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Health Checks for Care

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Introduction

I have volunteered for Meals on Wheels in its Newark Delaware location for over four years. What started as a way to gather community service hours before medical school quickly became one of my favorite volunteer experiences. The entire workplace has a great outlook on their non-profit program. From the numerous volunteers, to the cooks, and the administrative staff, everyone involved was so welcoming and had the same objective: to serve and help seniors unable to care for themselves. After being assigned a regular weekly route and getting to know each of my 10-14 clients, I noticed some common themes. Often, clients would voice certain issues regarding their health, talking about the medications they were on, worsening health issues, and concerns about the in-home care that they were receiving. Homebound, most clients have little social interaction throughout the day, with their daily meal deliveries being (at times) the first chance they get to talk to another person. As I was just a volunteer, I realized I could only listen to their concerns and advise them to go to someone else for help. As many clients are unwell and possess worsening health issues, a good number of the clients on my original route four years ago are no longer with us. After seeing several clients that I came to see as friends pass away, I began to wonder if there was a possible way to use this scheduled meal delivery time to further help the clients. What if there was a way to track the changing health of clients and catch the warning signs of major health issues like strokes or heart attacks? Could checking in on clients to make sure they were getting the best care for their specific situations help them to live longer and happier lives? During my internship at the Delaware Academy of Medicine/Delaware Public Health Association, I decided to study this further. I developed the plan *Health Checks For Care* during my internship to help answer these questions and provide help to the aging population of Newark.

Literature Review

Introduction

Meals on Wheels is a community-based service that delivers fresh meals directly to the homes of seniors and individuals with disabilities who are unable to purchase or prepare their own meals. Since its inception as a demonstration project in 1968 and its establishment by Congress in 1972, Meals on Wheels America supports more than 5,000 community-based senior nutrition organizations across the country. This network serves virtually every community in America and, along with more than two million staff and volunteers, enables America's seniors to live their lives with independence and dignity.[1]

Approximately 90 percent of older people want to stay in their communities, rather than move to institutionalized care. "The fear of having to enter a nursing home, with its associated loss of independence and threat of impoverishment, weighs heavily on the minds of many older persons and their caregivers," former American Association of Retired Persons (AARP) Senior Vice President Joyce A. Rogers stated in a letter to lawmakers.[2] Food programs like Meals on Wheels

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help save money on medical costs and strengthen independence for seniors. “The changing demographics of our country are such that we have to devote more resources, become more innovative and pay more attention to issues that affect older Americans” Senator Susan Collins, chairwoman of the Senate Special Committee on Aging, purposed when reflecting on the need for increased funding to senior citizen wellbeing.[2] With screening for malnutrition and the strengthening of programs for meals brought to homes, meal delivery can greatly combat isolation and help seniors in achieving better health outcomes.

The Newark Delaware Meals on Wheels location serves around 140 seniors each day out of the Newark Senior Center. Meals On Wheels Delaware (MOWD) provides financial resources to this program, and supports another four meal-delivery locations statewide. The average Delaware resident receiving meals is in their late 70s, and often lives alone. The MOWD webpage details that, “Many are struggling to balance their needs on a fixed income, and are unable to shop or prepare a hot meal for themselves. Most meals are a long-term lifeline.”[3] In 2018, more than a thousand individuals volunteered their time to deliver meals for this organization in Delaware, while another 150 individuals volunteered to fundraise for these programs. In 2018, close to 700,000 meals were delivered statewide to over 4,600 seniors. The MOWD organization itself is greatly involved within the community, sponsoring various initiatives around Delaware by hosting auctions, health walks, game nights and other events all around the state to benefit Delaware residents in need.

