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Maine Home Health United: an online community of practice to support home health occupational therapy practitioners in Maine

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BOSTON UNIVERSITY
SARGENT COLLEGE OF HEALTH AND REHABILITATION SCIENCES

Doctoral Project

**MAINE HOME HEALTH UNITED:
AN ONLINE COMMUNITY OF PRACTICE TO SUPPORT HOME
HEALTH OCCUPATIONAL THERAPY PRACTITIONERS IN MAINE**

by

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B.S., Quinnipiac University, 2003

Submitted in partial fulfillment of the
requirements for the degree of
Doctor of Occupational Therapy

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DEDICATION

This project is dedicated to my mother, Carol Conner, whose unconditional love and constant support served as a guiding compass throughout my doctoral journey. From a young age she instilled in me the qualities of empathy, compassion, independence and honesty, helping shape my foundation as a career occupational therapist. She has been my rock throughout my life, both in good times and times of struggle. She is always there to offer a listening ear when I am feeling overwhelmed or burned out. With her endless love and encouragement, I would never have been able to complete this doctoral project. With deepest gratitude, this one is for you Mom!

ACKNOWLEDGMENTS

This doctoral project would not be possible without the knowledge and support of my academic mentor Craig Slater. From day one, he quickly figured out my personality and learning style and geared his feedback to me in a personalized manner. He helped me to “zoom out” and “trust the process” when my anxiety brain would get ahead of me. I can’t thank you enough Craig for all you have done for me during this process!

A special thank you to my father, James Harvey, for passing on his gift of writing to me. I would like to think that I incorporate some of his style into all my academic writings.

I would also like to thank my extended family and friends for their unwavering support and encouragement during this doctoral journey. Your funny texts, memes and words of inspiration have gotten me through when times were challenging.

I would be remiss if I also did not mention the many therapy colleagues and supervisors that both shaped the way that I practice and supported me during this project. Some of these special people include Steve Johnston, Jenny Bolduc, Meneth Mazzone, Christina Perkins, Carrie Wolff, Lindsey Connell, Matthew Connell, Alicia Fowle, and Tanya Clement.

Lastly, I would like to acknowledge the greater healthcare community at large. The last few years have been tough. Keep doing what you do best and know that I see and support all of you!

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ABSTRACT

Home health services are medical services provided in the home by a skilled licensed provider (Rural Health Research Center, 2017). Evidence shows that health professionals in rural home health settings experience high levels of stress, isolation, and burnout (Manson et al., 2020). Occupational therapy practitioners (OTPs) are critical members of the home health care team (Roots and Li, 2013).

In the state of Maine, an overall aging workforce and patient population, coupled with the COVID-19 pandemic and recent vaccine mandates, have led to severe staffing shortages in all aspects of healthcare. Due to these factors, home health OT practice in Maine has proven to be challenging and ever changing. As a result, Maine home health OTPs often lack knowledge and confidence when providing care to their patients in the homecare settings. Currently, there are no formal support systems for Maine home health OTPs to gain needed knowledge and provide guidance for these issues. As a result, Maine home health OTPs often report increased episodes of professional burnout and poor job satisfaction.

Communities of practice (COPs) have been shown to facilitate peer communication and knowledge sharing, reduce isolation, and increase intention to work in rural areas (Bikinesi et al., 2020, p. 2). The Maine Home Health United program aims to connect Maine home health OTPs through an online COP. It will consist of two components: 1) a Project ECHO[®] (Extension for Community Healthcare Outcomes) education series using the Zoom platform, and 2) the establishment of a WhatsApp multimedia group. Engaging in Maine Home Health United has the potential to increase connectivity, social support, and feelings of belonging among members by learning and sharing knowledge. This connection has the potential to improve overall confidence with service delivery and in turn, decrease rates of professional burnout and job satisfaction amongst Maine home health OTPs.

PREFACE

In April 2020, roughly one month into the COVID-19 global pandemic and one month out from my 40th birthday, I felt anxious, burned out and stuck. I had been working as a rural home health occupational therapist in the poorest county in my home state of Maine. I was driving between 100–150 miles a day seeing patients/clients. I struggled at times with the lack of resources that were available to me practicing in a rural area. At times, I often felt lonely and isolated during my day. My confidence started to slip. I craved more support from my peers and my home health agency, however my efforts to create more of a support system were at times met with resistance due to the lack of time and resources available.

I took two weeks off work for a mental health break and to attempt to figure out my next steps. I met with an occupational therapist that specialized in mental health that was offering free consultations to Maine occupational therapists during April, national OT month. Through this meeting, I discovered that I was suffering from professional burnout and compassion fatigue. I spent time those two weeks understanding what those terms meant and looked for ways and resources to combat my personal experience with these constructs. I had a pivotal moment of thought and decided I wanted to shift my career to not just caring for my patients/clients, but to care for myself and help other occupational therapy practitioners that may also be struggling with these same challenges. I also decided that I wanted the option of teaching occupational therapy students, but soon discovered that I would need a higher degree to be able to do that. Since the COVID-19 global pandemic was limiting my anxiety coping skill of traveling, I

decided to turn that energy into achieving that higher occupational therapy degree that I needed to teach, and also research what it would take to develop a support program for my peers.

