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Help older adults live their healthiest life (health): an educational program to promote holistic practice in primary care

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HELP OLDER ADULTS LIVE THEIR HEALTHIEST LIFE (HEALTH): AN EDUCATIONAL PROGRAM TO PROMOTE HOLISTIC PRACTICE IN PRIMARY CARE

by

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DEDICATION

I would like to dedicate this work to Nick, Mom, Dad, Grammy, Grampy, extended family and friends. You all have been my biggest supporters and without a doubt, I would not be able to achieve any of this without your unwavering encouragement. I am forever grateful for each of you and so thankful you are my family. I love you!

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HELP OLDER ADULTS LIVE THEIR HEALTHIEST LIFE (HEALTH):

AN EDUCATIONAL PROGRAM TO PROMOTE HOLISTIC

PRACTICE IN PRIMARY CARE

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ABSTRACT

There is a growing need within the primary healthcare setting regarding necessary proactive treatment of productive aging and health literacy strategies amongst the aging population. Elderly individuals diagnosed with many chronic health conditions, or multimorbidity, are at risk for decreased health and well-being, poor quality of life, and decreased ability to age in place. Help Older Adults Live Their Healthiest Life (HEALTH) is a holistic continuing education unit (CEU) educational program with the goal of educating occupational therapy practitioners (OTPs) on productive aging and health literacy topics to implement within the primary care setting. Implementation of HEALTH within the primary care setting will promote improved quality of life and improved health outcomes amongst elderly individuals.

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LIST OF ABBREVIATIONS

ADLs.. Activities of daily living

AOTA .... American Occupational Therapy Association

CEU...Continuing education unit

IADLs .... Instrumental activities of daily living

OT .... Occupational therapy

OTP .... Occupational therapy practitioner

PCP .... Primary care practitioner

SNF .... Skilled nursing facility

GLOSSARY

Continuing Education Unit (CEU): A continuing education course that will provide participants with licensure credit towards their state therapy license. This is a course that will provide interactive education with a pre-and post-test component.

Help Older Adults Live Their Healthiest Life (HEALTH): A holistic educational program for occupational therapy practitioners on productive aging and health literacy topics in the primary care setting

Occupational Therapy Practitioner (OTP): A licensed occupational therapist or occupational therapy assistant that works in a wide range of settings with the purpose of engaging their clients in meaningful occupations

Primary Care Practitioner (PCP): A healthcare provider within the primary care setting

Self Determination Theory (SDT): A theoretical framework with a focus on autonomous decision making and self-determination

CHAPTER ONE – Introduction

Introduction

By the year 2030, nearly 20% of the US population will be at retirement age, with majority of this population managing at least one chronic condition including diabetes, heart disease, or arthritis (Mirza et al., 2020). Worldwide, chronic conditions cause 60% of the population death and 43% of disease, both of which are the leading causes for both categories (Richardson et al., 2012). To combat the high prevalence of chronic conditions, implementing productive aging strategies is a necessary focus. However, many aging adults have limited resources and access to technological sources to discover opportunities for productive aging recommendations. This is in part due to health illiteracy and barriers to e-technology amongst the elderly population. According to Neter & Brainin (2019), low health literacy has resulted in missed doctor appointments, inaccuracies with medications, noncompliance with recommendations, and ultimately, increased hospitalizations.

A common denominator among all adults who receive healthcare, is the primary care office. According to Garvey et al. (2015), diagnosis of multimorbidities, otherwise known as having many chronic health conditions, are commonly found in the primary care setting as part of routine appointments. The focus of this intervention will be to develop a program for all patient access at primary care settings in an attempt to reach a wide range of the population. Help Older Adults Live Their Healthiest Life (HEALTH) is a holistic approach to healthcare with the ultimate goal to provide all adults with resources to promote productive aging, healthy living, and ultimately, facilitate the elderly population to age in place safely.

The problem being examined through this program is understanding productive aging in relation to healthy aging. It is inevitable that aging is part of a human's lifespan; however, many individuals in the aging population have a lack of resources and education to live a safe and meaningful life within their physical and mental capacities. Much of the aging population has many chronic illnesses and oftentimes do not have access to resources to promote a healthy lifestyle and ability to implement productive aging strategies. Similarly, some individuals who have access to these resources do not implement these strategies consistently throughout their daily routines as they do not have the proper education on the individual benefits.

Productive aging is a big topic amongst healthcare workers; especially in the occupational therapy (OT) profession. Individuals who have a lack of resources or lack of follow-through related to community programs, healthy eating habits, lack of exercise, to name a few, can have a higher rate of chronic illness and increased health-related problems (Berger et al. 2018). Addressing productive aging is important within many areas of healthcare, especially within primary care offices. Facilitating a well-rounded and healthy lifestyle at any age is important to lay the foundation for healthy productive aging. Many healthy habits related to productive aging happens through routines and habits. Providing individuals with resources to promote healthy aging and addressing health promotion and maintenance can play an important factor in a person's longevity and quality of life (Berger et al. 2018).

Productive aging can be a key factor in every domain and occupation listed in the

American Occupational Therapy Association (AOTA) Occupational Therapy Practice Framework. In order to participate in our meaningful life occupations such as activities of daily living (ADLs), instrumental activities of daily living (IADLs), sleep, education, work, play, leisure, and social participation, implementing productive aging strategies can promote improved quality of life and facilitate aging in place. The outcome the author is seeking through use of evidence-based research is to develop a continuing education unit (CEU) course to educate occupational therapy practitioners (OTPs) on the topic of productive aging and health literacy strategies, and how to implement these strategies in their elderly clients' daily routines. As a result of the proposed program, HEALTH, the overall goal would be to provide fellow OTPs with the necessary tools and education needed to teach their community-dwelling aging clients how to facilitate improved health management strategies.

Conclusion

Throughout this paper, information regarding the importance of productive aging, health literacy, and how to apply this evidenced-based research into the OT practice will be discussed. Incorporating the evidence-based research regarding these topics, the proposed project, HEALTH, will be presented to promote improved overall health and well-being amongst community-dwelling elderly individuals to promote aging in place.

CHAPTER TWO – Project Theoretical and Evidence Base

Introduction

Productive aging is an umbrella term that describes the occupations or activities that an individual engages in that is meaningful to them and to ensure healthy aging while engaging in these routines (Centers for Disease Control and Prevention, 2015). The topic of productive aging is becoming increasingly important as the US population of individuals aged 65 and older is projected to nearly double to 95 million people by the year 2060 from 52 million in 2018 (Mather et al., 2019). Productive aging is also an important topic to help decrease healthcare costs nationwide as nearly 90% of the $4.1 trillion annual expenditures for health care is directly correlated to treating chronic and mental health conditions (Centers for Disease Control and Prevention, 2022).

To promote productive aging strategies amongst the elderly population, education on health literacy is also important. Health literacy is defined as an individual's ability to obtain, process, and understand their health information to be able to make well-informed health decisions (Centers for Disease Control and Prevention, 2022). A staggering 36% of the US is predicted to have low health literacy, which was found to cost the nation's economy approximately $236 billion annually as a result of decreased knowledge in managing health conditions (Mahadevan, 2013). In this chapter, productive aging and health literacy will further be explored, in addition to how primary care practitioners (PCPs) can play an integral role in achieving these outcomes.

Chapter 2

As individuals continue along the aging process, it is important to take steps for managing chronic illnesses, understanding healthcare terminology, and promoting aging in place to maintain an independent and healthy lifestyle within their natural environment. According to Berger et al. (2018), approximately 90% of the older adult population is living with a chronic health condition, and nearly 75% of those who have more than one chronic health condition. Research shows these percentages do not correlate with the actual percentage of the population who participate in health promotion strategies, resulting in decreased quality of life and overall health (Berger et al., 2018). In a study conducted by Quinlan et al. (2020), it was discovered many individuals currently residing in a skilled nursing facility (SNF) reported a common barrier of aging in place was not preparing for their future in regards to their health when they were younger, as they preferred to “live in the now”. Though individuals may not think to prepare for their future when they are younger, it is necessary to set the foundation of quality of life during all of life’s stages.

In addition, low health literacy has been linked to poorer health outcomes. According to Neter & Brainin (2019), low health literacy has resulted in missed doctor appointments, inaccuracies with medications, noncompliance with recommendations, and ultimately, increased hospitalizations. In addition, with medical records requiring more digital access, low health literacy has now been linked to individuals with poor understanding of the digital world (Neter & Brainin, 2019). Research also indicates that when productive aging strategies are utilized, it is associated with increases in self-reported health, less negative mental health symptoms, and decreased mortality rates among the elderly (Yang et al., 2019).

In Table 1.1 below, the problem, solution, and outcome are overviewed regarding the proposed plan for the HEALTH program. This overview is the foundation for how HEALTH was developed, which will later be described throughout this paper.

Table 1.1 *Problem, Solution & Outcome for HEALTH*

Problem
• Decreased health literacy among older adults • Difficulty maintaining chronic illness independently • Decreased strategies for healthy productive aging in place within their natural environment • Decreased clinical experience of occupational therapy practitioners regarding educating on productive aging and health literacy topics with their clients
Solution
Framework for health care professionals that will target health literacy and maintaining chronic illness in order to productively age in place.
Outcome
A CEU educational program to educate occupational therapy practitioners regarding productive aging and health literacy strategies for aging clients

To examine if addressing productive aging and health literacy strategies are being addressed in the primary care setting improves client outcomes, the following questions were used to guide evidenced-based research: (1) Is there evidence that preventative care and productive education in primary care improves health outcomes?; (2) Is there evidence that facilitating productive aging strategies promotes aging in place?; (3) Is there evidence that improved health literacy promotes better health outcomes for older adults?

To gather this information, various search engines were used such as BU Library, EBSCOhost, PubMed, and Google. The following key words were used to guide the research: “productive aging”, “health literacy” AND “primary care” OR “outcomes”, "chronic illness" AND "aging in place". Below are the research questions discussed with further evidence-based research to support each question.

Is there evidence that preventative care and productive aging education in primary care improves health outcomes?

By the year 2030, nearly 20% of the US population will be at retirement age, with majority of this population managing at least one chronic condition including diabetes, heart disease, or arthritis (Mirza et al., 2020). Worldwide, chronic conditions cause 60% of the population death and 43% of disease, both of which are the leading causes for both categories (Richardson et al., 2012). When chronic health conditions are not managed appropriately, individuals' overall health will decline, limitations in activities of daily living (ADLs) and instrumental activities of daily living (IADLs) will onset, and independence and quality of life will decline as chronic conditions manifest (Mirza et al., 2020). Multimorbidity, commonly known as having more than one chronic health condition, poses an increased risk for mortality, disability, decreased functional performance, and psychological stressors (Garvey et al., 2015). According to Richardson et al. (2012), physical changes in functioning are more commonly associated with decreased self-management skills when compared to aging. Without the ability to perform self-management skills for chronic health conditions, barriers formulate which reduces an individual's ability to implement productive aging techniques. As part of the study conducted by Richardson et al. (2012), self-efficacy scores improved when physical functioning was addressed in the areas of physical activity, grip strength, and overall self-management of chronic conditions.

According to Richardson et al. (2012), when elderly individuals with chronic health conditions participate in strengthening, aerobic exercise, and stretching, there was found to be a 30% improvement in their upper body and lower body strength.

