLEDGEMENTS

County Council on Aging

Beaufort County Council on Aging Colleton County Council on Aging Hampton County Council on Aging Jasper County Council on Aging

Lowcountry Area Agency on Aging

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The Public

Special thanks to the program participants and general public who provided feedback throughout the evaluation process.

Prepared by the Planning Department, Lowcountry Council of Governments with financial assistance from the South Carolina Department of Aging (SCDOA)

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EXECUTIVE SUMMARY

This evaluation of the Lowcountry AAA's program and services focuses on the **Nutrition Program.** The Nutrition Program is composed of three elements: (1) congregate meals/group dining and other activities offered at senior centers, (2) home delivered meals to homebound older adults, and (3) transportation services. The Nutrition Program is offered to persons over the age of 60, per the directives of the Older Americans Act of 1965. The evaluation measured the level of accomplishments of the program as it is currently implemented in the Lowcountry region. The evaluation also uncovered additional program and operational issues.

Findings

Between 2000 and 2019, the number of persons aged 60 and over increased by 118% in the Lowcountry region. This trend is expected to continue in the future. More older adults could translate into more program participants. There are 754 participants in the Nutrition Program currently.

Overall, the Nutrition Program is achieving its expected outcomes, as indicated by key evaluation findings below.

- Surveyed participants are highly satisfied with the services that were provided.
- Surveyed participants and Local Service Providers gave positive ratings to the condition of the facilities where services were provided.
- Participants experienced reduced food insecurity through group dining and home delivered meals.
- Surveyed participants experienced increased heathy food intake which led to healthy weight and improved overall physical health.
- Surveyed participants experienced enhanced emotional well-being and socialization via group dining and activities provided at senior centers, and home delivered meal contact.
- Local Service Providers are satisfied with the working relationship with the Lowcountry AAA.

The evaluation findings also indicated that some improvements to the Nutrition Program could be obtained. Program participants and Local Service Providers offered several suggestions for improving the program. These improvements revolved around several aspects of the program including meals, activities, facilities, personnel, and management.

With respect to recruiting new participants into the program, those potential participants that were surveyed indicated they were either unaware of the program or not interested. Classes, exercise equipment, activities, and entertainment were noted as possible attractions for participating.

Emerging models of senior center operations discussed in the research literature suggest a wide range of activities that incorporate health, wellness, growth, and learning; in a dynamic, sometimes intergenerational, setting.

Recommendations

Recommendations are based on the surveyed participants' suggestions and a review of other relevant Nutrition Program studies. These recommendations are geared toward the improvements of the Nutrition Program. They include:

- Developing a continuous monitoring system to track the outcomes of the program.
- Reorienting the program by upgrading facilities and offerings in response to the shift in older adults' demographics and the needs of dynamic generation of older adults.
- Participating in the National Senior Center Accreditation Program.
- Promoting capacity building of the program's personnel to maintain quality of and commitment with Nutrition Program provision.

INTRODUCTION TO EVALUATION

An increased aging population will likely increase demands for age-appropriate services and infrastructure. The Lowcountry Area on Aging Agency (AAA) is considering improving and expanding services to accommodate the increased number of older adults who will seek services to help them age in place. Improvements in programming and space can generate even higher rates of participation. As a result, a two phased project, including an evaluation of the Lowcountry AAA's programs and services (Phase 1) and an assessment of the senior centers (Phase 2), was initiated. This study focuses on Phase 1, the evaluation phase, and its results will be incorporated into the assessment phase.

Evaluation Purpose

The evaluation of the Lowcountry AAA's program and services focuses on the **Nutrition Program including congregate meals/group dining and activities offered at senior centers, home delivered meals to homebound older adults, and transportation services.** The evaluation intends to measure the level of accomplishments of the Nutrition Program offered by the Lowcountry AAA. The evaluation also looks to uncover other program or operational issues that may be present.

The purpose is to gain understanding of the perception of the current older adults receiving those services under the Nutrition Program and how the services impact them. Also, with an increased aging population, the evaluation would like to learn about the perception of older adults who do not participate in the program and what services they need or desire. Finally, the evaluation will help indicate areas of the program that need to be improved and adjusted to meet the need of the existing participants as well as to attract the new participants into the program.

The evaluation results will assist the Lowcountry AAA in making well-informed decisions about potential program changes to help match the program activities with the program goals. Also the results will help determine potential improvements to senior centers that align with all services they provided. Other stakeholders that will benefit from this evaluation include the existing and potential participants, existing and potential service providers, and local agencies. The older adults will receive services that meet their needs and desires, the providers will have information to provide appropriate services, and the local agencies will have more confidence that older adults in the region are and will be benefiting from the program participation.

Evaluation Questions

In response to the evaluation purpose, key evaluation questions were developed as follows:

- 1) What are the program participants' experiences with, and impressions of the program, and their assessment of meals and supportive services received through the program?
- 2) What are the potential participants' perceptions of the program and their needs of services received through the program?
- 3) What types of changes need to be made to the Nutrition Program to meet the need and desire of the current participants and to attract wider participation?

Methodology

Participants

To address these evaluation questions, different stakeholders were identified and categorized into five groups including:

- Congregate Meals Participants—older adults participating in group dining and group activities provided at the senior centers.
- Home Delivered Meals Participants—older adults receiving home delivered meals from senior centers.
- Potential participants or a proxy group—older adults who do not participate in the Nutrition Program and to whom the program needs to influence and vice versa.
- Local Service Providers (LSPs)—staff and volunteers serving the Nutrition Program.
- Lowcountry AAA staff administering the Nutrition Program.

At the time the evaluation, 146 Congregate Meals participants and 608 Home Delivered Meals participants were actively served. There were 46 Local Service Providers and 3 Lowcountry AAA staff members involved in the Nutrition Program.

In 2019, there were approximately 38,549 adults aged 60 years and over in the Lowcountry region. As mentioned above, 754 program participants are currently being served. The number of potential program participants is therefore 37,795. Based on this number of potential program participants, the target sample size for surveys was 154. The sample size was calculated using the Performance Outcome Measurement Project (POMP) sample size calculator with 95% confidence interval, 5% margin of error, 90% response rate, and 90 % population proportion (Administration for Community Living, 2019). More detail on the POMP's sample size calculation can be found in Appendix 1.

Data Collection

The data collection used two methods—survey and interview. The survey was used to obtain data from the older adults and the LSPs, while the interview was used to document data from the Lowcountry AAA staff. These two methods were conducted from October 2021 to January 2022.

Survey Development

Four surveys were developed for different stakeholders to gain understanding of how they perceive the Nutrition Program in different aspects and how to make program better for them. The creation of survey questions is guided by the Service Specific Surveys from the POMP. The surveys were then reviewed and revised by the Lowcountry AAA as appropriate. Generally, surveys collected data regarding demographics, current and future services and

Eligible Older Adults

- Persons age 60 and older, and
 - the spouse of the older program beneficiary, regardless of age;
 - a person under age 60 who has a disability and who resides in a housing facility occupied primarily by older adults, at which group dining services are provided;
 - a person under age 60
 who has a disability may receive a meal if they reside with an individual
 who is a program
 beneficiary; or
 - a person who volunteers during meal hours

(South Carolina Department on Aging, 2019)

needs, and performance of staff and volunteers. The surveys were distributed through both Survey Monkey and paper copies (Appendix 2). These surveys include:

- Senior Center Participant Survey for Congregate Meals Participants intended to capture the participants' perception of the group dining and supportive services received through the senior centers. The survey asked questions in relation to their experiences with the quality of the services, the outcomes of the services, overall satisfaction with the services, and suggestions on how to make services better and more suitable for them.
- *Home-Delivered Meals Service Survey for Home Delivered Meals Participants* asked homebound older adults who received meals delivered directly to their home for their impressions of the quality of meals, the outcomes of the services, overall satisfaction with the services, and suggestions on how to make the service better.
- Senior Center Interest Survey for Potential Participants focused on the new/potential older adults who had never participated in the program, particularly congregate meals. The survey collected their reasons for not participating in or receiving services through the senior centers, their areas of needs, and their interest in participating in the services offered at the senior centers.
- Senior Center Provider Survey gave the Nutrition Program's providers/contractors an opportunity to provide feedback on its satisfaction with the Lowcountry AAA and how to improve the services.

Interview

The Lowcountry AAA staff involving the Nutrition Program were interviewed multiple times. This process is to obtain insightful information about the services they provided. The results from the interviews were incorporated throughout the evaluation report.

Additional Information

Relevant studies on aging services were reviewed. This information will support the data analysis and recommendations geared towards the improvements of the Nutrition Program, identified services, and senior centers. The topics cover standards of senior centers, different models of senior centers, and expected outcomes of senior centers.

Measures

- *Demographics*—demographic characteristics of Congregate Meals and Home Delivered Meals participants
- *Participation or Provision*—participation characteristics of Congregate Meals and Home Delivered Meals participants, and provision characteristics of Local Service Providers
- *Outcomes*—perceived changes to different stakeholders including satisfaction/attitudes, behaviors, and improvements in factors related conditions resulting from the program.

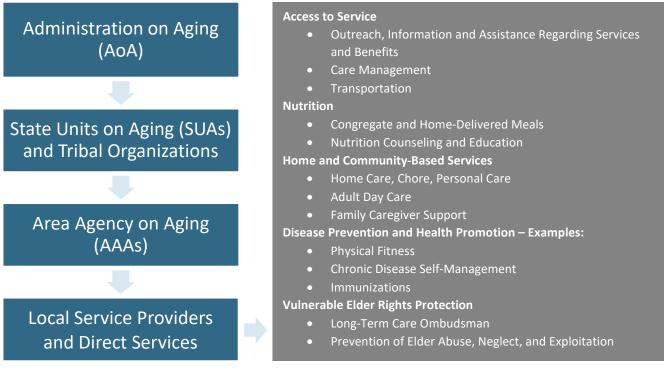
OVERVIEW OF AGING SERVICES AND OLDER ADULT DEMOGRAPHICS

Older Americans Act

Passed in 1965 as part of Lyndon Johnson's Great Society reforms, the Older Americans Act (OAA) serves as the most significant funding mechanism for aging services in the country. It intended to enhance the quality of life and promote the well-being of adults 60 years and older. As shown in Figure 1, a wide range of services provided under the Act are planned, administered, and delivered by the federal, state, and regional agencies (Congressional Research Service, 2021) including:

- Administration on Aging (AoA), the principal agency of the U.S. Department of Health and Human Services, established by the Act to carry out the provisions of the Act and to advocate for the older adults.
- State Units on Aging (SUAs) and Tribal Organizations, the state agency, established by the Act to be responsible for planning and policy development as well as administration of the Act's activities.
- Area Agency on Aging (AAAs)—established by the Act and designated by the SUA to operate within a
 planning and service area (PSA). The AAAs serve the area either directly or through contract with local
 service providers (LSPs).
- Local Service Providers and Direct Services

Figure 1: Aging Entities and Services



Note. Adapted from Congressional Research Service, 2020

Lowcountry Area Agency on Aging (AAA)

Under the Older American Act of 1965, as amended, the Lowcountry Area Agency on Aging (AAA) has administered and provided services to older adults 60 years and older who are in the greatest social and/or economic need, are limited English-speaking, are those living in rural areas, and/or are low-income minorities in the Lowcountry region. Over three decades, the Lowcountry AAA has served the older adults in the planning and service area, designated by the State Units on Aging (SUA), including Beaufort, Colleton, Hampton, and Jasper Counties.