Programming

Despite the mounting evidence that the trusted Meals on Wheels model is associated with improvement in overall health and well-being among older adults, funding for these vital programs has not kept pace with growing demand. This has resulted in millions of fewer meals provided, thousands of seniors going unserved, and the growth of waiting lists for services. Meals on Wheels America has set out to validate that Meals on Wheels delivers so much more than just a meal.[4] A newly published study confirms another benefit of visitors knocking on the doors of seniors in need: a significant reduction in their feelings of loneliness. Kali Thomas, an assistant professor at Brown University School of Public Health, analyzed data from a randomized, controlled trial in which more than 600 study participants in eight cities who were on Meals on Wheels waiting lists were either given access to daily fresh meal delivery, weekly frozen meal delivery, or simply remained on the waiting list as a control group.[5] The study staff interviewed seniors in all three groups at the beginning of the 15-week study and again at the end so they could measure how the seniors' responses changed. At the beginning of the study there were no statistically significant differences among the three study groups in their relative degree of loneliness. More than half lived alone, 14 percent reported having no one to call on for help, and 20 percent had contact with friends and family less than once or twice a month. Both groups receiving meal deliveries showed a reduction in self-reported feelings of loneliness to a statistically significant degree, compared to not receiving delivery. Daily recipients were three times more likely than weekly recipients to indicate that home-delivered meal service helped them feel less lonely. The study is one of the first randomized, controlled trials to assess the effect of meal delivery on loneliness, which has been linked by many studies to an increased risk of functional decline and death,[6] emergency department visits,[7] and nursing home placement.[8] This research has also shown that daily meal deliveries help seniors’ mental health and ease their fears of being institutionalized. Thomas also estimated that if all states increased the number of older people receiving these meals by one percent, they would save more than $100 million.[5]

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Previously Launched Programs

In 2019, The Gary and Mary West Health Institute, Meals on Wheels America, and a research group in the Brown University Center for Gerontology and Healthcare Research collaborated on a two-year research program called *More Than a Meal Phase 3*. This program investigates opportunities to improve the well-being of homebound seniors by integrating health and safety screenings into daily meal delivery services. It was conducted within select major cities, with the main objective being of standardizing reporting mechanisms and improving communication with healthcare providers to prevent an adverse health event. The assessment helps to identify a participant's health, safety and social needs such as loneliness, depression or fall risk. By providing volunteers with simple screening tools and user-friendly technology to perform check-ins on participants, the study was designed to improve care coordination across the medical and home community, informing providers and caregivers of changing conditions before health events occur.[9] This program has its limitations. With close partnership to a major health institute and funding provided by Brown University, only a small portion of struggling senior citizens could benefit from this unique program. Standardizing these reporting mechanisms and making the program as cost-effective as possible is essential to expand this program to a nation-wide level.

This program is similar to what Meals on Wheels America has done in partnership with Johns Hopkins Bayview Medical Center and Meals on Wheels of Central Maryland in 2019. Formally called *Together in Care,* the program aimed to keep seniors at home and reduce their need for costly health services specifically after hospitalization. Trained volunteers reported red flags and ensured that patients were following physician's health advice (for example, that patients with congestive heart failure are weighing themselves regularly and eating properly). Specifically, program participants received daily delivery of meals, an in-home safety assessment, help with removing any hazards or completing minor repairs or modifications, and a monthly visit from a care manager and phone calls between visits. Dan Hale, who lead this project from the Johns Hopkins Bayview Medical Center, explained that the meal delivery volunteers can help track patients' health even months after discharge and keep them from returning to the hospital: "It ultimately makes sense financially."[10] This program has some limitations, as it was sponsored and funded on a limited basis, and thus free meals and health visits were only provided for three months for participants.

These two highlighted programs are not uncommon. Meals on Wheels America and several other local programs around the country have launched partnerships with insurers, hospitals and health systems. By reporting to providers any physical or mental changes they observe, volunteers can help improve seniors' health and reduce unnecessary emergency room visits and nursing home placements. "It is a small investment for a big payoff," said Ellie Hollander, CEO of Meals on Wheels America.[11] Visitors from Meals on Wheels can be the only people some seniors see all day. The volunteers get to know them and can quickly recognize problems. "You notice if they are losing weight, if their house is a mess, if they are talking awkwardly," said Chris Baca, executive director of Meals on Wheels West in Santa Monica. "Our wellness check is critical. We know we are keeping people out of the hospital, seven dollars a day is cheaper than $1,300 a day."[12] After reviewing the information, research, and prospected programs regarding Meals on Wheels and their unique relationship with seniors in need, it is proposed that a similar program to *More than A Meal: Phase 3* and *Together in Care*, called *Health Checks For Care*, be conducted in the Newark Delaware location.