Primary care intervention for chronic health conditions and preventative measures is a critical component of productive aging. Primary care offices are typically more accessible to community-dwelling citizens compared to specialists, as these typically require a physician referral with an extended wait time for an initial appointment (Vestgens et al., 2019). Primary care facilities are often the first stop for individuals who seek medical advice and these primary care practitioners (PCPs) aide in developing strategies for managing chronic health conditions (Elliot et al., 2018). In addition to education, PCPs are also considered the *gateway* for access to community hospitals and specialist referrals to further manage chronic health conditions (Elliot et al., 2018). Most individuals who have chronic health conditions seek medical care from many health care providers. Implementing occupational therapy (OT) interventions within the primary care setting can improve clients' ability to manage or prevent chronic health conditions.

PCPs have a critical role in the prevention of frailty among older adults as this could lead to decreased quality of life, increased risk of falls, weakness, and adverse health problems (Obbia et al., 2019). Although primary care offices are more accessible, the common role of PCPs lately is to treat acute medical problems, rather than prevention and identification of complex medical conditions (Mirza et al., 2020). Oeseburg et al. (2013) expressed that for individuals to self-manage chronic conditions, the goal of primary healthcare must transition from treating acute illnesses to promoting healthy lifestyles in a proactive approach.

Many patients have expressed dissatisfaction with their primary care experiences due to the limited time available in their appointments to address their concerns and to establish preventative measures (Mirza et al., 2020). According to AlRuthia et al. (2020), patients' self-management strategies and medication compliance are positively associated with trusting their healthcare providers. According to a survey conducted by Grant et al. (2013), patients were asked to describe strategies that helped facilitate improved satisfaction as well as barriers to addressing concerns during visits. Three of the common habits of PCPs that were found to promote better health outcomes include PCP flexibility during visits, listening to patient concerns, and the patient's ability to be proactive and ability to share their own concerns (Grant et al., 2013). It was found that the two barriers to better health outcomes during routine visits included the physician's busy schedule and time constraints to address the patient in a holistic approach (Grant et al., 2013).

In addition to PCPs role in combating preventive care, it is also the responsibility of the patient to bring questions and concerns to their physician to identify their goals and objectives (Grant et al., 2013). According to Ngangue et al. (2020), health care professionals (HCP) reported that scheduling follow-up appointments is beneficial for attaining patient's goals and to assess patient's progress after implementing lifestyle changes. By facilitating this strategy, this holds a mutual responsibility for both the patient and the provider; the provider must educate and provide strategies on managing chronic health conditions, and the patient must carryover the learned strategies and implement in their daily routines (Ngangue et al., 2020). In addition, inclusion of an interdisciplinary healthcare team towards promoting patient-centered care facilitates improved self-management for chronic health conditions (Ngangue et al., 2020).

PCPs reported in a study conducted by Elliot et al. (2018) that the more practitioners got to know their patients', the more receptive their patients were in accepting their professional recommendations. Many elderly individuals have had a professional relationship with their PCP for many years; developing trust in a patient-provider relationship is key for establishing preventive care strategies.

Over the years, OT practices have been expanding in the primary care setting. Within the occupational therapy scope of practice, practitioners address health management topics, health prevention, and health wellness; all of which should be main focuses in the primary care setting (Halle et al., 2018). OTPs can add value in the primary care setting by implementing proactive programs with the focus of promoting early intervention, maintaining independence, managing chronic health conditions, decreasing risk of long-term institutionalization, and assisting individuals as they continue along the aging process (Halle et al., 2018).

Is there evidence that facilitating productive aging strategies promotes aging in place?

On average, nearly 95% of the elderly population reside at home, and approximately 25% of those individuals are frail according to studies examined in the Netherlands (Oeseburg et al., 2013). Similarly, 85% of adults aged 65 and older prefer to live in their home, whereas 80% of those wish to age in place in their home (Quinlan et al., 2020). According to Richardson et al. (2012), individuals who maintain physical activity with or without chronic health conditions have a decreased risk of developing a disability, whereas less active individuals have a higher risk. In addition, Moorin et al. (2020) examined U.S. data articles and discovered that individuals who regularly have their PCP involved in their healthcare resulted in decreased hospital readmissions.

Nearly 1-in-5 elderly homebound individuals experience a lack of community support to provide the assistance they require due to the location of their natural environment (Quinlan et al., 2020). This further expresses the need for implementing productive aging strategies within the primary care setting to facilitate safe aging in place to reduce risk of injury as caused by lack of community accessibility. According to a study conducted by Quinlan et al. (2020), two main barriers to achieving aging in place included lack of caregiver support and lack of future planning for the onset of aging.

To promote productive aging strategies, the Self-Determination Theory (SDT) can provide foundational components to facilitate autonomy, self-motivation, and internal satisfaction. The SDT states that behaviors are driven by a *perceived locus of causality*, otherwise described as the reason for which an individual is engaging in a behavior (Sheldon et al., 2017). According to Sheldon et al. (2017), the autonomous feeling one gets from motivated behaviors is either categorized as external, a lack of autonomy, or internal, feelings of self-determination. A behavioral response is determined by whether or not an individual is motivated by external or internal reasons (Sheldon et al., 2017). A negative behavioral response is depicted as an individual who is not motivated, requiring a reward, and possibly doing so to avoid punishment (Sheldon et al., 2017). A positive behavioral response, the aim of the SDT, describes an individual feeling autonomous, self-determined, and interested in the task (Sheldon et al., 2017).

Is there evidence that improved health literacy promotes better health outcomes for older adults?

As defined by the World Health Organization (WHO), health literacy refers to the cognitive abilities "of individuals to gain access to, understand and use information in ways which promote and maintain good health" (Neter & Brainin, 2019). Years ago, medical information was solely provided by PCPs through use of paper medical charts; however, with the increase in technological use, most medical information is found in electronic forms, requiring eHealth literacy skills (Neter & Brainin, 2019). Elderly individuals who are not fluent in electronics or accessing medical information via an online platform can experience disadvantages in the healthcare system due to lack of accessibility.

According to Neter & Brainin (2019), poor health literacy is associated with negative health outcomes including mismanaged medication usage, missed doctor's appointments, inability to self-manage chronic health conditions, and increased rates of hospitalization. In addition, low health literacy skills are related to difficulty understanding diagnoses and inability to interpret personal health documentation (Neter & Brainin, 2019).

According to Brabers et al. (2017), individuals who have higher cognitive functioning skills demonstrate higher level of health literacy skills and take a more active role in their healthcare decisions. Having health literacy skills enables patients to exchange information, understand, apply, and carryover with healthcare decisions determined through collaboration with their physician (Brabers et al., 2017). In the study conducted by Brabers et al. (2017), researchers found that individuals with a higher education were more likely to have health literacy skills, therefore, better involvement in their medical decisions. In addition, Kobayashi et al. (2015) found that older adults 80 years and older had a notable decline in health literacy skills compared to individuals 50 years and younger.

As determined by the Serper et al. (2014) study, individuals with low health literacy were associated with higher risk of mortality, decreased self-care, poor healthcare knowledge, and increased morbidities. In order to demonstrate health literacy, precursor cognitive skills must be achieved first including problem-solving, working memory, numeracy skills, processing speed, and literacy skills, to name a few (Serper et al., 2014). Similarly found in the Lee & Son (2018) study, cognitive function in both men and women was found to be the strongest predictor whether or not individuals demonstrated health literacy skills. Without these steppingstone achievements, it is quite difficult for individuals to understand medical terminology, dosage instructions, or understanding how to manage symptoms of their diagnoses.

Conclusion

As described in this chapter, incorporating both health literacy and productive aging strategies is vital for the longevity of the elderly population, and to provide them with the tools for healthy aging. Doing so requires a multidisciplinary approach with the client's healthcare team to achieve overall health and well-being for this population.

CHAPTER THREE – Overview of Current Approaches and Methods

Introduction

Limited productive aging and health literacy strategies amongst the elderly population has been a contributing factor for increased hospitalization, multimorbidity, decreased quality of life, and decreased opportunity to remain aging in place. Frailty, another term to describe the decline of the aging population, can be an alarming factor for increased risk of falls, disability, hospitalization, long-term institutionalization, and decreased quality of life (Obbia et al., 2019). Worldwide, chronic conditions cause 60% of the population death and 43% of disease, both of which are the leading causes for both categories (Richardson et al., 2012). When chronic health conditions are not managed appropriately, individuals' overall health will decline, limitations in activities of daily living (ADL) and instrumental (I)ADLs will onset, and independence and quality of life will decline as chronic conditions manifest (Mirza et al., 2020).

While research exists supporting the importance of productive aging and health literacy strategies, there is limited research regarding interventions to implement these strategies among the elderly population to promote improved quality of life. HEALTH aims to educate OT practitioners on productive aging and health literacy strategies to develop clinical knowledge to educate their aging clients within the primary care setting.

Literature Search

This literature search was used to guide the search for evidenced-based research regarding what interventions have been previously used to address productive aging strategies and health literacy amongst the elderly population in the primary care setting.

Multiple studies have shown the importance of the patient-provider relationship in developing trust, carryover with learned strategies, and shared decision making about the patient's health (AlRuthia et al., 2020; Cramm & Nieboer 2015; Obbia et al. 2019; Mirza et al., 2020; Ngangue et al., 2019; Novak et al., 2013; Vestgens, Cramm, & Nieboer 2019). In addition, correlations were found to the importance of patient-centered care by implementing individualized care based on the patient's medical needs (Cramm & Nieboer 2015; Obbia et al. 2019; Mirza et al., 2020; Ngangue et al., 2019; Novak et al., 2013; Vestgens, Cramm, & Nieboer 2019). Furthermore, Novak et al. (2013) expresses the value of patient's self-motivation to engage in health strategies for improved compliance. The link between the research conducted by both Novak et al. (2013) and Garvey et al. (2015) in relation to self-efficacy and prioritizing autonomy, correlates to the foundation of the Self-Determination Theory (SDT), which is the theoretical backbone of this research. Much research exists on the benefits of incorporating a motivational theory such as the SDT into healthcare practice as it increases individuals' autonomous decision making and satisfies their intrinsic motivation (Fortier et al., 2012). As Fortier et al. (2012) describes, when an individual feels autonomous and intrinsically motivated, they have a greater likelihood of meeting all three basic psychological needs. Utilizing the SDT as the foundation of this evidenced-based research for the program, the focus will be for individuals to feel autonomous in their decision to take the path towards a healthier lifestyle.

Similarities in research conducted by Mirza et al. (2020) and Elliot et al. (2018) found that more preventative measures are needed in the primary care setting, as they found that most primary care practitioners (PCPs) only address acute illness and injury, rather than addressing all concerns by patients.

Many studies researched the effectiveness of incorporating physical activity to promote productive aging strategies, and these researchers identified a positive correlation to patient outcomes when implemented (Berger et al., 2018; Fortier et al., 2012; Mirza et al., 2020; Richardson et al., 2012). According to Richardson et al. (2012), when elderly individuals with chronic health conditions participate in strengthening, aerobic exercise, and stretching, there was found to be a 30% improvement in their upper body and lower body strength. In addition, Berger et al. (2018), Fortier et al. (2012), Mirza et al. (2020), Novak et al. (2013) & Richardson et al. (2012) all discovered improved quality of life amongst participants who had implemented productive aging strategies in their daily routines. According to Richardson et al. (2012), individuals who maintain physical activity with or without chronic health conditions have a decreased risk of developing a disability, whereas less active individuals have a higher risk of disability onset.