Housed within the Lowcountry Council of Governments (LCOG), the Lowcountry AAA is managed by the Director who reports to the LCOG Executive Director. The Director advises the Executive Director, the Aging Advisory Committee and the LCOG Board of Directors on aging-related issues. The Lowcountry AAA receives administrative and fiscal management services from the LCOG and assistance from other departments within the LCOG. The Planning Department helps with demographic and mapping information and transportation related issues. The Community and Economic Development Department provides information regarding housing and community development projects of interest to the elderly and disabled population. Figure 2 illustrates the Lowcountry AAA organizational and work structure. The staff who support the Lowcountry AAA's mission include:

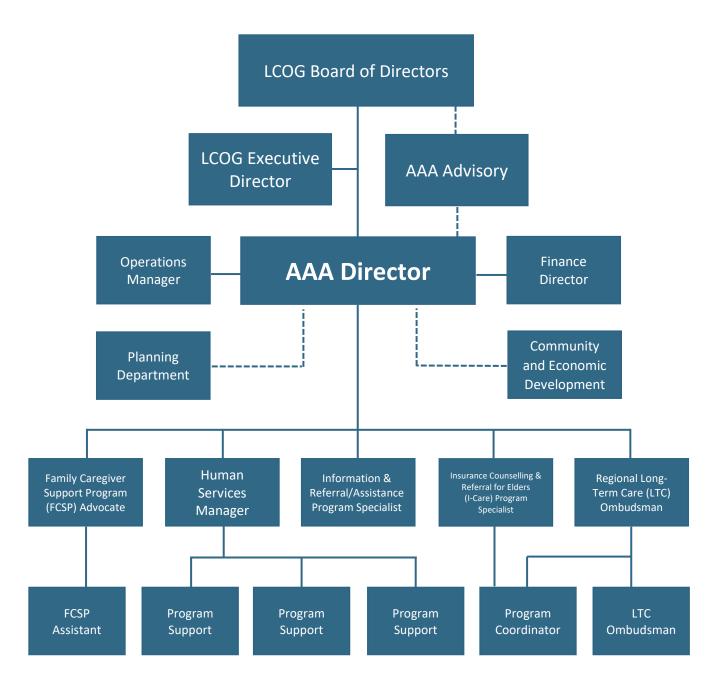
- Area Agency on Aging Director
- Finance Director from the LCOG
- Operations Manager (Nutrition, EBP, and Administrative Assistant)
- Human Services Manager (Regional Assessment and Home Care Coordinator)
- Three Assessors
- Regional Information and Referral/Assistance Specialist
- Regional Long-Term Care Ombudsman
- Long-Term Care Ombudsman
- Regional Family Caregiver Support Program Advocate
- Regional Insurance Counseling Assistance and Referral for Elders Coordinator
- Program Coordinator supporting Ombudsman/I-Care
- Program Assistant (FCSP)
- Volunteer (SCSEP)

Mission

"To serve as the regional lead agency responsible for advocating, planning, coordinating and developing resources to help local agencies provide a comprehensive range of social and health-related services for older individuals, adults with disabilities and their families within the statewide aging network and to promote a positive experience of safely aging in place."

Vision

"To be recognized as the lead agency offering a comprehensive resource system that provides information, education and access to services for individuals and local agencies that will improve the lives of the elderly and disabled adults in the Lowcountry region. Our vision is also that all seniors and adults with disabilities have access to services they need to safely age in place." Figure 2: Lowcountry AAA Organizational and Work Structure



Note. Reprinted from the Lowcountry AAA Area Plans 2017-2021

According to the Lowcountry Area on Aging Agency (2017), the goals for the Lowcountry AAA's Area Plan 2017-2021 are to: (1) improve services delivered through innovation, support, outreach, and education by increasing both the number of individuals served and the quality of the services, (2) provide more service options to older adults and disabled individuals in the region, driving new service model programming ideas for senior centers and therefore finding new ways to serve the New Senior of Tomorrow, and (3) continue to deliver existing services at a high level in compliance with the OAA and LGOA policies and guidance .

The Lowcountry AAA serves Approximately 1,500 older adults 60 years and older who are in the greatest social and/or economic need, are limited English-speaking, are those living in rural areas, and/or are low-income minorities. The services are offered through Nutrition Program, Family Caregiver Support, Homecare Program, Insurance Counseling Assistance and Referral Program for Elders (I-Care), Minor Home Repair and Safety Program, Legal Assistance Program, and Long-Term Care Ombudsman Program.

The sources of revenue to support these services are from the Grants for State and Community Programs on Aging-Title III and Public Health Service Act-Title XIX (Block Grants)

These services are provided either the older adults' residence or ten senior centers across the Lowcountry region. All senior centers' services comply with the Americans with Disabilities Act (ADA) Standards with acceptable condition and are provided either directly by the Lowcountry AAA or through contracts with local service providers (LSPs). Figure 3 illustrates the location of the senior centers and the LSPs.

Below is a brief description of each aging service offered by the Lowcountry AAA.

Nutrition Program

Funded under Title III-C-1 and C-2 and Home and Community-Based Services (HCBS), the Nutrition Program offers USDA approved meals to homebound older adults and those that attend locally ten senior centers (or nutrition sites). The purpose is to reduce hunger and food insecurity, promote socialization, and promote the health and well-being, of older adults. Three services offered include:

- Home Delivered Meals—meals delivered directly to homebound client's homes who are at high nutritional risk.
- Group Dining—meals provided at the senior centers as community focal points where older adults can come together for not only meals but also socialization and activities.
- Group Dining Transportation—transportation service for group dining clients who do not have the ability to transport themselves to and from the senior centers.

Local Service Providers (LSPs)

- Beaufort County Council on Aging
- Colleton County Council on Aging
- Hampton County Council on Aging
- Jasper County Council on Aging

Senior Centers

Beaufort County

- Burton Wells Senior Center
- St. Helena Nutrition Site

Colleton County

- Walterboro Nutrition Site
- Green Pond Nutrition Site

Hampton County

- Yemassee Senior Center
- Estill Nutrition Center
- Hampton Nutrition Site

Jasper County

- Robertville Nutrition Site
- Hardeeville Senior Center
- Ridgeland Senior Center

Family Caregiver Support Program

The program supports individuals who care for older adults by providing:

- Information about available services.
- Assistance in gaining access to supportive services.
- Educational sessions to assist caregivers in making decisions, validating experiences, and solving problems related to their roles.
- Respite care to enable caregivers to be temporarily relieved from their responsibilities.
- Supplemental services reimbursement for incontinence supplies, nutritional supplements and some home modification, and to complement the assistance provided by caregivers.

Homecare Program

The program provides services to older adults, their families, and/or caregivers with limitation in their abilities to provide self-care and maintain a safe and sanitary home. The services include:

- *Personal Care*—personal assistance, stand-by assistance, and supervision or cues (such as with eating, bathing, toileting, transferring in/out of bed or chair, walking, dressing, grooming, and assistance with medicine).
- *Homemaker*—preparing meals, errand/task, using the telephone, and doing light housework.

Insurance Counseling Assistance and Referral Program for Elders (I-Care)

I-Care is a local State Health Insurance Assistance (SHIP). It assists Medicare-eligible older adults, their families, and caregivers through outreach, counseling, and training in relation to Medicare Coverage. The assistance includes, but is not limited to benefits, prescription, and fraud.

Minor Home Repair and Safety Program

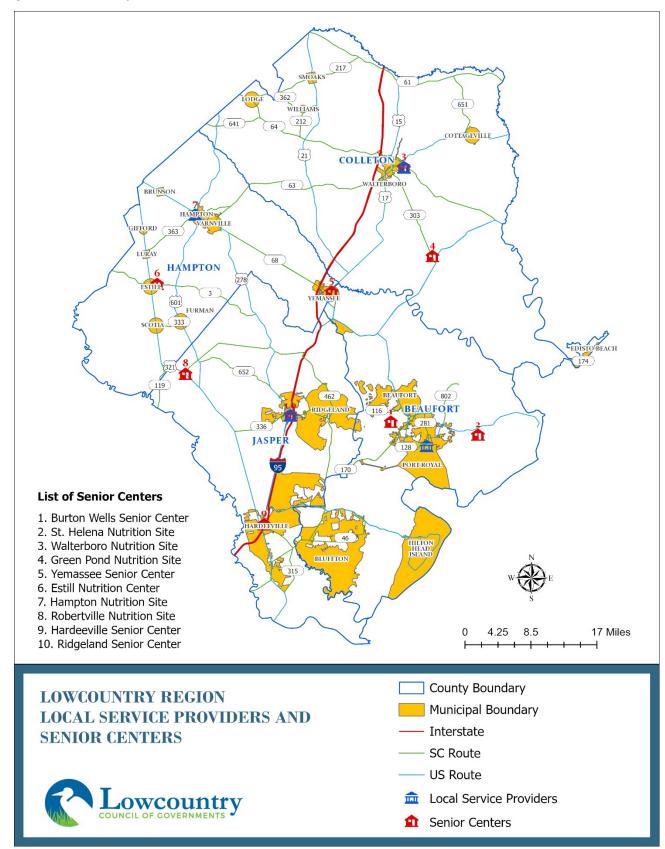
The program provides limited funds for the purchase of materials to assist in removing health and safety hazards, and to provide nonstructural environmental modifications to help meet the needs of the older adult. Examples of the modifications are wheelchair ramps, handrails, raised toilet seats, shower chair/transfer bench, hand-held shower head, and bathroom grab bars.

Legal Assistance Program

The program assists older adults in obtaining legal services from a lawyer participating in the program. Legal services include different legal issues related to, for example, housing, utilities, abuse, age discrimination, and defense of guardianship. A lawyer will provide an initial consultation at no cost.

Long-Term Care Ombudsman Program

With no service fee, the long-term ombudsman serves as the advocate for residents in long-term care facilities. They investigate complaints and mediate on the residents' behalf to resolve complaints to the residents' satisfaction.





Note. Map generated using data from the Lowcountry AAA

Older Adults Overview

National Older Adults

According to U.S. Census Bureau (2020), the population age 65 and older in the nation has experienced rapid growth. The older population is still expected to grow from approximately 49 million in 2020 to nearly 95 million people in 2060. As a result, the share of older population will grow from 17% in 2020 to 23% in 2060 (Figure 4).

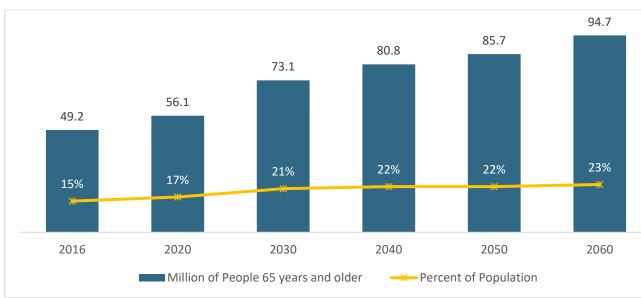


Figure 4: Projection of Older Adult Population 2020-2060

Note. Adapted from Census Bureau, 2020

Many older adults struggle with health problems and economic hardship. In 2020, 9% of older adults lived in poverty. The number of aged poor has increased as the total number of the older adults has grown (U.S. Census Bureau, 2021a). Consequently, one in six older adults participated in a wide range of needs-based assistance programs that support people with limited resources (U.S. Census Bureau, 2021b). These programs are:

- Health Insurance through Medicaid
- Nutrition Assistance through the Supplemental Nutrition Assistance Program (SNAP) or other food assistance programs
- Shelter Assistance in the form of rental subsidies, energy assistance or other housing assistance programs,
- Cash Assistance through the Supplemental Security Income (SSI) program or state- and county-level General Assistance (GA) programs.,

Approximately 9% participated in some form of nutrition assistance. The SNAP/Food Stamps was the most common type, either alone or in combination with other food aid.

Lowcountry Older Adults

To align with the population to whom the Lowcountry AAA serves, older adults here refers to people aged 60 years and older. The number of older adults in the Lowcountry region has markedly increased since 2000, with an increased aging population 118.5% from 2000-2019 and 35.5% from 2010 to 2019. Not only the number but also the share of older population has experienced an increase from 19.2% to 31% between 2000 and 2019 (Table 1). As a result, there will likely be increasing demands for age-appropriate services and infrastructure to suit older adults now, and into the future as the senior population continues to increase. Figure 5 illustrates the distribution of the older population in 2019 in the Lowcountry region.

	2000		2010		2019		% Change	% Change
County	Total 60+	% of Total Population	Total 60+	% of Total Population	Total 60+	% of Total Population	2000-2019	2010-2019
Beaufort	25,251	20.9%	45,305	27.9%	61,612	33.1%	144.0%	36.0%
Colleton	6,666	17.4%	8,683	22.3%	10,311	27.4%	54.7%	18.7%
Hampton	3,416	16.0%	4,105	19.5%	4,719	24.1%	38.1%	15.0%
Jasper	3,213	15.5%	4,069	16.4%	7,577	26.4%	135.8%	86.2%
Total	38,546	19.2%	62,162	25.2%	84,219	31.0%	118.5%	35.5%

Table 1: Population 60 Years and Older 2000-2019

Source. U.S. Census Bureau, Decennial and American Community Survey 5-Year Estimates

Table 2 further provides that of 84,2019 population 60 years and older in 2019, nearly 7% are economically insecure, living in poverty. Moreover, among households with at least one person 60 years or older, approximately 6% participated in the Supplement Nutrition Assistance Program (SNAP).