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The Theory Of Planned Behavior

To implement this program, volunteers must be willing to participate, and attention to the theory of planned behavior will be needed. Originally coined as the theory of reasoned action in 1980, the Theory of Planned Behavior is used to predict an individual's intention to engage in a behavior at a specific time and place. The theory is intended to explain all behaviors over which people have the ability to exert their own control. The key component to the planned behavior theory is behavioral intent, or the likelihood that a person will engage in a certain behavior. Behavioral intentions are influenced by the attitude about the likelihood that the behavior will have the expected outcome, and the subjective evaluation of the risks and benefits in participating in that behavior.[13] Since *Health Checks For Care* targets the behaviors of the volunteers specifically, a change in attitudes and a knowledge of expected outcomes by the volunteers is required for success.

To implement *Health Checks For Care*, cooperation between the staff, volunteers, and participants is imperative. Volunteers must complete the required coursework to successfully conduct wellness checks and change their usual routine to include these checks. They must also report back any and all findings to the facilities staff members after their deliveries. The theory of planned behavior can be referenced when viewing this change in the regular dynamic between volunteer delivery driver and client. Volunteers will have to shift their behaviors and attitudes towards their clients. Volunteers in Newark are accustomed to their regular routine and have certain attitudes towards the clients with whom they have developed relationships. Often, volunteers have been delivering meals to the same clients for years, developing a rigid behavioral pattern over time. They expect certain behaviors to generate certain outcomes, and, because of the theory of planned behavior, may not want to partake in the suggested program that requires them to change these behaviors.

Changing the routine of volunteers already donating their time to volunteer work is essential for conducting wellness checks, but will be difficult to change. Volunteers may feel uncomfortable with reporting what they see as they deliver to clients, as this could feel like a breach of privacy. They may also be less inclined to guide clients towards healthy living habits because this goes beyond their original training and the comfortable routine they have grown accustomed to. Taking time from their day to learn more about how to spot red flags in clients' homes and how to operate the given screening tools may also feel like too much work, since volunteers deliver with no cost incentive. Often, volunteers themselves are retired from work and spend their mornings delivering as a leisurely way to give back to the community. The wellness checks and health screenings need to be easy for volunteers to conduct without them feeling like they are going the extra mile for no reason.

To combat the challenges presented, *Health Checks for Care* will be geared towards appropriately educating volunteers and reminding them of how valuable their roles are for the success of this program. The training required will be on the volunteer's own time, and presented in a way that is convenient and easy to learn, creating a seamless transition into their delivery drives. There will be no "time limits" on the completion of training, and volunteers will be informed about the main purpose of the program before starting training. This will likely cause more volunteers to participate, as the program will be flexible to the schedules of volunteers. Volunteers can opt out of participating, and will only be instructed to give paper surveys to participants who have already agreed to being in the program, in an effort to make survey delivery as seamless as possible. With this, they won't feel forced into a new, unforeseen

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behavior, and more volunteers will be willing to participate. The volunteers will be informed of easy ways to incorporate wellness checks into even a thirty second interaction with clients, and may learn how their own role is vital in preventing adverse health events with the clients with whom they have developed lasting relations.

Health Checks for Care

Logistics

The *Health Checks for Care* plan will conduct wellness checks on existing MOW clients being served from the Newark Senior Center location. Similar plans have been launched by the West Health Institute (*More than a Meal*) and the Johns Hopkins Bayview Medical Center (*Together in Care*). Both projects aim to keep seniors at home and reduce their need for costly health services after hospitalization. The plan proposed for the Newark Delaware location focuses on using elements from these two projects to uniquely target Delaware residents. Trained volunteers will use their interactions with often isolated senior citizens to report red flags and conduct a monthly wellness check as they deliver meals. *Health Checks for Care* will become the "eyes and ears" of health providers, specifically benefitting clients who suffer from chronic illnesses or do not have family nearby. The Newark location can standardize reporting mechanisms and improve communication with primary healthcare providers to prevent adverse health events in seniors already benefiting from daily meals.