According to Neter & Brainin (2019), poor health literacy is associated with negative health outcomes including mismanaged medication usage, missed doctor's appointments, inability to self-manage chronic health conditions, and increased rates of hospitalization. This research is a direct correlation to the research conducted by Kobayashi et al. (2015). Kobayashi et al. (2015) & Neter & Brainin (2019) also determined that poor health literacy increases rates of mortality, limited practice of preventive care, and decreased quality of life. Due to these factors, individuals have decreased ability to follow through with recommendations from healthcare providers. In addition, a strong correlation was found between low socioeconomic status, being less educated, and being elderly with poor health literacy skills (Bo et al., 2014; Kobayashi et al., 2015; Novak et al., 2013; Obbia et al., 2020; Yang et al., 2019). Another contributing factor to poor health literacy was connected to decreased cognitive function (Kobayashi et al., 2015; Serper et al., 2014).

Throughout the literature search, several limitations were found in the previous studies. Examining these limitations will help guide the development of this educational program to integrate better health care practices and to address the constraints found in previous research. Common themes of study limitations included a lack of interdisciplinary approach to addressing patients' healthcare needs (Obbia et al., 2020). In addition, lack of continuity following individualized sessions was a factor to limited carryover in the patients' daily routines (Vestgens, Cramm, & Nieboer 2019). Also, lack of caregiver support was a pressing constraint, especially for patients with physical or cognitive limitations (Quinlan et al., 2020).

These previous study limitations will be prioritized at the forefront of this educational program to improve continuity, increase interdisciplinary approaches within the primary care team, increase caregiver support by including them in the educational sessions, increase OT clinical knowledge, and ultimately to promote increasing patient-provider relationships.

Self-Determination Theory

Through the lens of the Self-Determination Theory (SDT), behaviors are driven by a *perceived locus of causality* (PLOC), otherwise described as the reason for which an individual is engaging in a behavior (Sheldon et al., 2017). According to Sheldon et al. (2017), the autonomous feeling one gets from motivated behaviors is either categorized as external, a lack of autonomy, or internal, feelings of self-determination. A behavioral response is determined by whether or not an individual is motivated by external or internal reasons (Sheldon et al., 2017). A negative behavioral response is depicted as an individual who is not motivated, requiring a reward, and possibly doing so to avoid punishment (Sheldon et al., 2017). A positive behavioral response, the aim of the SDT, describes an individual feeling autonomous, self-determined, and interested in the task (Sheldon et al., 2017).

One of the main principles of the SDT describes when an individual participates in a task just for reasons as to appease others, for fear of punishment, for reward, or for compliance, they will in turn only do so for external motivation (Sheldon et al., 2017). By doing so, they will not exhibit positive behaviors of autonomy or enjoyment. In the SDT, external motivation describes “doing a behavior only to get a reward or avoid punishment after the behavior is over” (Sheldon et al., 2017, p. 1216)

A second main principle of the SDT describes when individuals participate in tasks of enjoyment, they will demonstrate positive behaviors associated with autonomy, self-determination, and internal satisfaction (Sheldon et al., 2017). In addition, when positive behaviors are exhibited, the individual does not feel need for reward due to the internalized motivation (Sheldon et al., 2017). In the SDT, intrinsic motivation refers to “doing a behavior because the doing is itself the reward” (Sheldon et al., 2017, p. 1216).

Lastly, if an individual participates in an enjoyable task, then they will satisfy the three basic psychological needs of autonomy, competence, and relatedness which will reflect positive behaviors (Fortier et al., 2012). When these three psychological needs are met, individuals gain a greater sense of autonomy in their motivation (Fortier et al., 2012).

This theory relates to HEALTH because although a healthcare provider can recommend medications, lifestyle changes, etc., ultimately it is the patient's autonomous decision if they include it in their daily routines. In order for productive aging strategies to be implemented for improved aging in place, individuals must be willing to address those factors individually and with their healthcare team. In addition, the individual must be actively engaged and agreeable to make the lifestyle changes in order for long-lasting results to occur. The author's ultimate goal is to educate individuals on the benefits of implementing productive aging strategies utilizing the theoretical framework of the SDT. By having the foundation of this project promoting autonomy and self-determined decisions, individuals will likely have increased carryover of learned information to implement in their daily routines.

Conclusion

The aim of the author's proposed program, HEALTH, will combine the strengths of the programs researched throughout the evidenced-based literature while also taking into consideration the limitations of what did not work in previous studies. In addition, the foundation of the SDT will be implemented to promote autonomous decision making amongst program participants to promote increased likelihood of carryover for both

OTPs and their clients within the primary care setting.

CHAPTER FOUR – Description of the Proposed Program

Introduction

In this chapter, the author's proposed program will be thoroughly described. In addition, evidence-based research will be explained through the development of the program to advocate for the benefits of this educational program. Expected outcomes will also be discussed to outline projected goals for program participants. To conclude in this chapter, potential challenges will also be explored to view the proposed program in a holistic viewpoint.

Program Description

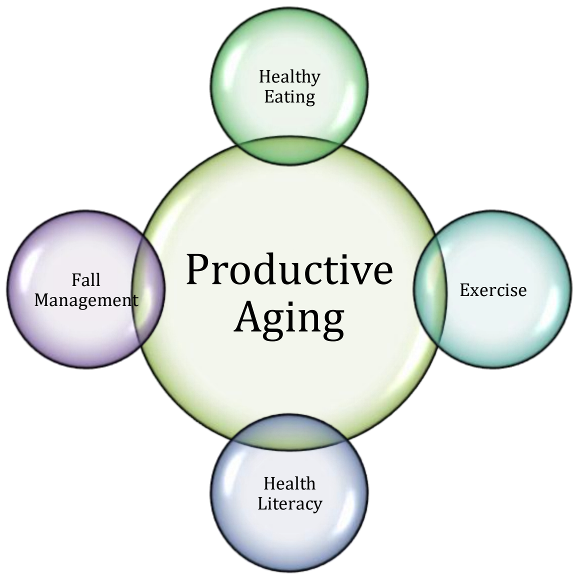
Help Older Adults Live Their Healthiest Life (HEALTH) is a comprehensive continuing education unit (CEU) course to educate occupational therapy practitioners (OTPs) on how to facilitate an educational program in the primary care setting for the elderly population and their caregivers. This educational program will address productive aging strategies and health literacy skills to promote improved health and well-being amongst community-dwelling elderly adults who wish to age in place.

To develop this program, the concepts of the Self-Determination Theory (SDT) were utilized to set the foundation for outcome achievement. The SDT can provide foundational components to facilitate autonomy, self-motivation, and internal satisfaction amongst both the CEU participants and their clients, who will also benefit by this program. The SDT states that behaviors are driven by a *perceived locus of causality*, otherwise described as the reason for which an individual is engaging in a behavior (Sheldon et al., 2017). According to Sheldon et al. (2017), the autonomous feeling one gets from motivated behaviors is either categorized as external, a lack of autonomy, or internal, feelings of self-determination. This theory is linked to HEALTH for two main purposes: the program participants will be motivated by gaining continuing education unit (CEU) credit as well as furthering their practice skills; the elderly participants will be motivated to improve their health and well-being. In order for successful outcomes to be achieved with this CEU course and educational program, both the CEU participants and clients in which the OTPs will serve must be internally motivated in order for carryover to be noticed and for the program to have positive results.

The HEALTH CEU course will be offered to licensed OTPs in any state that is approved by the American Occupational Therapy Association (AOTA) for CEU credit. This course will be delivered virtually via an online website with incorporation of self-directed learning components, pre-and post-test questionnaires, and education on how to address productive aging within the primary care setting. Within this website, there will be various sections incorporating videos, interactive activities, visual aids, and task analysis for facilitating the educational program. There will also be the option for participation in a question and answer session for CEU participants following completion of the course to guide further practice.

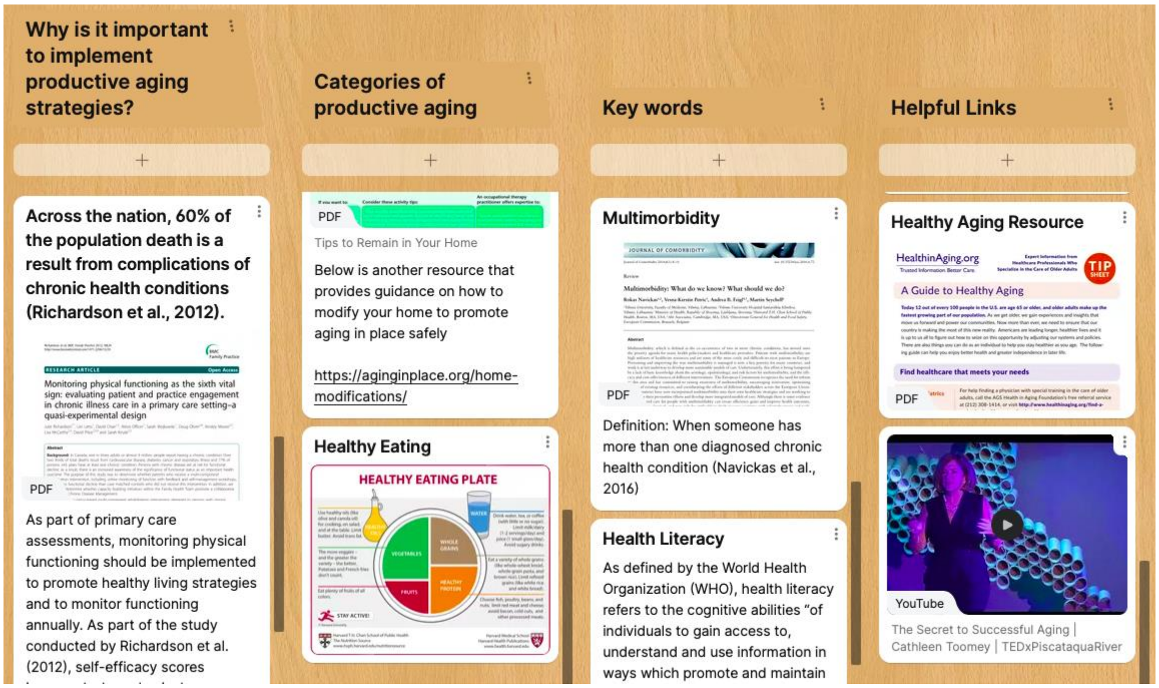
In Figure 4.1 below, a depiction of the four modules included within the HEALTH CEU course. This image describes how all four modules included within the HEALTH program revolve around improved productive aging strategies. In each module, a lesson with educational materials will be provided to participants with knowledge regarding each topic. Participants will be provided with all educational materials for successful completion of the post-test. The OTPs enrolled in the CEU course will be able to access evidence-based resources pertaining to these topics, giving them the clinical knowledge to advance their current practice through use of an embedded link within the course website.

FIGURE 4.1 *Components of the HEALTH CEU Program*



In addition, in Figure 4.2 below an example of educational materials included within the HEALTH CEU program are provided with inclusion of references for each source to promote easy access within the embedded website link. Each participant will be able to take this CEU course at their own pace and educational needs for successful carryover in their practice will be provided. This screenshot is a preview of a link that will be embedded within the CEU program. Annually, this link will be updated with up-to-date evidence-based resources for OTPs to use within their clinical practice. This link will be provided through an independently owned Padlet.com website. All participants in the CEU program will continue to have access to this resource throughout their career to promote further expansion of OT services within the primary healthcare field.

Figure 4.2 *Preview of Evidence-based resources within HEALTH*



Following successful CEU course completion, the OTPs will then have the education and clinical resources necessary to facilitate this educational program in primary care offices or community health settings. OTPs will then be competent to engage in person-to-person communication and education with their clients regarding all aspects of productive aging and health literacy.