County	Total 60+	Total 60+ in Poverty	% 60+ in Poverty	Total Households	Households with at Least One 60+	Households with at Least One 60+ Receiving SNAP	% Households with at Least One 60+ Receiving SNAP
Beaufort	61,612	2,965	4.8%	71,477	37,346	1,223	3.3%
Colleton	0,311	1,166	12.0%	15,075	6,893	946	13.7%
Hampton	4,719	662	14.7%	6,993	3,143	368	11.7%
Jasper	7,577	963	12.9%	10,269	4,728	522	11.0%
Total	84,219	5,756	6.9%	103,814	52,110	3,059	5.9%

Table 2: Population 60 Years and Older in Poverty and SNAP 2019

Source. U.S. Census Bureau, American Community Survey 5-Year Estimates

The Lowcountry AAA contributes to the Nutrition Assistance Program by offering meals to homebound older adults and those that attend locally senior centers. Figure 6 depicts the location of population 60 years and older who are in poverty and the location of senior centers across the Lowcountry region.

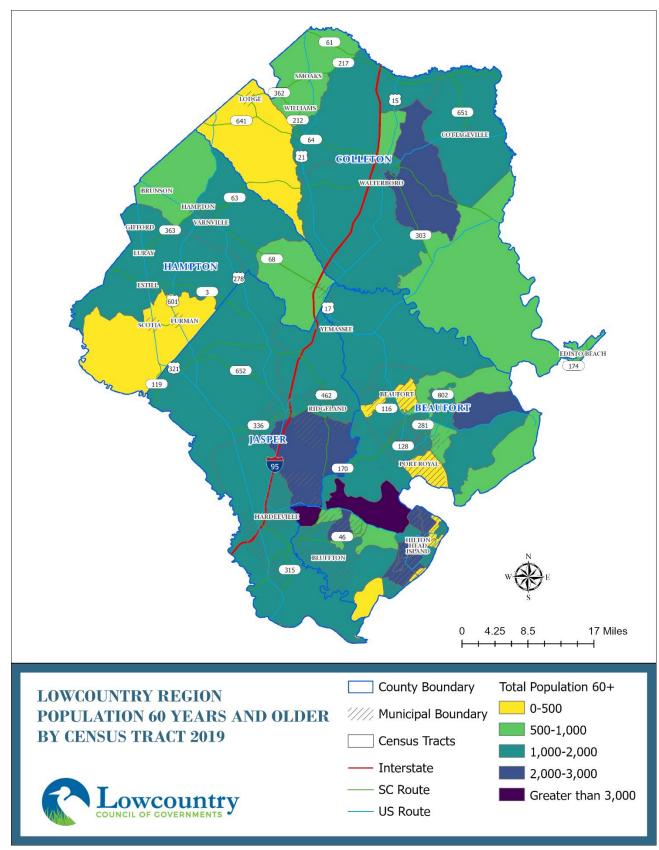
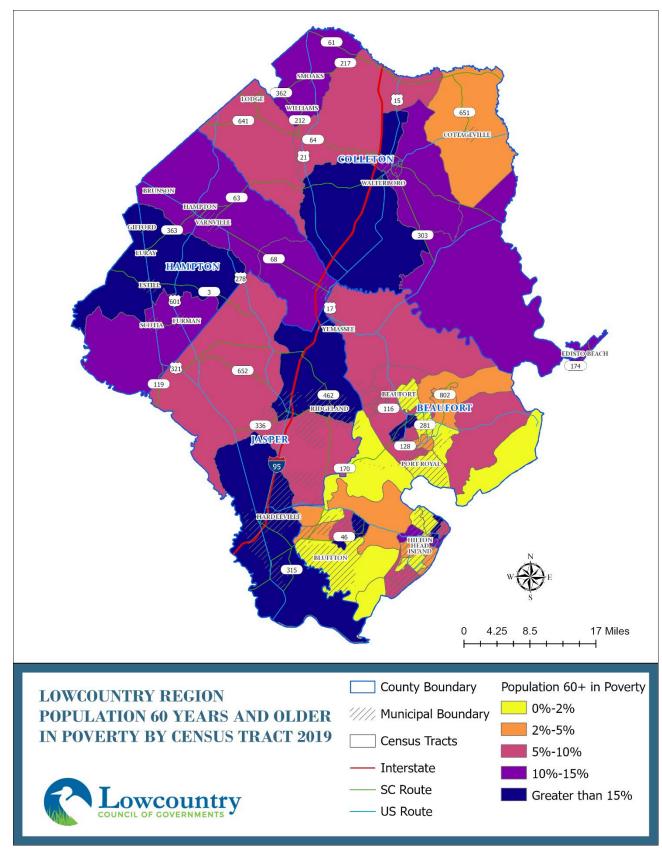
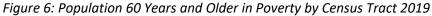


Figure 5: Population 60 Years and Older by Census Tract 2019

Note. Map generated using data from the U.S. Census Bureau, ACS 5-Year Estimates





Note. Map generated using data from the U.S. Census Bureau, ACS 5-Year Estimates

PROGRAM LOGIC MODEL

The program logic model describes and links the program's input/resources, activities, outputs, and expected outcomes (W.K. Kellogg Foundation, 2004). The component of the logic model is displayed in Figure 7. To design an appropriate evaluation, the logic model of Nutrition Program and group activities was developed to demonstrate how the program/services work (Table 3).

- *Introduction:* A brief description of the program that is evaluated.
- Assumptions: A statement of how the program works and why it works and will work this way. The assumptions are based on experience, research, or best practice.
- *Situation:* Description of conditions that give rise to the need for or issues of the program. The situation revolves around the target population.
- External Influential Factors: Factors that will influence change in the program.
- The program's progress and desired results:
 - Resources/inputs are used to accomplish the set of activities in the program.
 - \circ $\;$ Activities or action are taken to address the situation or issues in the program.
 - Outputs are evidence or service delivery/implementation targets that each activity aims to produce both directly and indirectly. They are usually described in terms of size and scope of the services or products delivered or produced by the program.
 - Outcomes are expected changes in different period once the activities are accomplished. The period can be short-term, intermediate-term, and long-term.
 - Short-term outcomes show the target groups' changes in awareness, interest, attitudes, knowledge, and skills that are expected to result from program activities.
 - Intermediate-term outcomes are specific changes in target groups' behaviors and level of functioning expected to result from program activities. These usually build on the progress expected by the short-term outcomes.
 - Long-tern outcomes are also specific changes in the target groups' improvements in factors related conditions. These usually build on the progress expected by the Intermediate-term outcomes.

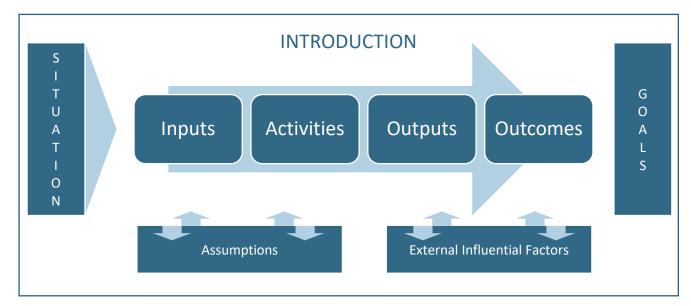


Figure 7: Program Logic Model Framework

Table 3: Logic Model of Nutrition Program

Logic Model of Nutrition Program

Introduction

The Nutrition Program established by the Older Americans Act (OAA). The program is a part of the Administration on Aging within the Administration for Community Living (ACL). The goal of the program is to offer a USDA approved noon time meal to older adults through: (1) Congregate Meals and activities offered at senior centers and (2) Home Delivered Meals (HDM). The program offers well-balanced and affordable healthy meals with adequate nutrition benefiting them in areas of health. The activities offered at the senior centers include health and wellness classes, educational classes, art and crafts, recreational activities, social support and interaction, and special event trips. The goal is to make community-based services available to older adults and keep them healthy and functioning as they age.

Assumptions

- Meals provide at least one-third of the recommended Dietary Reference Intakes established by the Food and Nutrition Board of the Institute of Medicine of the National Academy of Sciences, and adhere to the current Dietary Guidelines for Americans, issued by the Secretaries of the Departments of Health and Human Services and Agriculture.
- Meals will be secure throughout the programs with balanced hot or frozen meals provided by contracted Caterers (Senior Catering and GA Foods). In the event of an emergency, Shelf Stable Meals (SSMs) are provided to participants, allotting them 5-7 ready to eat meals.
- Participants have access to specific food as needed—pureed meals provided by contracted Caterers.
- Funding will be secure throughout the course of the programs through the OAA Title III support State and Regional efforts in South Carolina.
- Councils on Aging (COA) and other partners work together to deliver services to participants.
- Staff with necessary skills and abilities can be recruited and hired.

Situation

- The Nutrition Program serves nearly 1,000 older adults with 60 years of age or older who are in the greatest social and/or economic need, are limited English-speaking, are those living in rural areas, and/or are low-income minorities.
- There have been increased demands of the aging population due to an increase of population 60 years and older.
- Older adults who are in the greatest social and/or economic need are far more than what the aging programs serve.
- Expanding services to accommodate the increased number of older adults who will seek services to help them age in place. Therefore, improvements in programming and space are expected to reach the older adults in need and generate higher rates of participation.

External Influential Factors

- Funding available to support the program and services
- Participants' transportation accessibility and convenience
- Participants' motivation and perceived benefits
- Participants' self-efficacy

Table 3: Logic Model of Nutrition Program (continued)

		Logic Model C	of Nutrition Program		
Inputs	Activities	Outputs		Outcomes	
			Short term	Intermediate	Long term
 Personnel Lowcountry AAA staff—Director, Grants Compliance Officer, Human services Manager, Assessors, Finance Director County Council on Aging (COA) staff as facilitators of the programs— Director, Admin Assistant-Support Director, Site Manager, 	 Nutrition Meal plating and serving Meal deliveries Socialization/Group Activities Transportation services Social, educational, and recreational activities 	 Nutrition Number of meals (hot and cold) served/day Average daily attendance at senior centers Socialization/Group Activities Number of delivering mileage, cost Number of mileage in transporting older adults to and from centers Numbers of 	 Participants Increased availability of healthy foods Increased awareness/knowledge on nutrition Increased motivation in social engagement Increased affordability of healthy foods Strengthened knowledge and awareness of the program Increased in satisfaction of the program 	 Participants Increased intake of healthy food Increased physical motion Increased useful skills in daily tasks Reduced social isolation and increased social connection and engagement 	 Participants Improved nutritional status Delayed the onset of chronic disease Improved health and wellness Reduced healthcare cost
Assistant Site Manager, Transportation Staff COA volunteers as the assistants of the programs SCDOA staff— Program Coordinator— Nutritionist, Program Manager, Title III-B Programs		activities/events per month, types of activities offered (health and educational programs, exercise class/equipment, art class, computer lab, games, transportation service, social support and interaction, and special event trips), types of educational	 <u>Agencies</u> Increased awareness and understanding of the Lowcountry AAA, providers, and the services provided Increased in satisfaction of the working relationship 	 <u>Agencies</u> Increased stakeholder collaboration Revised plans/policies that improve the program 	 <u>Agencies</u> Attainment of older adults' goals to age in community Strengthened policie programs, and practices that suppol aging in community
 Lowcountry Aging Advisory Committee (LAAC) 		resources (guest speakers, handouts, tool and tips)			

Table 3: Logic Model of Nutrition Program (continued)

Logic Model of Nutrition Program						
Inputs	Activities	Outputs	Outputs Outcomes			
Inputs	Activities	Outputs —	Short term	Intermediate	Long term	
 Financial Resources Federal-Title III- distributed by SCDOA to 10 regions across SC State-HCBS- distributed by SCDOA to 10 regions across SC Cost sharing- participant donations Local contributions at COA level Grants-SCANA (purchased Shelf Stable Meals), 	 <u>Operations</u> Plans/policies to help the AAA carries out its function effectively and addresses the challenges of meeting the needs of more and different older adults Screening and resource referral Partnership with local agencies for activities and educational resources Volunteer opportunities 	 <u>Operations</u> Number of plans/policies, list of plans /policies Number of total older adults who are served Number of Identified eligible older adults at nutritional risk and/or food insecurity Number of total older adults participating in the congregate meals Number of total older adults receiving home- delivered meals Number of Local agencies/partners, list of agencies/partners 	Snort term	Intermediate	Long term	
Senior Catering (TempTaker Pilot) Manual/guidelines • OAA directives • SCDOA's Aging Services Policies	 Marketing of program services Participants' satisfaction survey Providers' satisfaction survey 	 Number of staff and volunteers serving the programs Number of marketing/outreach events, list of material distribution 				
and Procedures Manual 2019 • Lowcountry Aging Advisory Committee (LAAC)'s Bylaws		 Percent of participants reporting satisfaction with the program Percent of providers reporting satisfaction with the Lowcountry AAA 				

Note. Logic Model generated using data from the interview with the Lowcountry AAA staff and relevant operational documents.