In this program, basic health information recorded via paper survey will be sent to primary health physicians for interpretation through the Delaware Health Information Network (DHIN). This program does not rest specifically on monitoring participant health after major surgery (like *Together in Care*), but rather targets warning signs of major health changes, in an effort to "catch" health problems before they arise (similar to *More Than A Meal: Phase 3*). To appropriately conduct this program, certain aspects of the two highlighted programs will be incorporated. First, it should be recognized that both programs had affiliations with hospitals (John Hopkins Bayview Medical Center and The Gary and Mary West Health Institute). This affiliation is vital, as standardizing how various primary care physicians view and interpret the given healthcare surveys is vital for program success. As a public health initiative, this operation will operate on a tier system, where medical surveys will be completed by participants, returned by Meals on Wheels volunteers, assorted by the Meals on Wheels office staff, and sent electronically to the participant's primary health physician for interpretation. To create a secure and easily accessible outlet for survey results, the DHIN could be utilized, as participant surveys can be retrieved on a patient portal by Delaware physicians. An association with a large healthcare institution like ChristianaCare will be imperative for the program's success. Arranging a partnership with an institution will ensure that participants with primary care physicians affiliated with the hospital will receive adequate care based on their survey outcomes. Once affiliated with an institution, physicians with patients within the program will be instructed to take survey questions into consideration, and, if the information is deemed alarming, will request that a participant come in for a visit. This system will help to ensure that ominous "warning signs" of potential health risks will not go unnoticed, as improved communication with healthcare providers can prevent an adverse health event

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Methods

The Institutional Review Board (IRB) is an administrative body established to protect the rights and welfare of human research subjects. As *Health Checks for Care* uses participant's health survey answers, IRB approval will be needed. The University of Delaware has IRB protocol review and approval procedures geared towards their institution.[14] If this program is lead under the University of Delaware, research will be registered on IRBNet and must be sponsored by a faculty advisor before IRB approval. As training in the protection of human subjects in research is required, volunteers for this project will complete the Collaborative Institutional Training Initiative (CITI) Program, and training completion certificates will be linked in IRBNet for IRB review submission. Informed consent from research participants will be obtained and properly documented by the use of written consent forms before a survey is administered.

For this program to be successful, the consideration and execution of HIPAA (Health Insurance Portability and Accountability Act) guidelines, as well as proper medical research methodology, must be properly followed. Volunteers will undergo training on human research etiquette (PHRP or CITI training) before becoming a part of this program. Survey responses can be considered as a participant's own personal medical information, therefore volunteers within the program must be instructed on HIPAA guidelines and regulations. Each participant will be randomly assigned a number upon program agreement and this number will be listed on their survey as the only identifier. A survey will be given to patients once a month with this identifier, and the patient will seal the survey in an envelope without the help of the volunteer. From there, other volunteers trained in human research etiquette within the MOW office will input the information into the DHIN using the patient's identifier and using a secure password. Participants will be made aware of this entire process by signing a consent form detailing this procedure in order to enter the program. Volunteer drivers will not be allowed to view the participants' answers, and will be instructed to help participants only if clarification is needed, but under no circumstance will they aid in helping them answer any questions. Once these surveys have been uploaded, written responses will be immediately shredded.

Survey Instrument

As the program's main initiative is to watch for warning signs and symptoms of potential health risks in senior citizens, questions will be centered around evaluating overall changes in health. This survey (see Tables 1-5) will address common issues that could be aided by the assistance of a primary healthcare provider (e.g. need for a nursing aide, blood testing, psychiatric consult, or even additional medical equipment). The American Family Physicians Journal recommends the geriatric assessment to assess the health of patients 65 years and older. This validated survey is a multidimensional, multidisciplinary assessment designed to evaluate an older person's functional ability, physical health, cognition and mental health, as well as socio-environmental circumstances. Specific elements of physical health that are evaluated include nutrition, vision, hearing, fecal and urinary continence, and balance. This questionnaire is unique in that it includes nonmedical domains by emphasizing functional capacity and quality of life. Determining the most suitable living arrangements for older patients is an important function of the geriatric assessment. This assessment usually yields a more complete and relevant list of medical problems, functional problems, and psychosocial issues.[15] Validated previously within a more general aging population, the geriatric assessment will be monitored and could potentially be found to be a valid assessment of the health of the Meals on Wheels population. This

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questionnaire will be given to participants monthly, and changes to question responses will be tracked by physicians to "catch" potential health problems before an incident occurs. The Geriatric Assessment has some functional limitations. The full breadth of this assessment includes some medical instruction, a physical screening, and a lab test. As volunteers are administering this assessment in the homes of participants, the Geriatric Assessment will be limited to its survey outcomes. Based on the outcomes of the surveys, physicians may suggest further testing for their individual clients.