The stakeholders that will be invited to participate in the soft launch of HEALTH will include a variety of different individuals to gain the support of multidisciplinary practice settings. The stakeholders will include fellow OTPs, primary care physicians (PCPs), elderly individuals and their caretakers, town officials to spread the word at local senior centers, organizations such as the YMCA and adult day care centers, AOTA, and representatives from insurance companies. The elderly individuals in the community will be the ones who will benefit from this educational program, so their experiences with lack of productive aging strategies and how implementing them into their daily routines will be critical for the successful progression of this program. Since the aim of HEALTH is to develop a CEU course for OTPs to facilitate this educational program into clinical practice, support from AOTA to qualify HEALTH for continuing education credits will also be needed. It will be important to include fellow OTPs to increase the number of facilitators in this profession to educate clients on these topics. PCP involvement will be important to understand how to send client referrals to participate in this educational program. Local senior centers, organizations and adult day programs would be important to be represented to be able to promote the educational program amongst the community-dwelling elderly individuals and to develop a community to carryover the skills learned throughout the educational program sessions. Lastly, elderly individuals and their caretakers will be important to be represented as they will be the individuals receiving the education that the OTPs will be educating them on from their CEU course.

In Table 2 below, the complete logic model for HEALTH is displayed which describes in detail the program inputs, outputs, problem, theoretical foundation, program activities, and both short and long-term goals for participant achievement. The complete logic model is a crosswalk for the development of HEALTH which includes all of the requirements needed to achieve the program outcomes.

Table 2 *Complete Logic Model*

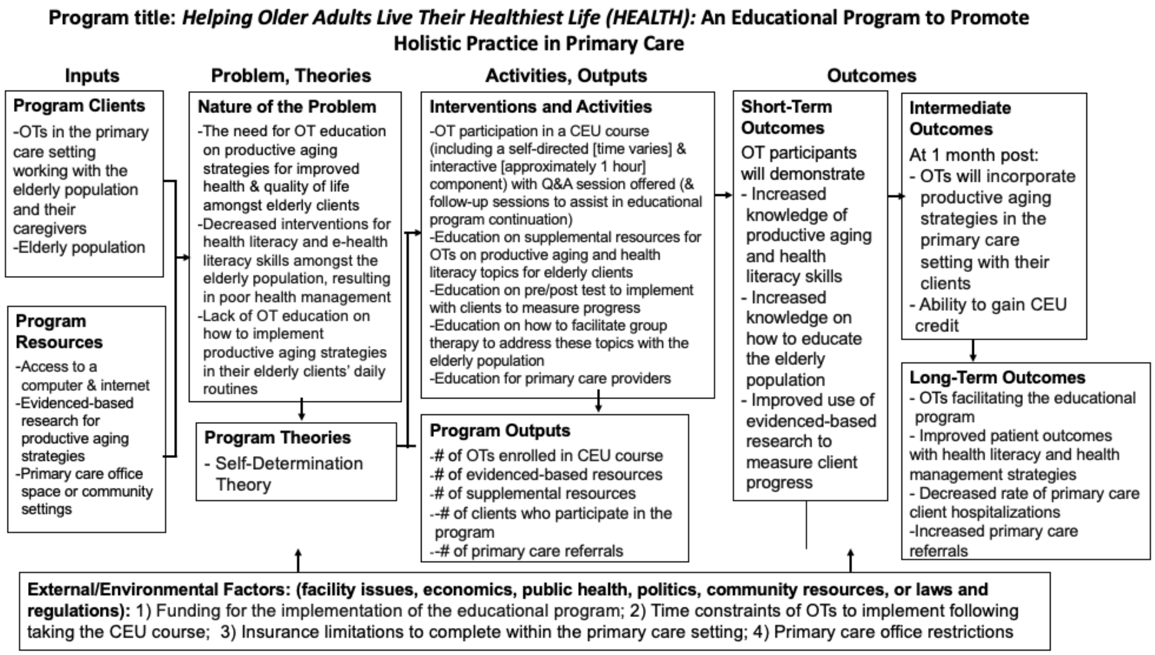


Figure 4.3 *Case Scenario for HEALTH*

Martin lives home alone with local family who visit him weekly. Martin drives, goes to the local Senior Center for BINGO and cards with his friends, and does his own grocery shopping. Martin mostly buys TV dinners and processed foods, rarely engages in exercise, and has noticed decreased endurance recently during his ADLs and IADLs. Martin is Independent with his ADLs. Martin does not know how to access his online medical records via his online portal, and he does not implement any productive aging strategies. Martin's PCP has requested occupational therapy to address productive aging strategies with him as she is concerned about his health and risk for further development of chronic health conditions. Emma, an occupational therapist working in the primary healthcare setting has completed her initial evaluation on Martin, a 70 year-old male, who is being treated by his primary care provider for type 2 diabetes mellitus, COPD, CHF, and high cholesterol. However, Emma does not have access to any resources strictly focused on addressing productive aging strategies. Emma researched CEU courses to further educate herself on this topic, and came across the HEALTH program. After course completion, Emma was successfully able to educate Martin on productive aging strategies to improve his health and well-being, in which Martin reported. During Martin's annual well-being check-up with his PCP, he was noted to have improvements in his lab work and BMI, and his PCP reported his chronic conditions were stable.

In Figure 4.3 above, a case scenario for the HEALTH program is explained to express the positive outcomes for successful program implementation within the primary care setting. To achieve outcomes similar to this example, it is essential for PCPs to refer their patients for an OT consult. OT intervention can facilitate improved health outcomes and improved quality of life.

Conclusions from Evidence & Desired Outcomes

As described in the evidence in Chapters 2 and 3, productive aging strategies, health literacy skills, and autonomy are important factors for facilitating a healthy lifestyle for the aging individual. The HEALTH program prioritizes promoting productive aging strategies, education on health literacy, and discovering elderly individual's internal autonomy to encourage them to make educated and informed decisions regarding their healthcare.

There are many desired outcomes for HEALTH in relation to both the OTPs who enroll, but also their clients in which they provide direct patient treatment to. The desired outcome for the OTPs will be to educate them on how to incorporate productive aging and health literacy in their everyday practice with their clients, regardless of their age within the primary care setting. In addition, the aim will be to provide these practitioners with CEU credit to obtain as part of their licensure requirements. Though there are many CEU programs across the internet, the goal for this program will be to develop an interactive course to attract individuals with varying learning needs to promote increased comprehension of the material provided. To further highlight the benefits of HEALTH, it will also be promoted about gaining access to up-to-date evidence-based research in relation to productive aging, health literacy, and primary care involvement.

The desired outcomes for the clients whom the OTPs work with will be to promote overall health and well-being through the implementation of compensatory strategies for improved health outcomes. In addition, a desired goal will be to provide the clients with the resources within the educational program so they have accessible information for ease of carryover following education in their treatment sessions. In addition, there will also be a goal for increased PCP referrals for their clients to receive an OT consult and intervention. Ultimately, the goal for HEALTH will also be to develop a more proactive healthcare system within the primary care setting.

Limitations

Potential limitations for this proposed study would include the number of OTP participants who initially sign up for the educational program launch. If there is not enough interest in this educational program, it will be difficult to determine trends within the program to gather information on what components need improvement. Another potential barrier could include determining if program participants are educating their clients on the material in the same way that it was presented, which could result in conflicting information being presented. Lastly, a potential barrier could include the amount of PCP referrals received, which could limit the number of primary care patients that could benefit from HEALTH.

Conclusion

Within this chapter, the HEALTH program was thoroughly explained and a portion of the online component was depicted to gain insight into the CEU course. The desired outcomes and the potential limitations will be closely monitored throughout the program evaluation stage to ensure CEU participants and their clients are meeting the desired outcomes, as well as monitoring when or if updating needs to occur to ensure successful implementation within clinical practice.

CHAPTER FIVE – Program Evaluation Research Plan

Introduction

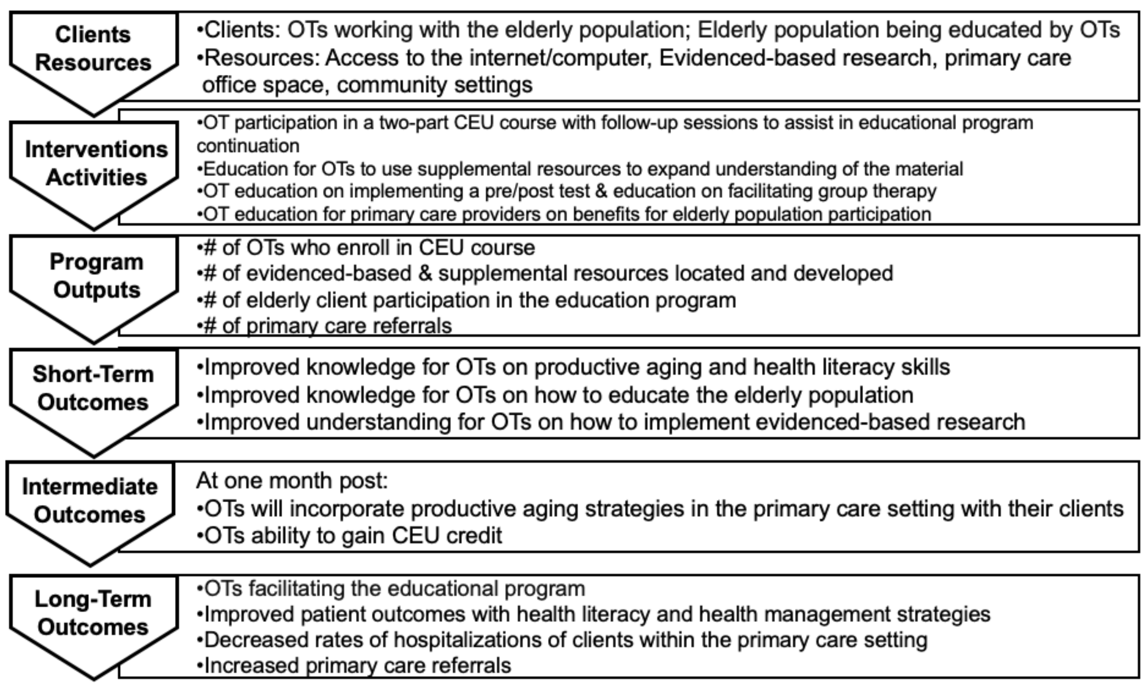
Within this chapter, HEALTH will be thoroughly evaluated including overview of the simplified logic model, summative and formative evaluation components within the program, stakeholder involvement, and outline of the research program. Research questions to guide the HEALTH program are also thoroughly described, which are guided to promote participant goal achievement.

Vision for the Program Evaluation Research

Through the author's program evaluation research, there are both short and long-term goals that will guide the development of this program. The short-term vision of HEALTH will be to identify improved knowledge for OTs on productive aging and health literacy skills and develop strategies to educate the elderly population on these strategies. This will lead to OTPs gaining CEU credits towards their professional development and developing a specialized area of interest. By the short-term goals being achieved, the long-term vision would then lead to improved health amongst their aging clients within the primary care setting by exhibiting productive aging strategies and improved health literacy. In addition, this educational program hopes to be able to aide in the decreased utilization of healthcare by improving clients' overall health. Lastly, another long-term vision would be for this educational program to reach nationwide locations to be able to target a larger percentage of the elderly population.

In Figure 5.1 below, a simplified version of the logic model that will be shared with key stakeholders of this program is displayed. Within this simplified logic model, it will provide a consolidated viewpoint of the program as a whole by describing client resources, intervention activities, program outputs, short-term, intermediate, and long-term outcomes.