RESULTS AND ANALYSIS

As of 2021, there are 754 older adults who participated in Nutrition Program—146 in Congregate Meals and 608 in Home Delivered Meals. Of the 146 in the Congregate Meals, 87% responded to the survey and of the 608 in the Home Delivered Meals, 45.7% responded to the survey.

The survey for potential older adults was distributed online throughout the Lowcountry region and received 290 responses. The Local Service providers had 46 personnel and 33 responded to the survey.

Congregate Meals Participants

Demographics

Demographic characteristics of respondents are shown in Table 4. Total respondents are 127. The majority of respondents were aged between 70 and 79, had income \$15,000 or less, and were female. Over 80% of respondents were Black, followed by White, Hispanics, and Asian respectively.

Statistical Definition

- Weighted mean (average) is often used in calculating a rating scale where each data is applied the weight or probability.
- Standard deviation measures a dispersion of data in relation to the mean.
- Coefficient of variance measures the dispersion of data points around the mean; therefore, variability can be compared within different groups.

Variables	Categories	Total Respondents	Frequency	Percentage
	Beaufort		35	27.6%
Household Location	Colleton	127	3	2.4%
	Hampton	127	41	32.3%
	Jasper		48	37.8%
	Under 60		4	3.1%
Age	60-69		29	22.8%
	70-79	127	56	44.1%
	80-89		32	25.2%
	90 and under		6	4.7%
Gender	Male	125	25	20.0%
	Female	125	99	79.2%
	Other		0	0.0%
	Black		104	83.9%
Deee en Ethnieitu	White	124	18	14.5%
Race or Ethnicity	Hispanic or Latino	124	1	0.8%
	Other		1	0.8%
	\$15,000 and under		55	49.1%
	\$15,001-\$25,000		38	33.9%
Income	\$25,001-\$50,000	112	16	14.3%
	\$50,001-\$75,000		2	1.8%
	Over \$75,000		1	0.9%

Table 4: Demographic Characteristics of Older Adults in Congregate Meals

Participation

According to Table 5, the number of respondents participating in senior centers varied in 2021—the Green Pond and Walterboro Nutrition Sites were closed during the time of survey.

Variables	Categories	Total Respondents	Frequency	Percentage
	Burton Wells Senior Center		12	9.5%
	Estill Nutrition Center		5	3.9%
	Green Pond Nutrition Site		0	0.0%
	Hampton Nutrition Site		22	17.3%
Participation	Hardeeville Senior Center	107	17	13.4%
Location	Ridgeland Senior Center	127	13	10.2%
	Robertville Nutrition Site		23	18.1%
	St. Helena Nutrition Site		22	17.3%
	Walterboro Nutrition Site		1	0.8%
	Yemassee Senior Center		20	15.8%
	Less than 1 year		23	18.3%
	1-3 years	125	26	20.6%
Participation Period	3-5 years	126	31	24.6%
	5-10 years		29	23.0%
	Over 10 years		17	13.5%
	1-3 days per week		52	41.6%
Participation	4-5 days per week	425	62	49.6%
Frequency	Twice a month	125	4	3.2%
	Other		7	5.6%
	Meal program		60	50.9%
	Social support and interaction		58	49.2%
	Exercise class/equipment		57	48.3%
	Games		56	47.5%
Reasons for overall	Special event trips		40	33.9%
participation	Health program	118	35	29.7%
	Educational program		29	24.6%
	Art class		24	20.3%
	Transportation services		24	20.3%
	Computer lab		10	8.5%
	Well-balanced meal		71	68.3%
	Affordable meal		41	39.4%
Reasons for	Friends		34	32.7%
participating in	Main meal	104	14	13.5%
lunch	Difficulty preparing meal at			
	home		3	2.9%
	Other		1	1.0%
-	Special diet		5	29.4%
Reasons for not	Poor quality of food		3	17.6%
participating in	Unappealing menu	16	1	5.9%
lunch	Other		8	47.1%
Transportation	Yes	46.5	52	41.9%
service use	No	124	72	58.1%
Younger generation	Yes		76	67.9%
preference	No	112	36	32.1%

Table 5: Participation of Older Adults in Congregate Meals

Their participation periods were nearly balanced, ranging from "Less than 1 year" to "Over 10 years." The majority of respondents visited senior centers 4-5 day per week, with over 80% participating in lunch and less than 50% using transportation services (transporting them to and from centers).

The meal program not only offered quality and well-balanced food but also provided opportunity for social interaction. However, the quality and well-balanced food might not be sufficient to meet the needs of older adults. The program administrator should monitor older adults who may need special diets and adjust the meals accordingly.

When asking the respondents about spending time with younger generation at the senior centers, almost 70% leaned more toward this preference.

The respondents were given an opportunity to assess the condition of senior centers, using a scale of 1 to 5, with 1 indicating bad condition and 5 indicating excellent condition. The respondents provided further detail if they indicated the condition as "Bad" or "Poor." The weighted mean values were ascertained to measure the condition of senior centers.

As shown in Table 6, the average score of the overall condition of senior center was 4.25 out of 5 with a standard deviation of 0.78 and coefficient of variance of 0.17. This result means that, on average, the condition of senior centers was excellent. The responses varied by 18%, however. Among the ten senior centers, the Estill Nutrition Center and the Robertville Nutrition Site had the lowest scores, 3.40 and 3.61 respectively. The respondents further explained that, in particular, the Robertville Nutrition Site was a very old building and needed improved facilities.

Categories	Weighted Mean	Standard Deviation	Coefficient of Variance
All Senior Centers	4.25	0.78	0.18
Burton Wells Senior Center	4.58	0.49	0.11
Estill Nutrition Center	3.40	0.49	0.14
Green Pond Nutrition Site	N/A	N/A	N/A
Hampton Nutrition Site	4.00	0.62	0.16
Hardeeville Senior Center	4.56	0.50	0.11
Ridgeland Senior Center	4.62	0.49	0.11
Robertville Nutrition Site	3.61	1.05	0.29
St. Helena Nutrition Site	4.41	0.65	0.15
Walterboro Nutrition Site	4.00	0.00	0.00
Yemassee Senior Center	4.30	0.70	0.16

Table 6: Older Adults' Views on the Conditions of Senior Centers

Outcomes

Satisfaction

The satisfaction with the senior centers and services was measured by a five-point scale where 1 indicated "Very dissatisfied" and 5 indicated "Very satisfied." Table 7 shows that the overall satisfaction was high, with an average score of 4.25. The responses varied by 14%.

The satisfaction with each senior center was also calculated. Each senior center's satisfaction was also high, except for the Walterboro Nutrition Site, with an average score of 3. This result should be interpreted with caution, however, as there was only one respondent for the Walterboro Nutrition Site.

Categories	Weighted Mean	Standard Deviation	Coefficient of Variance
All Senior Center	4.48	0.65	0.14
Burton Wells Senior Center	4.92	0.28	0.06
Estill Nutrition Center	4.46	0.69	0.15
Green Pond Nutrition Site	N/A	N/A	N/A
Hampton Nutrition Site	4.60	0.58	0.13
Hardeeville Senior Center	4.50	0.61	0.14
Ridgeland Senior Center	4.58	0.64	0.14
Robertville Nutrition Site	4.32	0.63	0.15
St. Helena Nutrition Site	4.55	0.59	0.13
Walterboro Nutrition Site	3.00	0.00	0.00
Yemassee Senior Center	4.35	0.73	0.17

Table 7: Older Adults' Overall Satisfaction with the Senior Center and Its Services

Taking a closer look at transportation services, transportation is critical for older adults to access senior centers' services and to live independently. The respondents were simply asked to answer "Yes" or "No" to the given statements related to transportation's safety, perceived benefits, and staff.

The majority of respondents who used transportation services felt that the commute to and from senior centers was safe and that the transportation staff was helpful. More than half of respondents did not perceive the transportation services' benefits of running errands or going to other appointments. These transportation service options for older adults needs to be considered when it is time to improve services. The result for each senior center can be seen in Table 8.

Catagorias	Safety		Perceived E	Perceived Benefits		Helpful Staff	
Categories -	Yes	No	Yes	No	Yes	No	
All Senior Centers	76.5%	23.5%	45.1%	54.9%	67.3%	32.7%	
Burton Wells Senior Center	33.3%	66.7%	83.3%	16.7%	83.3%	16.7%	
Estill Nutrition Center	50.0%	50.0%	75.0%	25.0%	75.0%	25.0%	
Green Pond Nutrition Site	N/A	N/A	N/A	N/A	N/A	N/A	
Hampton Nutrition Site	44.4%	55.6%	66.7%	33.3%	60.0%	40.0%	
Hardeeville Senior Center	50.0%	50.0%	50.0%	50.0%	66.7%	33.3%	
Ridgeland Senior Center	37.5%	62.5%	50.0%	50.0%	100.0%	100.0%	
Robertville Nutrition Site	33.3%	66.7%	66.7%	33.3%	66.7%	33.3%	
St. Helena Nutrition Site	50.0%	50.0%	80.0%	20.0%	90.0%	10.0%	
Walterboro Nutrition Site	N/A	N/A	N/A	N/A	N/A	N/A	
Yemassee Senior Center	61.5%	38.5%	69.2%	30.8%	76.9%	23.1%	

Table 8: Older Adults' Views on the Transportation Services

The other important factor is the senior centers' personnel, comprising staff and volunteers. Similar to transportation services, the respondents were asked to answer "Yes" or "No" to the given statements related to the senior centers' staff and volunteers. From the respondents' viewpoint, staff and volunteers were courteous, helpful, and knowledgeable. Overall, the respondents were appreciative of services received through these personnel. The result for each senior center can be seen in Table 9. Notably, the result for the Walterboro Nutrition Site should be interpreted with caution as there was only one respondent.

Categories	Courteo Helpful		Knowled Stat	-	Courteo Helpful Vo		Knowled Volun	0
	Yes	No	Yes	No	Yes	No	Yes	No
All Senior Centers	96.6%	3.4%	73.7%	26.3%	71.4%	28.6%	61.5%	38.5%
Burton Wells Senior Center	100.0%	0.0%	75.0%	25.0%	58.3%	41.7%	33.3%	66.7%
Estill Nutrition Center	80.0%	20.0%	60.0%	40.0%	80.0%	20.0%	60.0%	40.0%
Green Pond Nutrition Site	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hampton Nutrition Site	97.7%	5.3%	77.8%	22.2%	89.5%	10.5%	76.5%	23.5%
Hardeeville Senior Center	100.0%	0.0%	66.7%	33.3%	66.7%	33.3%	66.7%	33.3%
Ridgeland Senior Center	92.3%	7.7%	76.9%	23.1%	69.2%	30.8%	61.5%	38.5%
Robertville Nutrition Site	99.9%	9.1%	72.7%	27.3%	72.7%	27.3%	59.1%	40.9%
St. Helena Nutrition Site	100.0%	0.0%	63.6%	36.7%	68.2%	31.8%	59.1%	40.9%
Walterboro Nutrition Site	100.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Yemassee Senior Center	100.0%	0.0%	83.3%	16.7%	72.2%	27.8%	72.2%	27.8%

Table 9: Older Adults' Views on the Senior Center Staff and Volunteer

Health and Well Being

All senior centers offer not only nutritious meals but also a wide range of activities including exercise class/equipment, games, special event trips, art class, computer labs, and health and education programs. The goal is to make services available to older adults and to keep them healthy and functioning as they age. Since all senior centers share the same goal, the result will be presented using aggregate data.

The evaluation presumes causality but does not measure how much the services are contributable to the older adults participating in the Congregate Meals. The older adults' outcomes of the Congregate Meals are shown in Table 10. At the time of the survey, the respondents identified impacts of the program including making friends, having sense of purpose, feeling positive and energetic, and staying in physical motion, to name a few. The 4% of respondents who indicated that the program made no difference in their life were the older adults who participated in the program less than one year. The other 2.4% were the respondents who were in the program for a short period and could not identify the impact.