The Geriatric Assessment targets activities of daily living, cognitive capacity, hearing, independence, and nutritional health. These questions are taken from the Mini Cognitive Assessment, Activities of Daily Living, Hearing Handicap Inventory, and Nutritional Health Checklist parts of the Geriatric Assessment.[15] These survey components were acquired by utilizing all of the questionnaires from the original assessment that is specifically targeted towards an aging population. The Nutritional Health Checklist and The Activities of Daily Living surveys have been adapted to prevent participant self-scoring. Each portion will be divided into separate sheets of paper, with the Mini-Cognitive Assessment Instrument being the only survey conducted with the volunteer's involvement (as they must say words for the participant to repeat). This process will be HIPAA approved, as volunteers conducting the Mini-Cognitive Assessment will write down the three words used and their repeated results on the survey's envelope. The clock drawn for this assessment will also be illustrated on the envelope by the participant, and this will be the final step in the Mini-Cognitive Assessment. As all results will be written on the envelope, volunteers will not have access to survey outcomes themselves.

Discussion

Health Checks for Care can be implemented well within the confines of the Meals on Wheels food delivery system. Volunteers within this program already have closely developed relationships to their clients; utilizing their scheduled visits to document their client's well-being is both time-effective and free. By implementing an already researched Geriatric Health Assessment, costs for the program will be restricted to the costs of volunteer research training and a purposed partnership with a healthcare institution like ChristianaCare. However, a program like *Health Checks for Care* has the potential to substantially lower healthcare costs around Newark and the State of Delaware, by keeping seniors out of the hospital and reducing their need for costly health services. If care is taken in creating and implementing this program, and these highlighted key elements are considered, the clients of Meals on Wheels in Newark, Delaware can benefit greatly from these public health services.

Limitations

Possible limitations to *Health Checks for Care* include attaining the support and agreement of primary care physicians, volunteers, and participants, as all respective groups will need to be in agreement with program expectations for its success. Health checks will be conducted using only paper surveys, so limitations could also arise due to a lack of response or even biases in participant responses. As the Geriatric Assessment formally utilizes a physical exam to determine geriatric health, relying on its survey response components could limit the breadth of the assessment's effectiveness. Another limitation could be the survey's length and how long it will take for participants to complete. For the first six months of *Health Checks for Care*, volunteers will deliver the full survey and expect it to be completed fully. If survey responses

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aren't completed to the fullest, or if participants refuse to comply in completing the surveys length, surveys can be sent out by volunteers and then subsequently picked up later in that week.