Figure 5.1 *Simplified Logic Model for HEALTH*



Engagement of Stakeholders in the Program and Evaluation Research

To facilitate collaborative stakeholder meetings, the goal will be to share the outcomes and findings from the program research and evaluation to support the initiative of HEALTH. The primary purpose of engaging the stakeholders will be to promote buy in of HEALTH's vision and potential for positive change within the primary care system. To promote buy in, factual and positive results will need to be at the forefront of the presentation to show why HEALTH will work, how it will benefit the overall health of the elderly population, and why this program is better than what is currently being practiced in the healthcare industry. In addition, it will be important to show data how not addressing productive aging strategies will negatively impact the elderly population, to further support HEALTH's methods.

Meetings will be held for all stakeholders via a method that works best for them based on location, time zones, or availability. These stakeholders include the researcher, OTPs, PCPs, elderly individuals and their caregivers, community organizations, health insurance representatives and AOTA representatives. Without this multidisciplinary collaboration, the program would risk not achieving maximal potential with improving patient outcomes and furthering OT emerging practice areas. In Table 5.1 below, the layout of roles and responsibilities for all stakeholder groups are thoroughly described for improved program outcomes.

Table 5.1 *Matrix for Organizing Stakeholder Information for HEALTH*

Stakeholder Group	**Type of Involvement**	**Possible Role(s)**	**Specific Interests**
Program Author	P, I, R	-Overseeing and coordinating logistics -Developing the components of the program	Successful implementation of the program
Occupational Therapists who enroll in the CEU course	I, R	-Being educated on how to educate elderly clients on health management strategies -Administering program activities	-Ability to gain CEU credit & OT satisfaction with the course -Career advancements -Educate their elderly clients on strategies to develop better patient outcomes

Primary Care Providers	P, I, R	-Consultation on referral process -Education provided on how to implement productive aging strategies in the elderly clients' plan of care	-How this program will improve their patients' outcomes -Decreased patient utilization of healthcare services
Elderly participants and their caregivers (as needed)	R	-Receiving education on health management and health literacy strategies -Educating healthcare providers on their own habits, daily routines, and occupations of choice	-Improved overall health and well-being -Facilitate decreased risk of new onset of chronic conditions -Improved quality of life
Funding agencies, health insurance representatives, AOTA, community organizations	R	-Consultation on logistics, required protocol, funding, and program development	-Improved OT practice areas and achieving CEU credit (AOTA) -Decreased client utilization of healthcare resources such as hospitals and diagnostic testing (Funding agencies, health insurance reps) -Improved access to community centers for the population and improved program outcomes (community organizations)

Eliciting Stakeholder Involvement and Ensuring that Evaluation Results will be Used

To ensure all stakeholders are involved during this process, it would be beneficial for all stakeholders to be present during each meeting, or at least have the option to attend with the whole group to gain different perspectives and viewpoints from each stakeholder. Each stakeholder will be interested in different information, but all organization stakeholders could benefit from hearing the lived experiences of the elderly population as well as the OTPs perspective on this important health prevention topic in terms of clinical experience. These stakeholders would include the researcher, fellow OTPs, elderly individuals, caregivers, community organizations, health insurance representatives, town officials, PCPs, and other healthcare providers as necessary. It will be impactful for insurance companies and primary care physicians to hear about the potential lack of productive aging strategies amongst their clients. By all parties hearing the clients input on their lived experience, their decision to support HEALTH will likely be enhanced to promote a better quality of life for the elderly population to decrease risk of chronic conditions. It will also be emphasized how promoting increased clinical opportunity for OTP education will further enhance the OT profession.

All meetings would be held in person to set the foundation for group discussion and to allow for all stakeholders to have 1:1 and group discussion to further expand on the implementation of HEALTH. In addition, virtual sessions will be provided if external stakeholders (such as larger organizations or insurance company representatives) are unable to join based on location, and key points made during the in-person meetings will be discussed.

Background information and supporting documentation that will be included prior to, during, and after these meetings will include HEALTH’s logic model, evidence-based research articles supporting the topic of addressing productive aging strategies and how it improves overall health, articles that show the negative effects of poor health management strategies to further support the program, and how using a CEU platform to educate other OTPs on this program can expand this program across many different regions rather than just local areas. In addition, explanation will be provided regarding the program evaluation research, design, and methodology. During these stakeholder meetings, it will be important to remember that all stakeholders have different viewpoints, agendas, and expected outcomes. It will be important for all stakeholders to have an open mind during these conversations as each stakeholder has varying backgrounds of expertise that could further benefit the outcomes of this program. While being open-minded, the author will heavily rely on the findings based on evidence-based research, while promoting HEALTH. Stakeholder input will highly be considered on modification of research questions, design, and evaluation findings to develop a successful program that can benefit all stakeholders with emphasis on OTP education and improved health and well-being for the elderly population. It will be important to get feedback from others as there is more than one option to achieve the same outcomes.

Program Evaluation Research Questions by Stakeholder Group

In Table 5.2 below, both formative and summative research questions are described that are specific to each stakeholder group to ensure optimal program development. These research questions will be implemented throughout the program methodology to ensure the program is targeting what is described. These research questions will aide in ways to both improve the program development and to capture the effectiveness of the program.

Table 5.2 *Stakeholder Program Evaluation Research Questions for HEALTH*

Stakeholder or Stakeholder Group	Types of Program Evaluation Research Questions
The researcher	***Formative:*** • Was the program content and delivery sufficient for the participating OTs to begin educating their elderly clients on productive aging and health literacy strategies? ***Summative:*** • Will the program participants report increased perceived confidence in using the skills they have gained to then educate their clients? • Will the program participants report increased knowledge in their ability to educate their clients on productive aging and health literacy? • Will the program participants report increased knowledge in evidenced-based research?
OTPs enrolled in the CEU course	***Formative:*** • Was the information presented relevant to my area of practice? • Did participating in this CEU course enhance my understanding of productive aging? • Was the information provided to understand how to individualize the educational program for each client based on their client factors? • Was teaching delivered at an optimal pace for my specific learning style? • Was the instruction sufficient for the participants to begin using it with clients following a passing grade on the post-test? • Was the program duration adequate for optimal learning of the course material? • Is there anything that should be changed to improve program content or delivery? • Were there any questions or answers that were not addressed throughout the CEU course participation, Q&A sessions, or follow-up sessions? • What professional and/or personal insights did they gain from taking the CEU course?

	• How the process has been to begin implementing this educational program in their area of practice? ***Summative:*** • Did participants gain needed knowledge and skills consistent with program goals? • Did participants gain perceived confidence in their ability to educate their clients on productive aging strategies? • Did participants gain perceived competence with regard to identifying decreased productive aging utilization with their clients?
Elderly clients and their caregivers participating in the educational program	***Formative:*** • Did you identify areas of productive aging that you can implement in your daily routines? • Did you identify health literacy strategies to improve your understanding of your medical information? • Did you identify areas in your current daily routines where you can incorporate healthier strategies? • Was the information provided in an optimal way based on my learning style? ***Summative:*** • Did the participants of the educational program increase their understanding of the definition of productive aging? • Did the participants of the educational program learn the definition of health literacy? • Did you gain the confidence needed to independently incorporate at least one productive aging strategy in your daily routines?
Primary care providers (or other healthcare professionals as indicated)	***Formative:*** • Was the information presented relevant for my patient population? • Did the information improve my understanding on what resources to provide my patients with who are in need of education on this topic? • Is there anything that should be changed to improve program content or delivery? ***Summative:*** • Did you gain improved understanding of the importance of productive aging and health literacy for improved patient outcomes?

	• Did participants gain perceived confidence in their ability to educate their clients on productive aging strategies? • Did the evidenced-based research presented improve my understanding on the importance of tracking my patients' productive aging strategies? • Did participants gain perceived competence with regard to identifying decreased productive aging utilization with their clients?
Funding agencies, AOTA, health insurance representatives, policymakers, community centers, town officials	***Formative:*** ● Do participants report increased understanding of the distinctive role of occupational therapy in provision of services relevant to the project? ● Are participants confident that they will be able to advocate for the role of occupational therapy as a change agent in areas relevant to the project? ● Are the long-term goals of the project realistic and achievable? ● Will the project increase awareness of developments in the field? ***Summative:*** ● Will the research data demonstrate the importance of the role of OT for providing services relevant to the project? ● In relation to OT in the primary care setting, is the program justified based on study findings?

Research Design

Formative Evaluation

Open-ended questions in the form of a survey will be utilized to gather formative, or qualitative, evaluation components. These open-ended questions will be completed through the Survey Monkey platform. This formative evaluation component will be completed by CEU course participants following successful completion within one month of the program. Q&A and follow-up sessions via Zoom or Google Meet will be conducted in the form of semi-structured interviews. These will be used to gain individualized perspectives on what worked, what didn't work, and how the CEU course could be modified for improved understanding of the information. Data collection from the open-ended questions will extensively be tracked for the initial six months of CEU course launch to implement any consistent improvement recommendations for further course development.

Summative Evaluation

Pre-and post-tests of qualitative data will be utilized to gather summative evaluation components. These pre-and post-tests will be taken by the OTPs prior to engaging in the course modules, and then immediately following course completion. These pre-and post-tests will be used to portray successful understanding of the information learned during the CEU course and show progression in the OTPs knowledge.

The author also plans on tracking the responses from the Survey Monkey on an on-going basis, but likely less frequently once themes in recommendations for improvement begin to decrease. The follow-up Zoom or Google Meet interviews will be conducted through semi-structured interviews to promote group conversation on pre-determined questions as themes are discovered. These follow-up sessions will be scheduled with considering the author's availability and also attempting to accommodate CEU course participants' availability as well.

Methods

In this section, methods for both the formative and summative components of this program will be described in detail. In addition, to obtain IRB approval, a detailed program proposal will be submitted detailing the steps of this program launch and continuation. Confidentiality will also be prioritized to keep participants' identification out of public knowledge. Confidentiality will be ensured by replacing any identifying factors such as their name with use of "code names". This identifying information with the corresponding codes will be secured in a locked area without public access. For the video conferencing aspects of this program for the optional Q&A or Google Meet section, participants' camera access during the sessions will be turned off to ensure identifying qualities are not promoted. Lastly, informed and signed consent will be received for each participant upon enrolling in their course. Each OTP participant will not be able to access the course content without received electronic signatures on the informed consent document prior.

Formative Data Collection

Research Setting

The setting to gather the qualitative measures for HEALTH will be completed through asynchronous means. The CEU course will be developed through an online platform, allowing for remote access for each participant. Each participant will require the use of internet access and use of an electronic device, which is best used with a laptop or desktop computer for optimal performance. Follow-up communication and/or Q&A sessions will be offered to assist with continuation of the program development. These Q&A and follow-up sessions will be offered at set times. There will be an option for the participants to request a different time for follow-up sessions if scheduling conflicts arise and if they have pertinent questions, with the discretion of the author's availability to host the session.

Participants or subjects

Participants of this program will be registered OTPs. These OTPs would ideally already work in the primary care setting. For initial program launch, the CEU course sign-up maximum will be ten individuals who have signed the consent form for the initial launch. Inclusion criteria will be licensed OTPs, already working with the elderly population in the primary care setting, signed consent, and access to electronic devices and the internet. Exclusion criteria will be any profession outside of OT, unsigned consent, no access to the internet, and no experience with the elderly population. Recruitment will be done through the AOTA CEU course website as this course will ideally be approved and developed through AOTA. Characteristics of the participants that may influence study outcomes will include their level of experience and their previous level of evidence-based research on the topic of productive aging.

Qualitative and quantitative information gathering

For the formative measurements for HEALTH, there will be an open-ended survey via the online platform Survey Monkey. This open-ended survey will be completed at the completion of the CEU course, following completion of the post-test (summative portion). This open-ended survey will prompt guiding questions for participants to answer for determining ways in which to improve the process of the CEU course for further course development. Another qualitative approach will be holding follow-up sessions via Zoom or Google Meet to determine the process for implementing this educational program post-CEU completion. These follow-up sessions will be developed considering a semi-structured interview format.