Table 10: Older Adults' Outcomes of the Congregate Meals

Variables	Total Respondents	Frequency	Percentage
Making friends		108	87.1%
Feeling positive and energetic		51	41.1%
Having sense of purpose		51	41.1%
Staying in physical motion		50	40.3%
Feeling more independent	124	37	29.8%
Feeling healthier		36	29.0%
Having using skill in daily tasks		33	26.6%
Make no difference		5	4.0%
Other		3	2.4%

Note. The total of frequency is more than the total of respondents because each respondent can select more than one answer.

The respondents seemed to have positive views towards the program, overall. Nearly half of them, however, did provide suggestions for improving the senior centers and services. Common suggestions were related to activities, including having more activities in general, more field trips, more arts and crafts, better exercise equipment, and some special event i.e., Christmas or Valentine's Day. Some respondents pointed out that the buildings were not attractive and unwelcoming. Their suggestions included, but were not limited to replacing worn out carpet and tile in the kitchen, painting walls, providing a larger sitting area, and providing better sitting chairs. Some requested a special diet. Finally, the respondents would like the program administrator/providers to just listen to their voice on the services they need.

When asking the respondents about a possible new location of a senior center, some suggested the areas in the Town of Bluffton, City of Hardeeville (in the area of Levey Lime House Community Center), Town of Port Royal, and Lady's Island. Some suggested that rather than building a new senior center, an upgrade of existing ones would be a better option as well as new exercise equipment and attractive activities and events.

Home Delivered Meals Participants

Demographics

Demographic characteristics of respondents are shown in Table 11. Total respondents are 278. The majority of respondents were aged between 70 and 79, had income \$15,000 or less, and were female. Nearly 70% of respondents were Black, followed by White, Hispanics, and Asian respectively.

Variables	Categories	Total Respondents	Frequency	Percentage
	Beaufort		61	21.9%
Household Location	Colleton	278	54	19.4%
	Hampton	278	89	32.0%
	Jasper		74	26.6%
	Under 60		4	1.5%
	60-69		43	15.6%
Age	70-79	276	113	40.9%
	80-89		73	26.5%
	90 and under		43	15.6%
	Male	271	86	31.7%
Gender	Female	271	183	67.5%
	Other		2	0.7%
	Black		183	67.3%
Daga ar Ethnisity	White	272	84	30.9%
Race or Ethnicity	Hispanic or Latino	272	3	1.1%
	Other		2	0.7%
	\$15,000 and under		180	67.9%
	\$15,001-\$25,000		67	25.3%
Income	\$25,001-\$50,000	265	16	6.0%
	\$50,001-\$75,000		2	0.8%
	Over \$75,000		0	0.0%

Table 11: Demographic Characteristics of Older Adults in Home Delivered Meals

Participation

As presented in Table 12, the majority of respondents received meals delivered from Hampton Nutrition Site, Ridgeland Senior Center, and Walterboro Nutrition Site, respectively. Over 40% of respondents has been receiving meals from one to three years. The two main reasons for respondent to participate in the Home Delivered Meals are the well-balanced meals and their difficulty preparing meals at home.

Variables	Categories	Total Respondents	Frequency	Percentage
	Burton Wells Senior Center		22	8.0%
	Estill Nutrition Center		16	5.8%
	Green Pond Nutrition Site		19	6.9%
	Hampton Nutrition Site		63	23.0%
	Hardeeville Senior Center		8	2.9%
Participation Location	Port Royal Administration	274	10	3.7%
	Ridgeland Senior Center		51	18.6%
	Robertville Nutrition Site		14	5.1%
	St. Helena Nutrition Site		24	8.8%
	Walterboro Nutrition Site		34	12.4%
	Yemassee Senior Center		17	6.2%
	Less than 1 year		76	27.8%
	1-3 years	272	121	44.3%
Participation Period	3-5 years	273	47	17.2%
	5-10 years		21	7.7%
	Over 10 years		8	2.9%
	Main meal		58	22.8%
Desserve	Affordable meal		54	21.2%
Reasons for	Well-balanced meal	255	146	57.3%
Participation	Difficulty preparing meals at home		135	52.9%
	Other		26	10.2%

Table 12: Participation of Older Adults in Home Delivered Meals

The respondents were given an opportunity to assess the meals and delivering services, using a scale of 1 to 5, with 1 indicating "Never" and 5 indicating "Always" to the given statements. The weighted mean values were ascertained to measure the respondents' views on meals and delivering services. As shown in Table 13, the average score of each variable (statement) was high meaning the meals always arrive when expected; food is variety and cooked to their satisfaction; food tastes, looks, and smells good; staff and volunteers are courteous, helpful, and knowledgeable.

Table 13. Older Adults'	Views on Meals and Delivering Services
	views on wieus and benvering services

Variables	Weighted Mean	Standard Deviation	Coefficient of Variance
The meals arrive when expected.	4.7	0.46	0.10
There is a variety of food.	4.6	0.63	0.14
The food is cooked to my satisfaction.	4.4	0.78	0.18
The food tastes good.	4.3	0.82	0.19
The food looks good.	4.5	0.69	0.15
The food smells good.	4.6	0.62	0.13
Staff is courteous and helpful.	4.9	0.37	0.08
Staff is knowledgeable.	4.8	0.45	0.09
Volunteers are courteous and helpful.	4.9	0.37	0.08
Volunteers are knowledgeable.	4.8	0.54	0.11

The survey continued to ask the respondents to rate the overall quality of the Home Delivered Meals. This rating was based on a five-point scale where 1 indicated "Poor" quality and 5 indicated "Excellent" quality. As shown in Table 14, the weighted mean was 4.41 out of 5 with a standard deviation of 0.62 and coefficient of variance of 0.14. This result means that, on average, the quality of Home Delivered Meals was excellent. The responses varied by 14%, however.

Variable	Weighted Mean	Standard Deviation	Coefficient of Variance
All senior centers	4.41	0.62	0.14
Burton Wells Senior Center	4.59	0.49	0.11
Estill Nutrition Center	4.38	0.70	0.16
Green Pond Nutrition Site	4.58	0.49	0.11
Hampton Nutrition Site	4.30	0.65	0.15
Hardeeville Senior Center	4.29	0.45	0.10
Port Royal Administration	4.50	0.67	0.15
Ridgeland Senior Center	4.23	0.72	0.17
Robertville Nutrition Site	4.57	0.49	0.11
St. Helena Nutrition Site	4.63	0.56	0.12
Walterboro Nutrition Site	4.35	0.54	0.12
Yemassee Senior Center	4.53	0.50	0.11

Table 14: Older Adults' Views on Overall Quality of Home Delivered Meals

Outcomes

Satisfaction

The satisfaction with the Home Delivered Meals was measured by a five-point scale where 1 indicated very dissatisfied and 5 indicated very satisfied. Table 15 shows that the overall satisfaction was high, with an average score of 4.57 and standard deviation of 0.55. The responses varied by 12%. The satisfaction with each senior center was also calculated. Each senior center's satisfaction was also high.

Table 15: Older Adults' Overall Satisfaction with Home Delivered Meals

Variable	Weighted Mean	Standard Deviation	Coefficient of Variance
All senior centers	4.57	0.55	0.12
Burton Wells Senior Center	4.71	0.55	0.12
Estill Nutrition Center	4.20	0.65	0.15
Green Pond Nutrition Site	4.63	0.48	0.10
Hampton Nutrition Site	4.54	0.59	0.13
Hardeeville Senior Center	4.43	0.49	0.11
Port Royal Administration	4.70	0.46	0.10
Ridgeland Senior Center	4.51	0.58	0.13
Robertville Nutrition Site	4.71	0.45	0.10
St. Helena Nutrition Site	4.88	0.33	0.07
Walterboro Nutrition Site	4.44	0.40	0.09
Yemassee Senior Center	4.59	0.49	0.11

The goal of the Home Delivered Meals is to make services available to homebound older adults and to keep them healthy with nutritious meals. Since all senior centers share the same goal, the result will be presented using aggregate data.

Similar to the Congregate Meals, the evaluation presumes causality but does not measure how much the services are contributable to the older adults participating in the Home Delivered Meals. The older adults' outcomes of the program are shown in Table 16.

At the time of the survey, the respondents identified impacts of the program including eating healthier food, continuing to live at home, improving overall health, and maintaining a healthy weight. The 4.1% of respondents who indicated that the program made no difference in their life were the older adults who participated in the program less than one year. The other 3.4% indicated that the meals were affordable, gave them convenience, and made it easier to prepare.

Health and Well Being

Table 16: Older Adults' Outcomes of the Home Delivered Meals

Variables	Total Respondents	Frequency	Percentage
Eat healthier food		194	72.9%
Continue to live at home		133	50.0%
Improve overall health	200	107	40.2%
Maintain a healthy weight	266	73	27.4%
Make no difference		11	4.1%
Other		8	3.4%

Note. The total of frequency is more than the total of respondents because each respondent can select more than one answer.

Among 106 (out of 278) respondents who provided suggestions to make the Home Delivered Meals service better, approximately 50% expressed their gratitude towards the program and people who served them. The majority of the other half provided suggestions including:

- Offer wider food choices i.e., variety of protein choices with more fish, seafood, variety of fruits and vegetable, soul food.
- Offer more variety of menu, change menu regularly, and create more appetizing menu
- Offer special diet for people with health condition i.e., diabetic meals
- Provide more fresh food and more hot food
- Prepare and cook food properly
- Increase food portion
- Deliver meals more frequently

Potential Participants

The potential older adults were used as proxy respondents to obtain information from the non-participants' views. *The Senior Center Interest Survey* for potential older adults was distributed across the region and 290 responded.

Demographics

Table 17 presents demographic characteristics of respondents including their household location, age, gender, race or ethnicity and income. The respondents' household were mainly located in Beaufort Country where it has the highest density of older adults in the region. The majority of respondents were aged between 60 and 69, had income over \$75,000, and were female. Approximately 90% of respondents were White, followed by Black, Hispanics, and mixed race or mixed ethnicity respectively.

Variables	Categories	Total	Frequency	Percentage
	Beaufort		261	90.0%
Household Location	Colleton	200	12	4.1%
Household Location	Hampton	290	6	2.1%
	Jasper		11	3.8%
	Under 60		8	2.77%
	60-69		122	42.21%
Age	70-79	289	112	38.75%
	80-89		41	14.19%
	90 and under		6	2.08%
	Male	296	98	34.3%
Gender	Female	286	187	65.4%
	Other		1	0.4%
	Black		21	7.3%
Deee en Ethnieitu	White	200	258	90.2%
Race or Ethnicity	Hispanic or Latino	286	1	0.4%
	Other		6	2.1%
	\$15,000 and under		16	6.3%
	\$15,001-\$25,000		13	5.1%
Income	\$25,001-\$50,000	253	31	12.3%
	\$50,001-\$75,000		44	17.4%
	Over \$75,000		149	58.9%

Table 17: Demographic Characteristics of Potential Older Adults

Participation

The survey respondents were asked to provide reasons they did not visit the senior center. Approximately 40% of respondents do not know about the senior centers and the services they provided and approximately 36% of them do not have interest in joining the senior centers (Table 18).

The majority of respondents who have no interest in senior centers' services were older adults aged 60-69 and income over \$75,000. They are still active and have resources to support their interests and needs. They were also under an impression that senior centers inhibited very old people (75 and older) and activities provided did not fully enhance the health and well-being of the older adults. There were some respondents who expressed an interest in senior center. However, their health condition or immobility made it difficult to commute.

Some respondents further suggested that the senior centers should reposition or readjust themselves if they want to attract more older adults. These include:

- Contemporary facilities with upgrades of equipment
- Better communication about available locations, services, and activities
- Different activities to meet different age-groups i.e., activities for independent and active seniors, activities for seniors who need assistance
- More understanding of services and seniors i.e., health condition, special diet
- Suitable activities for seniors i.e., outdoor, events
- Approachable, welcoming, and pleasant staff

The services or activities that would attract the respondents were exercise class/equipment, education program, social activities, entertainment program, and special event trip, to name a few. Also, approximately half of the respondents preferred to spend time with younger generation.