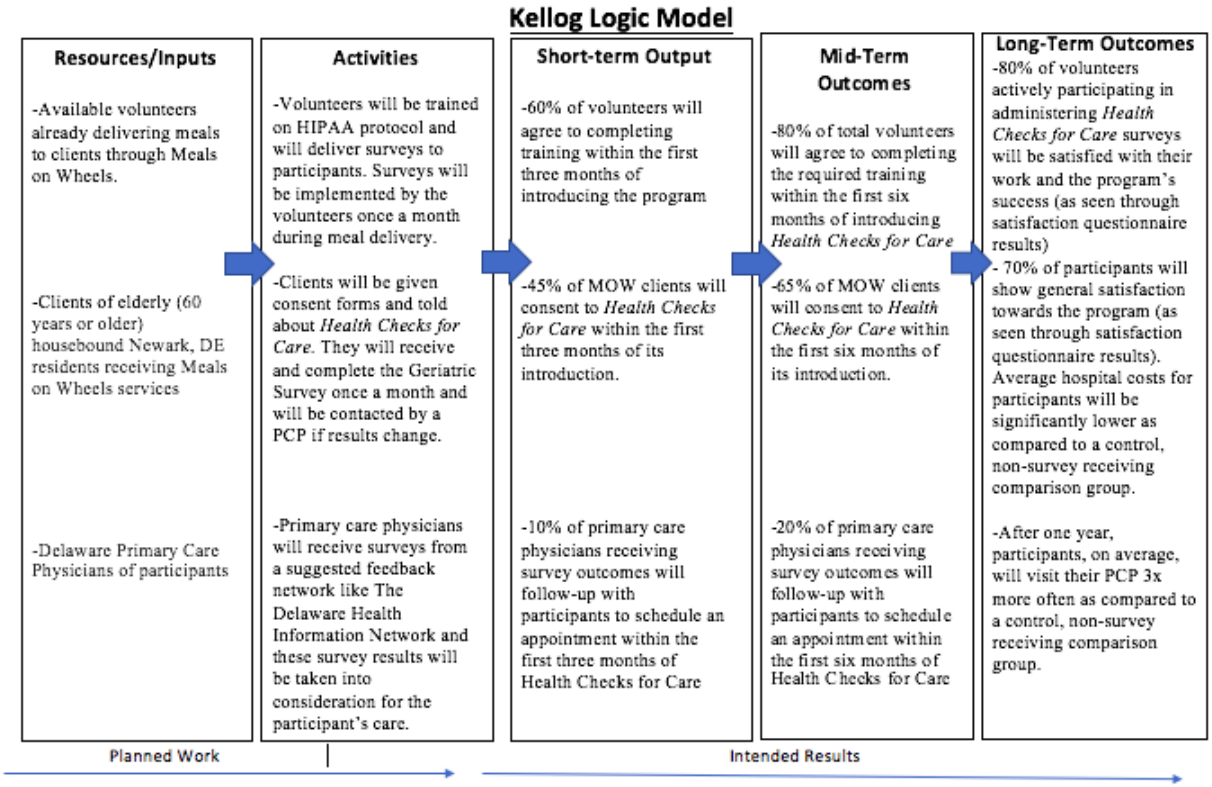
Further Research

To combat these limitations, further research could focus on recruiting medical personnel to volunteer in conducting these wellness checks. With this, survey responses would not be a participant's only form of health check-in, and participants can stay in their homes to receive medical advice. Another area of further research could rely on crafting a health assessment that targets MOW participants specifically. This area of research could focus on targeting the common health issues of the typical MOW participant, and create an assessment that "catches" all health concerns tailored specifically to this population.

Logic Model

Health Checks For Care uses the Kellogg Logic Model for program evaluation. The Kellogg Logic Model (see Figure 1) initiates and completes outcome-oriented evaluation, providing practical assistance to a presented program. On a broader scale, a logic model is also a graphic depiction or a road map for a given project, presenting shared relationships among resources, activities, outputs, outcomes, and impacts. This road map simplifies results, and depicts a relationship between a program's description and its intended effects.

Figure 1. *Health Checks for Care* Logic Model



In *Health Checks for Care,* the resources needed are already plentiful and cost little to acquire. Volunteers perform as drivers and deliver meals to participants through the organization. They

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have a set driving route and have previously developed relationships with their elderly clientele. *Health Checks for Care* seeks to use this already established system as a resource, with other desk and office volunteers to input these wellness checks and upload them to a patient's electronic medical record at no cost to the program. The Meals on Wheels clientele are often homebound, have little to no social contact throughout the day, and are not generally able to cook meals for themselves. Meals on Wheels participants are ideal candidates to receive wellness checks, as participants may not have anyone to advise them on healthcare, drive them to doctors' appointments, or properly monitor their changing health issues. Primary care physicians will receive these patient surveys and take the results into consideration for the participant's care.