Timing

For the formative aspect of this program, data collection will be occurring following participant CEU course completion and successful passing of the summative component. Each OT participant will complete the course at varying times and pace, depending on each individual's learning routines. Once each individual has completed the course and post-test, data will be analyzed through examining their responses from the Survey Monkey.

Logistics

The open-ended survey will be completed electronically and submitted through Survey Monkey. For the follow-up and Q&A sessions, the semi-structured interview format will be scheduled at specific times that fit into the author's schedule while also taking into consideration the availability of the participants if they choose to sign up. To optimize the credibility of deciphering through the qualitative data, the author will be using an outside group of peers will be utilized to examine themes and commonality in an unbiased setting. This information will then be used to determine areas for program improvement.

Methods for Formative Data Management and Analysis

When using Zoom or Google Meet, I plan to use the voice-to-transcript feature to transcribe the conversations will be used. Text versions for the open-ended surveys will be provided with code names. NVivo is an appropriate software for HEALTH as it supports both qualitative and mixed methods design. NVivo allows users to upload images, videos, open-ended surveys and various data for well-rounded learning. For any open-ended questions that ask for a numerical rating, it will be compiled and analyzed through NVivo.

Summative Data Collection

For the summative portion of this program, a pre-experimental approach will be taken. This intervention will require OTPs who enroll in the CEU course take part in a pre-and post-test, where their final score will be compared to their original score to show progress and carryover of learned material. Participants will be asked to complete the pre-test once successfully enrolling in the CEU course and once signed consent is received. They will need to complete the pre-test prior to having access to the CEU modules. Following completion of the modules, the same test will be provided as a post-test to demonstrate quantitative growth throughout the CEU program. A post-test score of 90% will be required in order to successfully earn CEU credit and to pass the course.

The independent variables of this program include OTPs enrolled in the CEU course, the same pre-and post-test for all individuals, and access to the same resources and course modules. The dependent variables will include OTP knowledge of productive aging strategies, health literacy, and how to educate their clients on these strategies within the primary care setting. The long-term goals for this CEU course will be to enhance OTPs knowledge regarding productive aging strategies, gain OT CEU credit, and to further improve the health and well-being of future clients the OTPs serve.

Research Setting

The setting to gather the quantitative measures for this study will be completed through asynchronous means. The pre-and post-test will be provided through the CEU course, allowing for remote access for each participant. Each participant will require the use of internet access and use of an electronic device, which is best used with a laptop or desktop computer for optimal performance.

Measurement

To measure the dependent variables in this program, the author will utilize a Likert-style survey that will be developed to determine the knowledge gained by OTPs in regards to productive aging strategies. This Likert-style survey will gain an understanding if each participant has little experience, average, or above-average experience with this material following course completion. This will also provide the author with an understanding of which productive aging topics participants feel most comfortable with, in addition to the topics the participants have little experience with. The general content of the survey that will be administered to study participants will include determining their overall comfort level with educating their clients on productive aging and health literacy topics, their understanding of what productive aging is, awareness of locating resources for their clients, and how to develop individualized plans of care for their clients regarding these topics. This qualitative data will further enhance the data collection and process for determining themes across all participants. These questions will be formatted in a Likert-scale format with five choice options, with responses ranging from “Strongly Agree”, “Agree”, “Neutral”, “Disagree”, and “Strongly Disagree”. This survey will be in addition to the semi-structured interviews that will also be completed following successful completion of the post-test. This survey will be developed through Survey Monkey, as all aspects of this study will utilize this platform.

In Table 5.3 below, six sample questions are provided that will be included in this

Likert-scale survey. These questions were chosen to gain a deeper perspective of the participants' viewpoints following course completion. The responses will gain constructive data that can be easily compared to all participants to determine themes and to determine if the population as a whole gained the most out of their experience with the CEU course. Following completion of this survey, the follow-up sessions with the semi-structured interview questions will be initiated.

Table 5.3 *Sample Likert-scale Questions for Dependent Variables*

Sample Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
"I feel confident in my ability to educate my elderly clients on productive aging strategies"					
"I feel confident in my ability to educate my elderly clients on health literacy strategies"					
"I understand the definition of productive aging and how to explain it in layman's terms for my clients"					
"I am aware of where I can locate productive aging resources to provide to my clients"					
"I understand how to incorporate individualized intervention to my clients with productive aging strategies based on their unique client factors"					
"I understand how to communicate with an interdisciplinary team to identify if productive aging strategies may be needed for clients to improve their overall health"					

Timing

Data collection will be completed prior to program initiation and immediately after course completion. The same pre/post-test will be utilized with each participant to be able to confirm if and how much change occurred and if it was maintained throughout course progression. Data will also be tracked for the number of times it will take each participant to successfully pass the post-test to determine if the information is easily understood.

Logistics

Data collection will be completed through Survey Monkey in terms of a quiz form. It will be more accessible and convenient for all participants to use the same platform for all aspects of both formative and summative components. Correct and incorrect responses will be loaded into Survey Monkey for ease of grading each pre-and post-test. Once the tests are completed in Survey Monkey, an outside group of peers will analyze the data to determine trends. Code names will be used for each test completed through Survey Monkey to optimize any biases. To optimize validity, pre-and post-test questions will relate exactly to CEU course material without need for participants to need to research elsewhere to locate the information.

Methods for Summative Data Management and Analysis

Microsoft Excel would be an appropriate software to analyze data as it allows users to input quantitative measures and develop flow charts for comparison and depicting progression. All pre-and post-tests and Likert-scale questions that ask for a numerical rating will be compiled and analyzed through Microsoft Excel. This data will be protected through password protection and in a locked area. All participants will have a code name, and any identifying factors will not be for public knowledge. Data will be tracked through spreadsheets. Correlational statistics will be used for this type of data collection to visualize the degree of change between pre-and post-tests to show participant improvement through course completion.

Disseminating the Findings of Program Evaluation Research

To disseminate the findings of the program evaluation research, a PowerPoint presentation on the key components of this program to highlight the important of the CEU course for improved OT knowledge and client outcomes will be utilized. This presentation will also prioritize showcasing the evidence-based research demonstrating the importance of education on productive aging strategies and health literacy skills as a health promotion measure. This presentation will also explain the goal of improved client outcomes to facilitate decreased use of emergency healthcare related services while improving clients' quality of life and overall health.

Conclusion

Both summative and formative components of the HEALTH program will be prioritized to gather a holistic evaluation to determine if participants are achieving in both categories. The pre-and post-test will be utilized to ensure successful passing score of the CEU course, which will certify the OTPs will be able to safely implement these strategies within their clinical practice. Feedback provided with use of Likert-scale questions will help to guide further development of the HEALTH program based on the trends of the responses. Overall, HEALTH has been evaluated through the beginning stages thoroughly, however, this program will have continued program evaluation through each round of participants to ensure program outcomes are still being achieved.

CHAPTER SIX – Dissemination Plan

Summary

The proposed program, Help Older Adults Live Their Healthiest Life (HEALTH), is an evidence-based educational program designed for occupational therapy practitioners (OTPs) to address productive aging and health literacy topics amongst community-dwelling elderly individuals. HEALTH will be implemented within the primary care office with the focus to educate the clientele on strategies to decrease risk of chronic disease onset or multimorbidity. Occupational therapy (OT) intervention regarding these topics can make an impact within the primary health care setting as OTPs prioritize health management, wellness, and prevention within their daily practice; this focus can decrease negative health impacts amongst the elderly population (Halle et al., 2018).

Dissemination Goals

The long-term goal for disseminating the key message from HEALTH would be for OTPs being considered as a primary provider within the primary health care field. As thoroughly described in the proposed program analysis, OT intervention can be a valuable addition to the primary care practice for improved patient outcomes. OT intervention in primary care is a growing need, but within five years the author's goal will be to ensure OTPs have an immediate role in this setting with a high referral rate by primary care practitioners (PCPs). In short-term, the goal of HEALTH will be to educate OTPs on effective strategies to improve their current OT practice with their clients and to enhance their clinical knowledge on these important healthcare topics. The OT profession is constantly growing, and providing evidence-based research to any OT would be beneficial to expand on their clinical practice.

Target Audiences

The primary audience to reach with the impact of HEALTH would be licensed and registered OTPs practicing in the Commonwealth of Massachusetts. These OTPs will be specifically focused on those who work within the primary care setting or who work with community-dwelling aging adults as identified by the licensing board database. In order for OTPs to be considered as a primary practitioner within the primary care setting, a large percentage of the OT population would need to be proficient in addressing primary healthcare concerns, such as productive aging and health literacy. Having a record of the percentage of OTPs who engaged in self-directed learning through HEALTH would demonstrate reason for the inclusion of OT involvement in this setting.

The secondary audience targeted with HEALTH would be PCPs. By targeting evidence-based research towards primary care, it would demonstrate the benefits of providing their own patients with a referral for OT services to address any health care concerns and to assist them in making lifestyle changes.

Key Messages

For Primary Target Audience

Within the OT scope of practice, practitioners address health management topics, health prevention, and health wellness; all of which are important focuses in the primary care setting (Halle et al., 2018). OTPs can add value in the primary care setting by implementing programs that promote early intervention, maintaining independence, managing chronic health conditions, decreasing risk of long-term institutionalization, and assisting individuals as they continue along the aging process (Halle et al., 2018). According to Berger et al. (2018), approximately 90% of the older adult population is living with a chronic health condition, and nearly 75% of those who have more than one chronic health condition. Research suggests these percentages do not correlate with the actual percentage of the population who participate in health promotion strategies, resulting in decreased quality of life and overall health (Berger et al., 2018).

For Secondary Target Audience

Individuals who have a lack of resources or lack of follow-through related to community programs, healthy eating habits, lack of exercise, to name a few, can have a higher rate of chronic illness and increased health-related problems (Berger et al. 2018). Providing individuals with resources to promote healthy aging and addressing health promotion and maintenance can play an important factor in a person's longevity and quality of life (Berger et al. 2018). Research also indicates that implementing productive aging strategies is associated with increased self-reported health, lower mental health symptoms, and decreased mortality rates among the elderly population (Yang et al., 2019).

Sources and Messengers

To target HEALTH's primary audience, collaboration with American Occupational Therapy Association (AOTA) would be a critical component to promote the program's purpose and vision. Since a goal of HEALTH would be to provide participants with continuing education units (CEUs), AOTA's platform would be an essential organization to help advertise the benefits of this program. In addition, to target

HEALTH's secondary audience, partnering with the National Council on Aging (NCOA) could provide opportunities to share the mission, values, and outcomes of this program to promote the incorporation within the primary care practice. The mission of NCOA is to provide financial security but also provide resources to help older adults live healthy while maintaining their well-being and independence (The National Council on Aging, 2023).

Dissemination Activities

To reach each targeted audience, various activities will need to be pursued to market HEALTH. Some examples of these activities are as follows:

Person-to-person activities

For initial program launch, marketing strategies for the first year will be beneficial to gain interest amongst the OT community. The goal will be to promote HEALTH at the upcoming AOTA conference by renting a booth in a high-traffic location of the conference. This will be a primary dissemination activity to promote HEALTH to OTPs statewide. With this activity, pamphlets will be provided to conference attendees to describe course information and with a QR code to easily sign-up for the educational program.

In addition, the aim will be to have representation for HEALTH at virtual and local workshops, guest lecturing at graduate OT programs, and various conferences to help increase access and awareness of HEALTH.