Variables	Categories	Total	Frequency	Percentage
	Do not know about it		111	39.9%
	Do not have interest in it		101	36.3%
Reasons not to	Do not know where it is		24	8.6%
	Do not like it	278	6	2.2%
Participate	Too far from my residence		4	1.4%
	Do not have transportation		1	0.4%
	Other		31	11.2%
	Exercise class/equipment		115	44.2%
	Educational program		106	40.8%
	Socialization		94	36.2%
	Entertainment program		86	33.1%
	Special event trips		75	28.9%
Services that would	Health program	200	74	28.5%
attract potential	Art class	260	72	27.7%
older adults	Computer lab		63	24.2%
	Games		49	18.8%
	Meal program		23	8.9%
	Transportation services		20	7.7%
	Other		25	9.6%
Younger generation	Yes	222	222	51.1%
preference	No	239	117	49.0%

Table 18: Participation of Potential Older Adults

When asking the respondents about a possible new location of a senior center, some suggested the areas in the Town of Bluffton, Town of Hampton, Town of Hilton Head Island, Beaufort County of unincorporated areas of Burton and Okatie, Jasper County unincorporated areas of Pineland, Robertville, and Tarboro.

Outcomes

Since the potential older adults have never participated in any services provided by senior centers, the aspects of satisfaction measurements are not possible. Instead, the measurements of perceived needs and expectations were used based on their experience.

The respondents were asked to rate the importance of areas of needs, using a scale of 1 to 5, with 1 indicating "Not at all important" and 5 indicating "Very important." The weighted mean values were ascertained to measure the respondents' views on each area. As presented in Table 19, the areas of needs with the weighted mean ranging from 4.06 to 4.25 out of 5, indicating the highest needs.

These measurements can help the Lowcountry AAA better perceive services needed from the potential older adults' viewpoint and improve its services accordingly in a timely manner.

Variables	Weighted Mean	Standard Deviation	Coefficient of Variance
Physical health	4.25	1.04	0.24
Mental health	4.06	1.18	0.29
Recreation, art, and culture	3.81	1.01	0.27
Social engagement	3.59	1.12	0.31
Safety	3.57	1.31	0.37
Social support	3.52	1.20	0.34
Financial	3.10	1.40	0.45
Home maintenance	3.00	1.44	0.48
Food security	2.67	1.50	0.56
Transportation accessibility	2.48	1.39	0.56
Caregiver	2.44	1.38	0.57
Housing	2.34	1.48	0.63
Employment	2.06	1.21	0.24

Table 19: Potential Older Adults' Views on Importance of Areas of Needs

Local Service Providers

Provision

Working in concert with the Lowcountry AAA, Local Services Providers have provided social or health services to older adults in the region for decades. As of 2021, a total 46 Local Service providers' personnel actively served the Nutrition Program. Of this number, 33 responded to the survey—29 staff and 4 volunteers (Table 20). The number of respondents serving senior centers varied—the Green Pond and Walterboro Nutrition Sites were closed during the time of survey. The majority of respondents had served the older adults for over ten years.

The respondents were given an opportunity to assess the condition of senior centers they served, using a scale of 1 to 5, with 1 indicating "Bad" condition and 5 indicating "Excellent" condition. The respondents provided further detail if they indicated the condition as "Bad" or "Poor." The weighted mean values were ascertained to measure the condition of senior centers.

Except for the Hampton Nutrition Site, all senior centers are in either good or excellent condition (weighted ranging from 3.80 to 5) as seen in Table 21. As there was only one respondent for the Port Royal Administration, the interpretation of its condition should be cautious.

Further explanation of condition include:

- Hampton Nutrition Site—the building is small and outdoor space needs to be added, electrical and
 plumbing need to be replaced (outlets are bad and cut off, kitchen sink is bad, about to fall through
 countertop, toilet has trouble flushing), floors are bad and never look clean, roof leaks, there is not
 enough storage, and internet service needs to be updated.
- *Robertville Nutrition Site*—the building is old (a county building in an old school). This is consistent with the Congregate Meals participants' comments.

Categories	Variables	Total Respondents	Frequency	Percentage
Deles	Staff	22	Frequency 29 4 6 3 0 8 3 1 1 5 5 0 4 7 7 4 6 9 9	87.9%
Roles	Volunteer	33	4	12.1%
	Burton Wells Senior Center		6	18.2%
	Estill Nutrition Center		3	9.1%
	Green Pond Nutrition Site		0	0.0%
	Hampton Nutrition Site		8	24.2%
Provision Location	Hardeeville Senior Center		3	9.1%
	Port Royal Administration	33	1	3.0%
	Ridgeland Senior Center		12	36.4%
	Robertville Nutrition Site		5	15.2%
	St. Helena Nutrition Site		5	15.2%
	Walterboro Nutrition Site		0	0.0%
	Yemassee Senior Center		6 3 0 8 3 1 12 5 5 0 4 7 7 7 4 6	12.1%
	Less than 1 year		3 1 12 5 5 0 4 7 7 4	21.2%
Provision Period	1-3 years	22	7	21.2%
	3-5 years	33	4	12.1%
	5-10 years		6	18.2%
	Over 10 years		9	27.3%

Table 20: Provision Characteristics of Local Service Providers

Table 21: Local Service Providers' Views on the Conditions of Senior Centers

Variables	Weighted Mean	Standard Deviation	Coefficient of Variance
Burton Wells Senior Center	4.83	0.37	0.08
Estill Nutrition Center	4.00	0.00	0.00
Green Pond Nutrition Site	N/A	N/A	N/A
Hampton Nutrition Site	2.86	1.46	0.51
Hardeeville Senior Center	4.33	0.47	0.11
Port Royal Administration	5.00	0.00	0.00
Ridgeland Senior Center	4.42	0.49	0.11
Robertville Nutrition Site	3.80	0.98	0.26
St. Helena Nutrition Site	4.67	0.47	0.10
Walterboro Nutrition Site	N/A	N/A	N/A
Yemassee Senior Center	4.00	0.00	0.00

<u>Outcomes</u>

Satisfaction

The satisfaction of Local Service Providers with the Lowcountry AAA was measured using a six-point scale where 1 indicated "Very dissatisfied" and 5 indicated "Very satisfied." Table 22 shows that, overall, the majority of respondents satisfied with the Lowcountry AAA, with an average score of 4.81. The responses varied by 23%.

The satisfaction of Local Service providers serving each senior center was also calculated. The Local Service Providers serving each senior center, except for the St. Helena Nutrition Site, was either satisfied or very satisfied with the Lowcountry AAA. This result of the Port Royal Administration should be interpreted with caution because there was only one respondent.

Variable	Weighted Mean	Standard Deviation	Coefficient of Variance
All Senior Centers	4.81	1.12	0.23
Burton Wells Senior Center	4.2	1.94	0.46
Estill Nutrition Center	5.00	0.00	0.00
Green Pond Nutrition Site	N/A	N/A	N/A
Hampton Nutrition Site	4.50	1.00	0.22
Hardeeville Senior Center	5.00	0.00	0.00
Port Royal Administration	6.00	0.00	0.00
Ridgeland Senior Center	5.11	0.31	0.06
Robertville Nutrition Site	5.25	0.43	0.08
St. Helena Nutrition Site	3.75	1.92	0.51
Walterboro Nutrition Site	N/A	N/A	N/A
Yemassee Senior Center	5.00	0.00	0.00

Table 22: Local Service Providers' Overall Satisfaction with the Lowcountry AAA

The respondents were given the opportunity to provide suggestions for enhancing the relationship with the Lowcountry AAA and overall services, and share what obstacles they face in providing services.

- *Enhancing the relationship with the Lowcountry AAA*—improve networking or teamwork, communicate more directly with the service providers, listen to service providers' opinion,
- Obstacles in serving the older adults—emotional experience with frail older adults, time requirement for delivering meals, outdated facilities with insufficient space, insufficient funds to support variety of activities, and difficulty handling older adults' behavior.
- *Enhancing overall services*—provide more funds to the program, provide more space for activities, provide better transportation services, hold occasional group meeting between the Lowcountry AAA and the service providers, develop the service providers' capacity, and reach out to older adults, particularly the homebound ones to make them aware of the available services

Additional Information

Senior Center Standards

Generally the senior center has standards or guidelines applicable to specific programs. However, each senior center may go above and beyond to be nationally recognized by participating in the National Senior Center Accreditation Program. This program is offered by the National Institute of Senior Centers (NISC), setting nine standards for the current and future senior centers. These standards serve as a guide for all senior centers to improve their operations. Below is a brief overview of each standard (National Council of Aging, n.d.).

- 1. *Purpose*—have written statements of its mission, goals and objectives, and action plans. These statements are geared toward the support of needs and interests of older adults, and are used to guide the direction of the senior center's operation and program.
- 2. *Community*—participate in community planning, establish service delivery arrangements with other community agencies and organizations, and serve as a focal point and advocate for older adults. A senior center should provide information relevant to aging programs and issues to older adults and community.
- 3. *Governance*—create organizational structure that supports effective relationships among participants, staff, governing structure, and the community. Also the organizational structure should allow the senior center to carry out its mission, goals, and objectives.
- 4. Administration and Human Resources—have clear administrative and human resources policies and procedures that contribute to the effective management of the senior center's operation. The staff—paid and volunteer—should be qualified and capable of implementing the program.
- Program Planning—provide a broad range of group and individual activities and services that respond to the needs and interests of older adults, families, and caregivers in the community. Program planning reflects mission, goals, and objectives. Outreach and marketing are integral parts of the program planning.
- 6. *Evaluation*—have appropriate and adequate evaluation on regular basis to measure accomplishments or uncover problems. The evaluation may use self-assessment or outside consultant.
- 7. *Fiscal Management*—practice sound fiscal planning and management, financial record keeping, and reporting; and conform to all applicable legal and administrative requirements. The fiscal management ensures that the funds are properly and efficiently used.
- 8. *Records and Reports*—the senior center's complete records of operation and program should be reported to the governing structure, participants, staff, funder, public officials, and the general public about all aspects.
- 9. *Facility*—make use of senior centers that promote effective program operation and that provide for the health, safety, and comfort of participants, staff, and community. A panel from the community, serving as the self-assessment committee, can help determine the condition of the senior centers and the improvements.

Senior Center Models

Designed as socialization centers or nutrition sites, senior centers play a vital role in helping older adults aging in place. However, changing demographics along with the health and wellness of the older adults require innovative ideas to make senior centers remain relevant to this change. Based on several studies, seven emerging models of senior centers are identified. These models have similar and differing characteristics in terms of consumer profile, organizational mission, program design, operating profiles, funding sources, and impact. Also the impact of these senior center models is identified on multiple levels (Pardasani, Sporre & Thompson, 2009; Pardasani & Thompson, 2012). Table 23 described the characteristics and the impact of each model—Community Center, Wellness Center, Lifelong Learning/Arts, Continuum of Care/Transitions, the New Chapter, Entrepreneurial Center, and the Café Program. To adopt these models, a senior center needs to consider available funding, strategic planning, target clients, and data collection on the impact of participation.

Regarding improvement of the senior centers and services, the agency also needs to address other aspects including leadership, goals, community participation, funding, programming, partnership, and message (California Commission on Aging, 2009).

- Leadership, Policy, and Governance—strengthen leadership to implement changes in operational structures, new mechanisms to enhance community involvement and, diversifying funding streams; adapt and adopt policies to more sustainable for diverse community of seniors; and maintain good governance.
- *Goals*—with limited resources, create vision, refine goals, and prioritize the needs of the seniors.
- *Community Participation*—be creative in engaging all members of the community using survey, conversation or focus group techniques. These can increase the community's understanding and assure the community buy-in.
- *Funding*—consider diversify funding to include government, donation, fee and grant sources; and saving resources by reducing, reusing and recycling.
- *Programming*—consider services that are relevant to multiple generations of older adults, serving as one-stop information hubs for housing, transportation and other service needs.
- *Facilities*—seniors centers need to be functional, attractive, and accessible. Some elements include, but are not limited to universal design features, varied hours of operation, close to transportation, adequate parking, co-location with universities and housing facilities, and knowledgeable staff or volunteers.
- *Partnership*—consider collaborative partnerships within community i.e., hospitals, banks, businesses to increase visibility, awareness and resources.
- *Message*—change public perception on senior center stereotypes by, for example, branding all communications, emphasizing diversity of age and cultures of the community, and being a good spokesperson for the senior center.