Another key part of the *Health Checks for Care* Logic Model is the intended results section of proposed research, which includes the identification of outputs, outcomes, and impacts. The outputs of this partnership with Meals on Wheels can be financially computed with estimations, as the program's key goal is to keep seniors out of the hospital or from having an adverse health event. A control matched population of clients not receiving wellness checks could be monitored for costly health events or hospital stays and labeled as a comparison group. This comparison group could be tracked for a year's time to compare the average healthcare costs of Meals on Wheels clients with and without *Health Checks for Care,* as well as their average amount of visits to a primary care physician each year. Another key output is participant satisfaction. Interviewing the participants about the effectiveness of these wellness checks would be an important output of this plan. The outcomes, or participant benefits of this proposal can potentially be substantial, as catching health warning signs and keeping participants out of the hospital would likely reduce their insurance costs, keep them living independently, and even save their lives if warning signs of major health concerns are caught and monitored. The greater impacts of this proposal, if all intended results are met, could be widespread, as Meals on Wheels is a nationwide organization. If other cities with a large network of primary care physicians and a hub of available volunteers were to get on board with this proposal, communities across the U.S could see great financial and health benefits from conducting these wellness checks.

Discussion of Internship

During my experience interning with the Delaware Academy of Medicine, I became aware of the vast complexities of writing a formal research proposal. One of my most challenging experiences was simply choosing a topic to pursue, as I found that narrowing down options was much harder than I originally thought. After thinking about my time volunteering, it became clear that I wanted to utilize my experience to seek out possible ways to improve the Meals on Wheels non-profit program. With help and guidance, I realized quickly that looking into the logistics of other programs and seeing how they implemented improvements to MOW branches was a great way to get started. Something I was fascinated to learn is how different a research proposal is from the standard college paper. Taught previously by some professors to use ostentatious wording in an effort to sound "smart," I was surprised to find that research proposals did not operate in the same way. I believe that drafting this proposal has taught me to be more succinct in the wording of sentences, yet broad in the coverage of material. I will definitely be using the tools I've learned grammatically to better my writing in the future.

This experience has also taught me a lot about my own interest in public health. I've become much more aware of how the public health system operates, and all the hard work that goes into making programs, like my own, come to life. As I am in the process of applying to medical

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schools, conducting research on the overall complexities of the aging population's health has also proved enlightening. After my research, it became clear how a person's health is not merely physical, but covers a broad spectrum of areas that I hope to one day take into consideration as a physician. I am excited to utilize all the new skills and information I have learned to benefit after my internship.

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Table 1. The Lawton IADL Scale

For each question, circle the points for the answer that best applies to your situation.			
	1. Can you use the telephone?		
		Without help	3
		With some help	2
		Completely unable to use the telephone	1
	2. Can you get to places that are out of walking distance?		
		Without help	3
		With some help	2
		Completely unable to travel unless special arrangements are made	1
	3. Can you go shopping for groceries?		
		Without help	3
		With some help	2
		Completely unable to do any shopping	1
	4. Can you prepare your own meals?		
		Without help	3
		With some help	2
		Completely unable to prepare any meals	1
	5. Can you do your own housework?		
		Without help	3
		With some help	2
		Completely unable to do any housework	1
	6. Can you do your own handyman work?		
		Without help	3
		With some help	2
		Completely unable to do any handyman work	1
	7. Can you do your own laundry?		
		Without help	3
		With some help	2
		Completely unable to do any laundry	1
	8a. Do you use any medications?		

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		Yes (If "yes," answer question 8b)	1
		No (If "no," answer question 8c)	2
	8b. Do you take your own medication?		
		Without help (in the right doses at the right time)	3
		With some help (take medication if someone prepares it for you or reminds you to take it)	2
		Completely unable to take own medication	1
	8c. If you had to take medication, could you do it?		
		Without help (in the right doses at the right time)	3
		With some help (take medication if someone prepares it for you or reminds you to take it)	2
		Completely unable to take own medication	1
	9. Can you manage your own money?		
		Without help	3
		With some help	2
		Completely unable to handle money	1

Note: *Scores have meaning only for a particular patient (e.g., declining scores over time reveal deterioration). Some questions may be sex-specific and can be modified if needed.*