Electronic media

Built within the HEALTH program, use of an interactive website through

Wix.com will be utilized to facilitate participant engagement while incorporating various learning styles. In addition, when individuals attend the booth at the AOTA conference, there will be a sign-in sheet for conference participants to enroll in email updates regarding HEALTH program developments. These individuals will be signed-up for updates via email regarding any program announcements, updated course content annually, and general information as pertinent.

Budget

In Table 6, a breakdown cost of dissemination activities is described for planning purposes. Of note, these are estimated costs at this time, and the annual budget can be more or less than originally anticipated.

Table 6 *Estimated Budget*

Dissemination Category	Activity	Estimated Cost: Year One	Estimated Cost: Year Two
Person to person	AOTA Conference	Booth rental: $1,250 ($25 per square foot) Conference Registration: $475 Hotel/Airfare: $2,000 Printing costs for pamphlets: $200	It is projected that representation at the AOTA Conference will occur biannually.
	Local Annual Workshops & Conferences	Booth rentals: $2,000 Travel Expenses: $2,000	Booth rentals: $2,000 Travel Expenses: $2,000
	Guest Lecturing	Travel Expenses: $500	Travel Expenses: $500
Electronic Media	Wix.com personalized website	Free	Free
	Email Notifications	Free	Free
Total Expenses		**$8,425**	**$4,500**

Evaluation

To evaluate the success of the dissemination efforts, use of a pre-and post-test will be used to measure the clinical knowledge gained for each participant from enrolling in HEALTH. The pre-test will be administered prior to viewing course content within the modules to determine their baseline knowledge regarding topics that will be reviewed during the course. Once the participants have engaged in self-directed learning throughout the four modules, access will be granted to the post-test, which will provide the same questions as the pre-test for accurate measurement of knowledge gained. In addition, data will be collected to determine how many OTPs enrolled in the course successfully achieved CEU credit. Lastly, the number of referrals by PCPs to the participants will also be measured to determine the successful implementation of course knowledge within their clinical practice.

Conclusion

Throughout the dissemination process, the success of HEALTH's clinical outcomes will be evident by participant knowledge gained through the course content, as well as the positive impact the program will have on the aging population who get referred to OTPs in the primary care practice. With HEALTH being utilized in the primary care setting, aging individuals will have access to proactive healthcare, resources for improved health and well-being, and increased monitoring of chronic health conditions. OTPs have a vital role in the healthy aging process amongst elderly individuals, and HEALTH's role will demonstrate improved health outcomes of community-dwelling aging individuals.

CHAPTER SEVEN – Funding Plan

Proposed Program Summary

The proposed program, Help Older Adults Live Their Healthiest Life (HEALTH), is an evidence-based educational program for occupational therapy practitioners (OTPs) for addressing productive aging and health literacy topics amongst community-dwelling elderly individuals. Since this program is a proactive treatment rather than reactive, the goal will be to implement HEALTH within the primary care office with the focus to educate these individuals on strategies to decrease risk of chronic disease onset or multimorbidity. Occupational therapy (OT) intervention regarding these topics can make an impact within the primary health care setting as practitioners prioritize health management, wellness, and prevention within their daily practice; this focus can aide in decreasing negative health impacts amongst the elderly population (Halle et al., 2018).

HEALTH is a self-directed educational continuing education unit (CEU) program conducted via an online platform with a pre-and post-test component to ensure clinical competency is achieved. OTPs will complete a pre-test prior to gaining access to the course content. Individuals will then engage in self-directed learning strategies throughout the four modules within the course with evidence-based research provided in various learning experiences. Following completion of the course content review, the practitioners will then be required to successfully pass a post-test to be eligible to receive CEU credit and a certification of completion. OTPs will then be able to incorporate the resources and clinical knowledge gained throughout this educational program with their elderly clients within the primary care setting. This proposed program will adhere to the

American Occupational Therapy Association (AOTA) OT Practice Standards and ethical guidelines.

In order to successfully implement this program into clinical practice, volunteers would be necessary for program launch and development. However, funding and financial resources, as described next, would facilitate successful implementation within clinical practice across a wide span of the United States amongst OTPs.

Available Local Resources

To successfully implement the HEALTH program, various local resources will be required to ensure cost-effective program development. To develop the CEU course platform, use of a free website through Wix.com will be utilized. Wix allows user-friendly access, in addition to individualized personalization and customization directed towards the program and the customers. For marketing strategies and website design, a goal will be to contact local university faculty members to determine if students enrolled in marketing courses can volunteer their time with achieving course credit. In addition, providing students opportunities to volunteer their time for proof-reading, trialing the CEU course, and ensuring website links are accurate will be beneficial to determine accessibility for all users. Collaboration with local PCP offices will also be at the forefront of marketing strategies, with the goal of providing flyers and informational packets for their practitioners regarding the role of referring their patients to occupational therapists to address productive aging.

Needed Resources: Budget

In Table 7.1 below, detailed information is described for budgeted costs associated with implementing HEALTH for year one and year two. Since HEALTH will be a pilot program with its initial launch, additional costs will be needed within the first two years to ensure the program achieves all projected outcomes. Program costs are expected to decrease in consecutive years, as the same program software will be utilized and the CEU course will be utilized across all years, with only requiring the addition of updated evidence-based research into the modules.

Table 7.1 *Dissemination Plan*

Category	Justification	Budget: Year One	Budget: Year Two*
Personnel (40% of OT annual salary)	Once an occupational therapist successfully completes the CEU course, the goal will be for the practitioners to continue to have access to the resources provided within the course content and website. To provide these resources, it is expected that an occupational therapist will initially allocate approximately 40% of their caseload for education on the course material within this program for their clients. In Massachusetts, the mean annual OT salary is $89,470 (U.S. Bureau of Labor Statistics, 2022). For this program, it is expected that $35,788 will be required for one occupational therapist personnel.	$35, 788	$35,788
Supplies & Resources	This would include printing costs for flyers to promote the HEALTH program at local universities, primary care offices, senior centers, etc.	$300	$100
Program Security Software	Cloudflare Web Application Firewall: Pro version costs $20 per month. Website security protection will be an important investment each year to ensure website content will be safe from internet hackers or viruses.	Annually: $240	Annually: $240
Course Revision*	Course revision and review will be required annually following the first year of development to ensure accurate and up-to-date evidenced based practice is provided to course participants. Course content research		$400

	will be conducted by the program developer at a cost of $40 per hour. At this time, approximately 10 hours of course review may be required annually beginning in year two.		
Total	**Disclaimer:** These are all estimated costs at this time. Additional program costs may be required each year to ensure successful outcomes with this program. If the budget was not reached in a specific year, the remaining money will be rolled into the consecutive year for further program development.	$36,328	$36,528

Potential Funding Sources

To achieve the outcomes for HEALTH, funding from local and national grant organizations will be necessary to provide fundamental resources and education within this program. In Table 7.2, various grant opportunities will be described, including the justification for organizational support.

Table 7.2 *Potential Grant Opportunities*

Name of Grant/Funding Source	Description	Award Amount
Massachusetts Healthy Aging Fund	The vision of this organization is to support programs that promote older adults to maintain active and safe lifestyles, and to maintain their independency within the community (Massachusetts Healthy Aging Fund, 2022). Their goal is to promote improved quality of life and improved overall health outcomes amongst the elderly population.	$20,000
The Harry and Jeanette Weinberg Foundation: Aging in Community	This foundation supports programs that focus on providing older adults resources to maintain their independency, quality of life, and to help them to age in place (Health, 2023).	Maximum over two years: $50,000

AARP Aging in Place	The focus of this organization is to provide elderly adults with the necessary tools to help them to age in place independently (Aging in Place).	Up to $10,000
Crowdsourcing	Crowdsourcing will be explored as potential funding options to determine if individuals, small businesses, or free-lance companies will donate their time and resources to assist with program development and continuation.	Variable

Conclusion

HEALTH is a necessary program to achieve optimal outcomes for elderly individuals. International health care models specific to the primary care setting found that when OTPs are involved in patient-centered care, patients demonstrate improved function, quality of life, decreased adverse health conditions, and reports of improved life satisfaction (Halle et al., 2018). In addition to the improved health effects of patients, HEALTH will benefit OTPs enrolled in the program as studies report that OTs working within the primary care setting is a growing population (Halle et al., 2018). HEALTH is an impactful program that will improve the lives of many elderly individuals in the community. HEALTH is better and more effective than other CEU programs currently advertised due to the interactive, evidence-based, and specifically to the primary care setting directed towards OTP involvement and proactive intervention.

To ensure successful program outcomes for HEALTH for both OTPs and their clients, necessary funding from local and national organizations will be required to ensure program longevity and to reach a nationwide population. To decrease out of pocket costs for the development and continuation of the program, an emphasis will be on locating free or pro-bono resources, volunteers, and researching cost-effective measures. Incorporating more low-cost options will allow for grant funds to be directly put into course content and further expansion of the program in future years. Use of these funding opportunities would ensure successful program outcomes by having access to all evidence-based research platforms, effective marketing strategies, and useful resources to educate as many OTPs nationwide. Funding for HEALTH will allow for improved program outcomes, but will also promote improved health and well-being of elderly individuals within the community.

CHAPTER EIGHT – Conclusion

Throughout the research, it was clear that a gap in the existing healthcare model was present in regards to reactive versus proactive treatment in the primary care setting (Oeseburg et al., 2013). HEALTH was designed with promoting proactive healthcare management in mind to create an effective productive aging program within the primary care setting to provide strategies to live a meaningful and healthy life. For the success of this program to be achieved, educating occupational therapy practitioners (OTPs) on productive aging and health literacy topics is vital. There is limited research regarding existing programming regarding promoting productive aging strategies within the primary healthcare industry, opening an opportunity for the development of HEALTH.

At the forefront of HEALTH, completion of the continuing education unit (CEU) educational program will provide OTPs with the clinical knowledge, tools, and resources to effectively educate their aging clients in a proactive manner within the primary care setting. With a successful passing score of 90% on the post-test, OTPs will gain CEU credits for their state licensure, but will also gain a plethora of resources as part of the HEALTH educational program. HEALTH is designed to provide evidence-based research and accessible resources to OTPs, with the primary focus of implementing these strategies and resources into their daily clinical practice. OTP involvement in the primary care setting will bridge the gap between multimorbidities amongst patients to a healthier community.

As with any successful program, a concrete theoretical framework is needed to guide the components from beginning to implementation. Utilizing the main principles of the Self-Determination Theory (SDT) was critical for the development of this program to promote autonomous decision making amongst OTPs and their clients, promote self-determination, and prioritize internal satisfaction. Positive outcomes do not reflect with being persuaded to engage in a task, rather, these outcomes are achieved when individuals feel a sense of autonomy and self-satisfaction.

With HEALTH being implemented across primary care practices, long-term outcomes would include improved patient outcomes, increased quality of life amongst community-dwelling aging adults, increased referrals by primary care providers (PCPs), and improved clinical competency on productive aging topics for OTPs. Throughout the literature review, many correlations were discovered regarding improved patient outcomes when productive aging strategies were implemented in their daily routines ((Berger et al., 2018; Fortier et al., 2012; Mirza et al., 2020; Novak et al., 2013; Richardson et al., 2012).