Community Wellness Lifelong Continuum of Entrepreneurial Café Next Chapter Learning/Arts Center Center Care/Transitions Center Program Characteristics **Consumer Profile** Children, youth, Active older adults Active older adults Older adults Active older Active older adults Active older adults adults, and active 50+ 50+ Working 50+.Specific adults 50+ 50+ 50+ older adults seniors programs and services for frail and homebound older adults Organizational Center for all ages Health & wellness is Seniors want to **Providing services** Health, wellness, Seniors want to utilize Provide a Mission and under one roof a major concern for continue to learn on a gradual and their skills and noninstitutional, Philosophical all seniors and grow continuum as older independence of expertise non-age-segregating Focus postretirement adults age all seniors, postretirement. community experiencing in Utilize senior gathering space flexible work or productivity as service sources of income opportunities Program Design Recreation, arts & Health and Education, travel, Recreation, arts & Senior employment Café-style meals, Recreation, arts, and cultural, fitness, wellness, meals, cultural events, cultural, fitness, education, health placement, vocational recreational and Offerings meals, education, arts & cultural, performing arts meals, adult day & fitness, meals, training, hand-crafted health information afterschool, recreation health centers, goods for sale, travel, programs, summer day camps, caregiver respite, transportation, recreation, arts & entertainment, intergeneration homebound entertainment, cultural, fitness, information & programs, support services, employment meals, education referral medical grandparent caregiver support transportation Hours of Early morning to Early morning to Daytime, evening Daytime only Early morning to Early morning to late Breakfast and lunch Operation late afternoons. only. Limited late evenings late evenings hours, and afternoons weekends daily. Open on daily. Open on Open on weekend programs in the weekends weekends daytime and early evenings Service Sites One main site One main site Multiple Multiple (including One main site One main site One main site (café) senior centers, home-based and assisted living) Location Suburban or new Urban or suburban Urban or suburban Urban or suburban Urban or Urban, suburban, or Urban or suburban developments. suburban rural Could be in a rural region with a growing population

Table 23: Characteristics of Emerging Senior Center Models

Table23: Characteristics of Emerging Senior Center	r Models (continued)
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	Community Center	Wellness Center	Lifelong Learning/Arts	Continuum of Care/Transitions	Next Chapter	Entrepreneurial Center	Café Program
Main Sources of Funding	Public mainly. Partly funded by membership dues	Mainly funded by membership dues and service fees	Service fees	Service fees, private insurance, and limited public funding	Public funding, membership dues, service fee, and fundraising	Income generated through various services/projects, fundraising, and limited public funding	Service and meal fees, and private fundraising
Identification as "Senior Center"	No	Sometimes	No	No	Yes	Sometimes	No
Impact							
Participants	An increase in the number of overall participants (55-75), middle-to-upper income, better health and well- being	An increase in the number of overall participants (55-75), middle-to-upper income, better health and well- being	An increase in the number of overall participants (55-75), middle-to-upper income, better health and well- being	An increase in adults 75 years and over, a decrease in the younger cohort	Better physical and mental health, maintain income	An increase in number of men— newly retired; active; civic engagement, volunteering, or vocational opportunities	An increase in a broad range of older adults
Community	A community focal point for all constituents.	Collaborations, linkages, and coordinated programming	Collaborations, linkages, and coordinated programming	The most coordinated and structured system of linkages,	Vital community resource of senior's wisdom and experience	Collaborations, linkages, and coordinated programming. Perceived as a competitor for assisted-living facilities and retirement communities	A positive impact on the community
Funding	An increase in funding, both in size and nature	An increase in funding, both in size and nature	An increase in funding, both in size and nature	An increase in funding, both in size and nature	An increase in funding, both in size and nature	An increase in funding, both in size and nature	An increase in funding, both in size and nature
Public Image	An energetic, mobile, educated, and informed older adult. Exciting, expansive, and modern physical facility	An energetic, mobile, educated, and informed older adult. Exciting, expansive, and modern physical facility	An energetic, mobile, educated, and informed older adult	An energetic, mobile, educated, and informed older adult.	A vibrant focal point for seniors of all ages and abilities	An energetic, mobile, educated, and informed older adult	An energetic, mobile, educated, and informed older adult. Exciting, expansive, and modern physical facility

Note. Adapted from Pardasani & Thompson (2012)

Outcome of Senior Centers and Services

The expected outcomes of the senior centers and services are to help improve the older adults' quality of life and enhance their health and wellness. Understanding quality of life of older adults is critical to evaluating outcomes of senior centers and services. One study by van Leeuwen, et al. (2019) synthesizes the perception of older adults and identifies nine quality of life domains. These include:

- *Health perception*—feeling healthy and not limited by physical and mental conditions and cognitive disorders.
- *Autonomy*—being independent, retaining dignity, and not feeling like a burden.
- *Role and activity* spending time doing activities that bring a sense of value, joy, and involvement.
- *Relationships*—having valued relationships, having ability to support others, and feeling supported.
- Attitude and adaptation—being positive and changing behavior according to environment
- *Emotional comfort*—having peace of mind and being happy.
- *Spirituality*—feeling attached to and experiencing faith and self-development from beliefs, rituals and inner reflection.
- *Home and neighborhood*—feeling safe and secure at home and living in a pleasant and accessible neighborhood.
- *Financial security*—having sufficient money to meet basic needs and not feeling restricted by financial situation.

The other outcome is health and wellness of the older adults. According to National Wellness Organization (NWO) (n.d.), wellness is an active process through which people become aware of, and make choices toward, a more successful existence. The NWO referred to the wellness in six dimensions including:

- *Occupational dimension*—personal satisfaction and enrichment in one's life through work including choice of profession, job satisfaction, career ambitions, and personal performance.
- *Physical dimension*—the relationship between physical activity and diet nutrition leading to psychological benefits of enhanced self-esteem, self-control, determination and a sense of direction.
- *Social dimension*—healthier living and enhancement of personal relationship and important friendships.
- Intellectual dimension—knowledge learning and sharing in the classroom and beyond the classroom.
- Spiritual dimension—actions that are consistent beliefs and values.
- *Emotional dimension*—feeling and related behavior including importance of seeking and appreciating the support and assistance of others.

To determine whether the senior r center and services work as intended, the measure of outcomes is needed. The outcome measurement provides a snapshot of the performance of senior centers and services. It can also provide the information needed to develop or expand a specific service, or help identify new/potential services.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

As of 2021, the Nutrition Program served 754 older adults across the region where their households were located in:

- *Beaufort County*—City of Beaufort, Town of Port Royal, and unincorporated areas of Lady's Island and St. Helena
- Colleton County—City of Walterboro and unincorporated area of Green Pond
- *Hampton County*—Towns of Brunson, Estill, Furman, Gifford, Hampton, Varnville, Yenassee, and unincorporated area of Early Branch
- Jasper County—City of Hardeeville, Town of Ridgeland; and unincorporated areas of Grays, Pineland, Robertville, Tarboro, and Tillman

There were 405 (53.7%) program's participants responded to the surveys. The respondents' household were mainly located in Beaufort Country where it has the highest density of older adults in the region. The majority of respondents were aged between 70 and 89, had income \$15,000 and under, and were female. Approximately 63% of respondents were Black, followed by White, Hispanics, and Asian respectively.

The Nutrition Program played a significant role for older adults in the Lowcountry region. The program was well managed conforming to the Older American Act (OAA) Title III-C and following the state's Aging Services Policies and Procedures Manual as well as the Lowcountry AAA's Area Plan. The program provided community-based services available to older adults and kept them healthy and functionality as they aged.

The Nutrition Program provides nutritious meals, education, counseling, and food assistance referrals to older adults in greatest social and economic needs (low-income, minority, in rural, limited English proficiency, and at risk of institutional placement). The program was directed to deliver services that contribute to four higher-level program outcomes:

- Identified eligible older adults at nutritional risk and/or food insecurity.
- Delayed decline in health and nutrition status.
- Reduced identified nutrition risk and food insecurity among participating older adults.
- Reduced isolation of program participants through socialization and home-delivered meal contact.

The program also adapted and responded to changes. For example, senior centers located in rural areas are more vulnerable to power outages and accessibility, particularly during hazard events such as hurricanes, tornadoes, winter storm. The program adapted how it operated to maintain their proper services by developing an emergency preparedness plan with assigned responsible individuals, parties, and agencies, and crating ways of communication. The plan ensures the safety of senior participants and continuity of the services.

Overall, the Nutrition Program contributed to achieving the program level outcomes mentioned in "Conclusion 1." The respondents recognized the benefits of the program as discussed in the prior outcomes.

- Reduced hunger and food insecurity through group dining and home delivered meals.
- Increased heathy food intake which led to health weight and improved overall physical health.
- Increased emotional well-being though socialization—group dining and group activities provided at senior centers, and home delivered meal contact.
- Overall, highly rated condition of facilities where services were provided.
- Overall, highly satisfied with services that were provided.

In addition, the relationship between the Local Service Providers and the Lowcountry AAA was highly positive but with some room for improvement.

The surveys gave an opportunity to the respondents to provide feedback and suggestions in different aspects of the program from services, facilities, personnel, to management. The results are presented in both facility-aggregated data and individual facility.

Last but not least, additional information is the review of different aspects in relation to improvement of the Nutrition Program. The topics cover standards of senior centers, different models of senior centers, and expected outcomes from the services.

Recommendations

Recommendation I: Develop a Monitoring System

Although the Nutrition Program led to positive outcomes, they were the older adults' self-rated outcomes. Therefore, the outcomes should be interpreted with caution. The older adults who were dependent on nutrition services might tend to provide positive feedback and comments to please the program administrator/service providers.

Although the program contributed to the high-level program outcomes, it would be helpful if the program set up its own outcomes to reflect the specific impact in the region. The Lowcountry AAA can develop a continuous program monitoring system by, for example:

- Collecting the baseline conditions of the older adults beyond demographics i.e., physical and mental health, physical and social environment, financial security.
- Monitoring the conditions of older adults for a certain period i.e., 1 year, 3 years, 5 years.
- Measuring the outcomes/changes. This would also help to confirm/validate the outcomes that could be bias from the program participants.

As a result, each senior center can use the monitoring and evaluation system as a guideline in tracking the outcomes of the program on the participants as time progresses. The data can be incorporated into the existing AIM data system, or a new database system can be created.

Recommendation 2: Reorient the Program and Upgrade Facilities

The Lowcountry AAA should investigate ways of improving the program that responds to the shift in older adults' demographics. These include:

- Improve the quality of the program with the existing program management. This may include some new activities at the senior centers and some upgrades of facilities.
- Reposition the program to meet the needs of dynamic generation of older adults. This includes an adoption of a new model for senior centers by, for example:
 - \circ $\;$ Turning traditional senior centers into place for all ages and abilities.
 - o Adding new activities suitable for different age groups to appeal more participants.
 - Upgrading senior centers to look and feel modern and welcoming. Each senior center should be assessed for its physical condition and functionality. The assessment will help identify a comprehensive list of needs, upgrades, repairs, or replacement for the senior centers.
 - Changing image or identification of the senior centers as, for example, "Wellness Center" or "Community Center."

• Developing a strategic plan for reorientation to consider available funding, networking, information technology, and targeted potential participants. Reorientation can be tackled in multi-phase tasks and by individual senior center.

Recommendation 3: Participate in the National Senior Center Accreditation Program

Although senior centers are not required to be accredited, the Lowcountry AAA has potential to meet this challenge. If the program and senior centers will be reoriented, the standards set forth by the National Senior Center Accreditation Program can help the Lowcountry AAA carry out its mission more effectively.

Recommendation 4: Promote Capacity Building

Despite the excellent provision, there should have an assessment of knowledge and skills of the Lowcountry AAA' staff and Local Service Providers to identify their abilities and limitations. As the program is improved and/or expanded, the development of additional training should be provided to maintain quality of and commitment with the provision.

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APPENDIX I: POMP'S SAMPLE SIZE CALCULATOR

The sample size is the number of people out of the entire population of interest that will be selected for the administration of the survey. It is not the number of completed surveys to be gathered. The POMP's Sample Size Calculator requires five factors in calculation including:

- *Confidence Level:* An indicator of how often the true percentage of the population would pick an answer lying within the confidence interval. For example, 95% confidence level means you can be 95% certain. Most researchers use the 95% confidence level.
- *Population Size:* The exact number of people in the population that you are studying and from which the sample will be drawn.
- Margin of Error: Indicates the desired degree of precision attached to an estimate computed from the survey. It indicates the range into which the estimate would fall if the entire population was surveyed. For example, if a 5% margin of error is acceptable to the researcher and the survey estimate of the measured characteristic is 48%, then if the entire population were surveyed, one would expect the true value of the characteristic of interest to lie between 43% and 53%.
- *Estimated Response Rate:* This is an estimate of the percent of the sample that will complete the survey and is usually based on previous experience. For example, 95% response rate assumes that 5% of the people in the sample will not complete the survey because they refused or couldn't be located or other reasons.
- *Population Proportion:* This is an estimate of the percentage of your sample that will pick a particular response. If most of the respondents will answer in a particular way, for example 90% yes and 10% no, then a smaller sample will suffice, compared to the "worst-case" scenario, where 50% say yes and 50% say no. To ensure an adequate sample size, it is best to assume the worst-case scenario.