Table 2. Katz Index of Independence in Activities of Daily Living

independence ***YES=INDEPENDENT*** ***NO=DEPENDENT***		***YES***	***NO***
Bathing		Bathes self completely or needs help in bathing only a single part of the body, such as the back, genital area, or disabled extremity	Needs help with bathing more than one part of the body, getting in or out of the bathtub or shower; requires total bathing
Dressing		Gets clothes from closets and drawers, and puts on clothes and outer garments complete with fasteners; may need help tying shoes	Needs help with dressing self or needs to be completely dressed
Toileting		Goes to toilet, gets on and off, arranges clothes, cleans genital area without help	Needs help transferring to the toilet and cleaning self, or uses bedpan or commode
Transferring		Moves in and out of bed or chair unassisted; mechanical transfer aids are acceptable	Needs help in moving from bed to chair or requires a complete transfer
Fecal and urinary continence			Is partially or totally incontinent of bowel or bladder
Feeding			

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		Gets food from plate into mouth without help; preparation of food may be done by another person	Needs partial or total help with feeding or requires parenteral feeding

Table 3. Nutritional Health Checklist

STATEMENT	***YES***	***NO***
I have an illness or condition that made me change the kind or amount of food I eat.		
I eat fewer than two meals per day.		
I eat few fruits, vegetables, or milk products.		
I have three or more drinks of beer, liquor, or wine almost every day.		
I have tooth or mouth problems that make it hard for me to eat.		
I don't always have enough money to buy the food I need.		
I eat alone most of the time.		
I take three or more different prescription or over-the-counter drugs per day.		
Without wanting to, I have lost or gained 10 lb in the past six months.		
I am not always physically able to shop, cook, or feed myself.		

note: *The Nutritional Health Checklist was developed for the Nutrition Screening Initiative. Read the statements above, and circle the "yes" or "No" column for each statement that applies to you.*

0 to 2 = You have good nutrition. Recheck your nutritional score in six months.

3 to 5 = You are at moderate nutritional risk, and you should see what you can do to improve your eating habits and lifestyle. Recheck your nutritional score in three months.

6 or more = You are at high nutritional risk, and you should bring this checklist with you the next time you see your physician, dietitian, or other qualified health care professional. Talk with any of these professionals about the problems you may have. Ask for help to improve your nutritional status.

Table 4. Screening Version of the Hearing Handicap Inventory for the Elderly

QUESTION	***YES***	***SOMETIMES***	***NO***
Does a hearing problem cause you to feel embarrassed when you meet new people?	_____	_____	_____
Does a hearing problem cause you to feel frustrated when talking to members of your family?	_____	_____	_____
Do you have difficulty hearing when someone speaks in a whisper?	_____	_____	_____

DOI: 10.32481/djph.2021.03.013

Do you feel impaired by a hearing problem?	_____	_____	_____
Does a hearing problem cause you difficulty when visiting friends, relatives, or neighbors?	_____	_____	_____
Does a hearing problem cause you to attend religious services less often than you would like?	_____	_____	_____
Does a hearing problem cause you to have arguments with family members?	_____	_____	_____
Does a hearing problem cause you difficulty when listening to the television or radio?	_____	_____	_____
Do you feel that any difficulty with your hearing limits or hampers your personal or social life?	_____	_____	_____
Does a hearing problem cause you difficulty when in a restaurant with relatives or friends?	_____	_____	_____
Raw score (sum of the points assigned to each of the items)			

Table 5. Mini-Cognitive Assessment Instrument

Step 1. Ask the patient to repeat three unrelated words, such as “ball,” “dog,” and “window.”

Step 2. Ask the patient to draw a simple clock set to 10 minutes after eleven o'clock (11:10). A correct response is drawing of a circle with the numbers placed in approximately the correct positions, with the hands pointing to the 11 and 2.

Step 3. Ask the patient to recall the three words from Step 1. One point is given for each item that is recalled correctly. Scoring will be done by Meals on Wheels office volunteer

Interpretation:

NUMBER OF ITEMS CORRECTLY RECALLED	***CLOCK DRAWING TEST RESULT***	***INTERPRETATION OF SCREEN FOR DEMENTIA***
0	Normal	Positive
0	Abnormal	Positive
1	Normal	Negative
1	Abnormal	Positive
2	Normal	Negative
2	Abnormal	Positive
3	Normal	Negative
3	Abnormal	Negative

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