HEALTH is an innovative program that aims to improve the overall health and well-being of all elderly clients. With a larger percentage of the aging population prioritizing productive aging and healthy living, another expected outcome would be to minimize onset of multiple chronic health conditions, otherwise known as multimorbidities. HEALTH will also positively contribute to the existing healthcare system by facilitating decreased healthcare utilization, resulting in decreased healthcare cost and decreased burnout amongst healthcare providers. HEALTH will also promote the need for OTP involvement within the primary healthcare system. With increased PCP referrals for their patients, not only will primary care clients have better health outcomes, but there will be a focus on proactive treatment and multidisciplinary involvement. OT practitioners prioritize preventive healthcare in their daily practice; HEALTH will further provide these clinicians with readily available evidence-based resources and increased knowledge to implement into their clinical practice.

APPENDIX A – Logic Model

Program title: ***Helping Older Adults Live Their Healthiest Life (HEALTH):*** **An Educational Program to Promote Holistic Practice in Primary Care**

Inputs

Program Clients
-OTs in the primary care setting working with the elderly population and their caregivers
-Elderly population

Program Resources
-Access to a computer & internet
-Evidenced-based research for productive aging strategies
-Primary care office space or community settings

Problem, Theories

Nature of the Problem
-The need for OT education on productive aging strategies for improved health & quality of life amongst elderly clients
-Decreased interventions for health literacy and e-health literacy skills amongst the elderly population, resulting in poor health management
-Lack of OT education on how to implement productive aging strategies in their elderly clients' daily routines

Program Theories
- Self-Determination Theory

Activities, Outputs

Interventions and Activities
-OT participation in a CEU course (including a self-directed [time varies] & interactive [approximately 1 hour] component) with Q&A session offered (& follow-up sessions to assist in educational program continuation)
-Education on supplemental resources for OTs on productive aging and health literacy topics for elderly clients
-Education on pre/post test to implement with clients to measure progress
-Education on how to facilitate group therapy to address these topics with the elderly population
-Education for primary care providers

Program Outputs
-# of OTs enrolled in CEU course
-# of evidenced-based resources
-# of supplemental resources
--# of clients who participate in the program
--# of primary care referrals

Outcomes

Short-Term Outcomes
OT participants will demonstrate
- Increased knowledge of productive aging and health literacy skills
- Increased knowledge on how to educate the elderly population
- Improved use of evidenced-based research to measure client progress

Intermediate Outcomes
At 1 month post:
- OTs will incorporate productive aging strategies in the primary care setting with their clients
- Ability to gain CEU credit

Long-Term Outcomes
- OTs facilitating the educational program
- Improved patient outcomes with health literacy and health management strategies
- Decreased rate of primary care client hospitalizations
-Increased primary care referrals

External/Environmental Factors: (facility issues, economics, public health, politics, community resources, or laws and regulations): 1) Funding for the implementation of the educational program; 2) Time constraints of OTs to implement following taking the CEU course; 3) Insurance limitations to complete within the primary care setting; 4) Primary care office restrictions

APPENDIX B – Executive Summary

Help Older Adults Live Their Healthiest Life (HEALTH): An Educational Program to Promote Holistic Practice in Primary Care

Introduction

By the year 2030, nearly 20% of the US population will be at retirement age, with the majority of this population managing at least one chronic condition including diabetes, heart disease, or arthritis (Mirza et al., 2020). Worldwide, chronic conditions cause 60% of the population death and 43% of disease, both of which are the leading causes for both categories (Richardson et al., 2012). To combat the high prevalence of chronic conditions, implementing productive aging strategies within the primary healthcare system has potential to improve the overall health and well-being of aging adults within the community.

A current gap within the primary care industry is rather than preventing and identifying complex or chronic medical conditions, only acute medical problems are addressed (Mirza et al., 2020). As Oeseburg et al. (2013) examined in the research, for aging individuals to be able to self-manage their medical conditions, primary healthcare must transition their treatment approach into a proactive mindset. Help Older Adults Live Their Healthiest Life (HEALTH) was designed to address this current gap in healthcare with the goal of improving the quality of life for aging adults.

Project Overview

While research exists supporting the importance of productive aging and health literacy strategies, there is limited research regarding interventions to implement these strategies amongst the older population to promote improved quality of life. HEALTH aims to educate occupational therapy practitioners (OTPs) within the primary care setting on productive aging and health literacy strategies to enhance quality of life and limit barriers amongst aging adults in the community. To develop this program, an examination of research was conducted to determine current strategies for productive aging and health literacy in primary care settings.

Foundations of the Self-Determination Theory (SDT) were highly considered when developing the components of HEALTH due to its main principles. The first principle describes when an individual participates in a task just for reasons as to appease others, for fear of punishment, for reward, or for compliance, they will in turn only do so for external motivation (Sheldon et al., 2017). The second principle of the SDT describes when individuals participate in tasks of enjoyment, they will demonstrate positive behaviors associated with autonomy, self-determination, and internal satisfaction (Sheldon et al., 2017). Lastly, if an individual participates in an enjoyable task, then they will satisfy the three basic psychological needs of autonomy, competence, and relatedness which will reflect positive behaviors (Fortier et al., 2012). To achieve the mission of HEALTH, autonomous decision making is critical for both the OTP and their clients. OTPs will need to make the conscious decision to implement these strategies into practice; clients will need to demonstrate carryover in their daily routines to implement lifestyle changes.

Key Findings in Research

Many studies researched the effectiveness of incorporating physical activity to promote productive aging strategies, and these researchers identified a positive correlation to patient outcomes when implemented (Berger et al., 2018; Fortier et al., 2012; Mirza et al., 2020; Richardson et al., 2012). In addition**,** many studies discovered improved quality of life amongst participants who had implemented productive aging strategies in their daily routines (Berger et al., 2018; Fortier et al., 2012; Mirza et al., 2020; Novak et al., 2013; Richardson et al., 2012). Kobayashi et al. (2015) and Neter & Brainin (2019) also determined that poor health literacy increases rates of mortality, limited practice of preventive care, and decreased quality of life. A strong correlation was found between low socioeconomic status, less education, being elderly, and cognition (Kobayashi et al., 2015; Serper et al., 2014) with having poor health literacy skills (Bo et al., 2014; Kobayashi et al., 2015; Novak et al., 2013; Obbia et al., 2020; Yang et al., 2019).

Recommendations

Through engagement in the HEALTH program, OTPs will engage in a self-directed online continuing education unit (CEU) program aimed at providing resources and education regarding productive aging and health literacy topics. Competency of this material will be determined through use of an online pre-and post-test format. Requirements to obtain CEU credit and to implement strategies into their clinical practice will be for participants to successfully pass the post-test with a score of 90% or higher. The pre-post-test will consist of 20 multiple choice questions. Once the OTP participants successfully pass the standardized post-test, it will be expected they implement these strategies into their clinical practice within the primary care setting. Doing so will promote increased patient referrals by primary care providers (PCPs). In addition, emphasis will be highlighted on the importance of increasing education for OTPs to advocate for OT intervention within the primary care setting.

To implement HEALTH within the primary care setting within the first year, the estimated annual expenditure is $36,328. To achieve successful program outcomes for HEALTH, funding from local and national grant organizations will be necessary. The first-year cost for program implementation would include expenses for a portion of an OTs annual salary, supplies and resources and online computer software. The monetary amounts received through grants or pro bono resources would be utilized to further expand and achieve all projected outcomes for improved client and OT practitioner success.

General Conclusions

In summary, the long-term outcomes of HEALTH are to promote increased referrals by primary care providers to request for OT services for their patients within the primary care setting. The mission of the HEALTH program emphasizes use of autonomous decision making as outlined in the SDT framework for both OTPs and their aging clients. This proposed program is a vital component of the ever-changing healthcare field, which can contribute to decreased healthcare utilization, improved patient outcomes, and involvement of a multidisciplinary approach to patient care. HEALTH meets the current gap within the primary care setting involving proactive patient care. Supporting HEALTH would not only improve the primary healthcare system, but it will primarily improve the quality of life and overall health and well-being of aging individuals nationwide.

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APPENDIX C – Fact Sheet

BOSTON UNIVERSITY

Help Older Adults Live Their Healthiest Life (HEALTH): An Educational Program to Promote Holistic Practice in Primary Care

Erika Lamagdeleine, OT, MOT, OTR

Current Gap in Healthcare:

- Primary care providers address acute illness rather than proactive treatment (Mirza et al., 2020)
- Self-managing chronic conditions requires a proactive treatment approach within the primary care setting (Oeseburg et al., 2013)

Description of HEALTH:

- Evidence-based, continuing education unit (CEU) program aimed at educating occupational therapy (OT) practitioners within the primary care setting. This program is accessible via an independently owned website
- Education on health literacy and productive aging topics for OT practitioners to promote improved quality of life amongst community-dwelling aging adults that they serve
- Pre- and post-test format with 20 multiple choice questions (10 questions of productive aging and 10 questions of health literacy)
- Collaboration with American Occupational Therapy Association (AOTA) for participants to gain CEU credit for successful course completion
- **Goals of HEALTH:**
    - Long-term goal is to increase the number of primary care referrals for OT early intervention
    - Improve OT practitioner competency in productive aging and health literacy topics
    - Promote a multidisciplinary approach to patient care within the primary care setting
    - Improve aging adults' quality of life and decrease risk of multimorbidity onset
- Expected cost for the first year of program launch: $36, 328
    - Cost will include a portion of an OTs annual salary, supplies and resources, and computer software for successful program implementation
    - Goal will be to fund HEALTH through local and federal grants that support aging adults

Self-Determination Theory (SDT) Framework:

- Emphasis on autonomous decision making, self-determination, and internal satisfaction (Sheldon et al., 2017)
- Satisfaction of three basic psychological needs: autonomy, competence, and relatedness (Fortier et al., 2012)

- To have success with the HEALTH program, both OT practitioners and clients will need to demonstrate autonomous decision making

Four Modules of HEALTH

- **Healthy Eating:** A lack of access to healthy foods can increase risk of malnutrition, disability, loss of independence, and quality of life among the elderly (Juckett & Robinson, 2019)
- **Benefits of Exercise:** Participation in strengthening, aerobic exercise, and stretching was found to increase upper and lower body strength among individuals with chronic health conditions by 30% (Richardson et al., 2012)
- **Health Literacy:** Studies show that individuals with poor health literacy skills have increased rates of illness, poor health status, poor health outcomes, and higher usage of healthcare (Weiss & Fain, 2019)
- **Fall Management:** Frailty can lead to increased fall risk, hospitalization or institutionalization, and decreased quality of life (Obbia et al., 2019)

Figure 1: ***Four Modules of HEALTH***

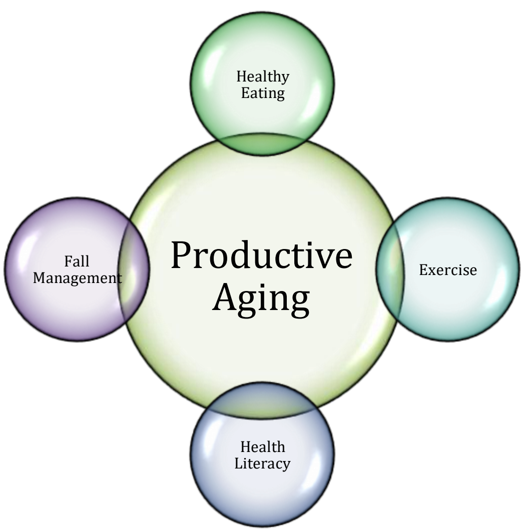

Figure 1 illustrates the four modules within the HEALTH CEU course, which emphasizes productive aging strategies. This figure explains how the combination of healthy eating, exercise, health literacy, and fall management strategies all correlate to living a healthier life. Within the CEU course, each of these four topics will be reviewed. The OT practitioners enrolled in the CEU course will be able to access evidence-based resources pertaining to these topics, giving them the clinical knowledge to advance their current practice.

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