APPENDIX 2: SURVEY DEVELOPMENT

Senior Center Participants Survey



SENIOR CENTER PARTICIPANTS SURVEY

The Lowcountry Area on Aging (AAA) is seeking your input to help gain understanding of how Lowcountry senior center participants perceive the AAA services and how to make services better and more suitable for them. Please take a few minutes and complete the survey below by **December 17, 2021.** Your responses will be kept anonymous. If you have any questions or concerns, please contact Maleena Parkey, Planning Department, Lowcountry Council of Governments at 843-473-3987 or mparkey@lowcountrycog.org.

Please indicate your selection or provide a brief response to the questions below.

1.	In what county is your household located? Beaufort Colleton Hampton	Jasper Other (please specify)
2.	What is your age range? Under 60 60-69 70-79	 80-89 90 and Over
3.	What is you gender?	Female
4.	What is your race or ethnicity? Black or African American White	Hispanic or Latino Other (please specify)
5.	What is your annual income range? □ \$15,000 and under □ \$15,001-\$25,000 □ \$25,001-50,000	\$50,001-\$75,000 Over \$75,000
6.	How long have you been coming to the set Less than 1 year 1-3 years 3-5 years	center? 5-10 years Over 10 years
7.	How often do you visit the senior center? 1-3 days per week 4-5 days per week 	Twice a month Other (please specify)

1/3

select more than one) Computer lab Meal program Games Health program Games Educational program Transportation services Exercise class/equipment Social support and interaction Art class Special event trips 1. If you participate in lunch, please provide the reasons. (You may select more than one) Main meal Difficulty preparing meal at home Affordable meal Friends Well-balanced meal Other (please specify) 2. If you do not participate in lunch, please provide the reasons. (You may select more than one) Poor quality of food Special diet Poor quality of food Other (please specify)	 B. What senior center do you visit? Estill Nutrition Center Green Pond Nutrition Site Hampton Nutrition Site Robertsville Nutrition Site St. Helena Nutrition Site 	 Walterboro Nutrition Site Burton Wells Senior Center Hardeeville Senior Center Ridgeland Senior Center Yemassee Senior Center
 Meal program Gomputer lab Health program Games Educational program Transportation services Exercise class/equipment Social support and interaction Art class Special event trips 11. If you participate in lunch, please provide the reasons. (You may select more than one) Main meal Difficulty preparing meal at home Affordable meal Friends Well-balanced meal Other (please specify) 12. If you do not participate in lunch, please provide the reasons. (You may select more than one) If you do not participate in lunch, please provide the reasons. (You may select more than one) Other (please specify) 13. If you use the transportation provided by the senior center, please answer "Yes" or "No" to the statements below. I feel safe on transportation. I would benefit from transportation to run errands or to other appointments. 	□ Excellent□ Good	Poor (please specify)
 Main meal Main meal Affordable meal Friends Well-balanced meal Other (please specify) I2. If you do not participate in lunch, please provide the reasons. (You may select more than one) Poor quality of food Special diet Unappealing menu Other (please specify) I3. If you use the transportation provided by the senior center, please answer "Yes" or "No" to the statements below. I feel safe on transportation. I would benefit from transportation to run errands or to other appointments. 	select more than one) Meal program Health program Educational program Exercise class/equipment 	 Computer lab Games Transportation services Social support and interaction
 Poor quality of food Special diet Unappealing menu Other (please specify) 13. If you use the transportation provided by the senior center, please answer "Yes" or "No" to the statements below. I feel safe on transportation. I would benefit from transportation to run errands or to other appointments. 	☐ Main meal ☐ Affordable meal	 Difficulty preparing meal at home Friends
 Poor quality of food Special diet Unappealing menu Other (please specify) 13. If you use the transportation provided by the senior center, please answer "Yes" or "No" to the statements below. I feel safe on transportation. I would benefit from transportation to run errands or to other appointments. 	2	ise provide the reasons. (You may select more than
I feel safe on transportation. I would benefit from transportation to run errands or to other appointments.	Poor quality of food	
I would benefit from transportation to run errands or to other appointments.	"No" to the statements below.	ed by the senior center, please answer "Yes" or
	l would benefit from transpor	
		2/3

one) Make no difference	□ Making friends
Feeling healthier	Staying in physical motion
	Having useful skills in daily tasks
 Having a sense of purpose Feeling more independent 	Other (please specify)
15. Please rate your satisfaction with the	senior center and its services?
Very satisfied	Dissatisfied
□ Satisfied	Very dissatisfied
Neutral	
16. Please answer "Yes" or "No" to the st	atements below.
Staff is courteous and helpful. Staff is knowledgeable.	
	elpful.
Volunteers are knowledgeable.	
17. Would you like to spend time with yo □ Yes	unger generations at the senior center?
18. Is there any other location you would	
·	
	enior center and/or services better
19. Please tell us one thing to make the so	enior center and/or services better.
19. Please tell us one thing to make the so	enior center and/or services better.
19. Please tell us one thing to make the so	enior center and/or services better.

Home-Delivered Meals Service Survey



HOME DELIVERED MEALS SERVICE SURVEY

The Lowcountry Area on Aging (AAA) is seeking your input to help gain understanding of how Lowcountry senior center participants perceive the AAA services and how to make services better and more suitable for them. Please take a few minutes and complete the survey below and return to your Driver **during your next meal delivery**, if possible, but no later than **December 17**, **2021**. Your responses will be kept anonymous. If you have any questions or concerns, please contact Maleena Parkey, Planning Department, Lowcountry Council of Governments at 843-473-3987 or <u>mparkey@lowcountrycog.org</u>.

Please indicate your selection or provide a brief response to the questions below.

1.	 In what county is your household located? Beaufort Colleton Hampton 	Jasper Other (please specify)	_
2.	What is your age range? Under 60 60-69 70-79	80-89 90 and Over	
3.	What is you gender?	Female	
4.	What is your race or ethnicity? Black or African American White	Hispanic or Latino Other (please specify)	
5.	 What is your annual income range? □ \$15,000 and under □ \$15,001-\$25,000 □ \$25,001-\$50,000 	\$50,001-\$75,000 Over \$75,000	
6.	 From which senior center do you receive your Estill Nutrition Center Green Pond Nutrition Site Hampton Nutrition Site Robertsville Nutrition Site St. Helena Nutrition Site 	Walterboro Nutrition Site Burton Wells Senior Center Hardeeville Senior Center	
7.	How long have you been receiving home-deliv Less than 1 year 1-3 years 3-5 years		
			1/2

1/2

-	The second secon	a Maria and a second second second second	1 2 1.4		
8	Why do you receive	home-delivered	meals? (You r	nav select m	ore than one
U .	trilly do your court.	inomic achierco	incuisi (iou i	nay serece in	for c chair one

□ Main meal

You may select more than one)

- □ Affordable meal
- □ Well-balanced meal

□ Other (please specify)

9. Please respond to the statements below.

	Always	Usually	Sometimes	Rarely	Never
The meals arrive when expected.					
There is a variety of food.					
The food is cooked to my satisfaction.					
The food tastes good.					
The food looks good.					
The food smells good.					
Staff is courteous and helpful.					
Staff is knowledgeable.					
Volunteers are courteous and helpful.					
Volunteers are knowledgeable.					
0. How would you rate the quality of Excellent Good Fair	f home-deliv	ered meals (Poor Bad	overall?		
1. Please rate your satisfaction with	the home-de	elivered mea	als service ov	erall?	
Very satisfied		Dissatis			
□ Satisfied		Very dis	ssatisfied		
Neutral		,			
Eat healthier foodMaintain a healthy weight			ue to live at h please specif		
13. Please tell us one thing to make	the home-de	elivered mea	als service be	tter.	
Thank yo	ou for your p	participation	1		



SENIOR CENTER INTEREST SURVEY

The Lowcountry Area on Aging (AAA) is seeking your input to help gain understanding of why some seniors do not visit the Lowcountry senior centers. Your input will help us improve the senior centers and services. Please take a few minutes and complete the survey below by **December 17, 2021.** Your responses will be kept anonymous. If you have any questions or concerns, please contact Maleena Parkey, Planning Department, Lowcountry Council of Governments at 843-473-3987 or <u>mparkey@lowcountrycog.org.</u>

Please indicate your selection or provide a brief response to the questions below.

 In what county is your household loca Beaufort Colleton Hampton 	ated? ☐ Jasper ☐ Other (please specify)
 Do you ever visit the senior center in □ □ No 	the Lowcountry region?
3. What is your age range? □ Under 60 □ 60-69 □ 70-79	 Res (please discontinue the survey) 80-89 90 and Over
 What is your gender? □ Male 	Female
 5. What is your race or ethnicity? □ Black or African American □ White 	 Hispanic or Latino Other (please specify)
 6. What is your annual income range? □ \$15,000 and under □ \$15,001-\$25,000 □ \$25,001-50,000 	□ \$50,001-\$75,000 □ Over \$75,000
7. What is the main reason you do not v	isit the senior center?
Do not have interest in it (please specify)	Do not know where it isDo not have transportation
 Do not like it (please specify) Do not know about it 	 Too far from my residence Other (please specify)
	1/2

- 8. If you were to visit the senior center, what would be the services that attract you? (You may select more than one)
 - □ Meal program
 - Health program
 - Educational program
 - Entertainment program
 - Exercise class/equipment
 - Art class

- Computer lab
- Special event trip
- □ Games
- □ Transportation service
- Socialization
- □ Other (please specify) _____
- 9. Please tell us how important these areas of needs are to you.

	Very Important	Important	Neutral	Not Important	Not at all Important
Food security					
Physical health					
Mental health					
Social support					
Social engagement					
Transportation accessibility					
Safety					
Recreation, art, and culture					
Financial					
Employment					
Housing					
Home maintenance					
Caregiver					
Other (please specify and rate)					

10. Would you like to spend time with younger generations at the senior center?

11. Is there any other location you would suggest for a new senior center?

12. Please provide any other suggestions that make you want to visit the senior center.

Thank you for your participation!



SENIOR CENTER PROVIDERS SURVEY

The Lowcountry Area on Aging (AAA) is seeking your input to help gain understanding of the perception of the Senior Centers' services providers. Your input will help the AAA improve and enhance its services and increase satisfaction of the service providers. Please take a few minutes and complete the survey below by December 17, 2021. Your responses will be kept anonymous. If you have any questions or concerns, please contact Maleena Parkey, Planning Department, Lowcountry Council of Governments at 843-473-3987 or mparkey@lowcountrycog.org.

Please indicate your selection or provide a brief response to the questions below.

1.	What is your role?	
	□ Staff	Volunteer
	Role	Role
2.	What senior center(s) do you serve? (You may	/ select more than one)
	Estill Nutrition Center	Walterboro Nutrition Site
	Green Pond Nutrition Site	Burton Wells Senior Center
	Hampton Nutrition Site	Hardeeville Senior Center
	Robertsville Nutrition Site	Ridgeland Senior Center
	St. Helena Nutrition Site	Yemassee Senior Center
3.	How long have you provided services for the	senior center(s)?
	Less than 1 year	6-10 years
		More than 10 years

- 1-3 years
- □ 3-5 years

More than 10 years

4. What do you think about the condition of the senior center(s) you serve?

	Excellent	Good	Fair	Poor	Bad	Not Applicable
Estill Nutrition Center						
Green Pond Nutrition Site						
Hampton Nutrition Center						
Robertsville Nutrition Site						
St. Helena Nutrition Center						
Walterboro Nutrition Site						
Burton Wells Senior Center						
Hardeeville Senior Center						
Ridgeland Senior Center						
Yemassee Senior Center						

If your answer is either "Poor" or "Bad," please explain the condition.

1/2

5.	How are you satisfied with the AAA? Very satisfied Satisfied	Somewhat dissatisfiedDissatisfied		
	Somewhat satisfied	Very dissatisfied		
6.	Please provide suggestions that help en			
7.	What are your obstacles serving the senior center(s)?			
8.	center(s).	at help enhance your services at the senior		
	Thank you for	your participation!		
			2/2	