In June 2020, I had a phone conversation with Karen Jacobs, the Director of the Boston University Post Professional Occupational Therapy Doctorate (PP-OTD) program. I knew that pursuing my PP-OTD degree at Boston University would be the perfect fit to achieving these goals. Throughout my classes within the PP-OTD program, I developed my own little community of practice with my peers. I was exposed to different concepts including connectivism, self-compassion and emotional intelligence. I knew that these concepts needed to be included in my doctoral project. I hope the chapters that follow can serve as a guidebook to developing an online community of practice for my fellow Maine home health occupational therapy practitioners. My wish is for these concepts to not only be for occupational therapy practitioners but for other healthcare professionals as well.

In closing I would like to share a quote from the late Supreme Court Justice Ruth Bader Ginsberg. I feel these words encompass the goals I have for this project.

“If you want to be a true professional, you will do something outside yourself, something to repair tears in your community, something to make life a little better for people less fortunate than you. That’s what I think a meaningful life is. Living not just for oneself, but for one’s community. Real change, enduring change, happens one step at a time.” (Stanford University, 2017).

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LIST OF ABBREVIATIONS

ADL	Activities of Daily Living
AE	Adaptive Equipment
AOTA	American Occupational Therapy Association
BU	Boston University
CINAHL	Cumulative Index to Nursing and Allied Health Literature
COP	Community of Practice
COVID-19.....	Corona Virus Disease 2019 caused by SARS-CoV-2
DME.....	Durable Medical Equipment
DP	Depersonalization
DRI.....	Disability Rights International
EE.....	Emotional Exhaustion
IRB	Institutional Review Board
KB.....	Knowledge Broker
MBI.....	Maslach Burnout Inventory
MEOTA	Maine Occupational Therapy Association
MOOC	Massive Open Online Courses
OT	Occupational Therapy
OTP	Occupational Therapy Practitioner
OTPF-4	Occupational Therapy Practice Framework
PA	Personal Accomplishment
PEP.....	Professional Experience Placement

PLN..... Personal Learning Network
PP-OTD Post Professional Occupational Therapy Doctorate
Project ECHO® Extension for Community Healthcare Outcomes
WHO..... World Health Organization

GLOSSARY

Community of Practice

A community of practice is a group of people who share a common concern, a set of problems or interest in a topic and come together to fulfil both individual and group goals (Holden et al., 2015). Communities of practice are intended to promote health and well-being through the exchange of ideas and best practices (American Occupational Therapy Association, 2025).

Home Health

Home health services are medical services provided in the home by a skilled licensed provider. These services include skilled nursing, physical therapy, occupational therapy, speech language pathology, medication management and medical social services, among others. (Rural Health Research Center, 2017)

Occupational Therapy

Occupational therapy uses everyday life activities (occupations) to promote health, well-being and your ability to participate in the important activities in your life. (American Occupational Therapy Association, 2025)

Occupational Therapy Practitioner

Occupational therapy practitioners are occupational therapists and occupational therapy assistants that provide occupational therapy services. Occupational therapy practitioners

enable people of all ages to live life to its fullest by helping them promote health, and prevent—or live better with—injury, illness, or disability. (American Occupational Therapy Association, 2025)

Project ECHO®

Project ECHO® (*Extension for Community Healthcare Outcomes*) is an innovative tele-mentoring program delivered virtually, typically using the Zoom platform. ECHO participants partake in educational discussion on pre-established topics and engage in a virtual community with their peers where they share support, guidance and feedback. As a result, collective understanding of how to implement best practices and support amongst the group emerges. (University of New Mexico, 2021)

Rural

Rural can be defined as regions having a population of less than 10,000.
(Roots & Li, 2013)

CHAPTER ONE – Introduction

Rural Home Healthcare

Many Americans are experiencing profound changes in health care delivery. There is widespread acknowledgement that rural health care is a distinct entity with unique challenges. Rural and small towns are regions having a population of less than 10,000 (Roots & Li, 2013). Rural communities face their health care needs with a system that has long been underfunded compared to urban and sub-urban communities (Size, 2002). The relatively poorer health profile in rural communities, combined with an aging population, suggest that there is a proportionally larger demand for services for medical treatment, rehabilitation, and health promotion (Roots & Li, 2013).

Access to health services for rural populations in the United States of America (USA) and retention of health care providers in these areas is a growing area of attention and concern (Rural Health Research Center, 2016). The increasing needs of rural communities are resulting in mental fatigue, burnout, and poor mental health in health professionals (Recto et al., 2023). In recent years, health professionals have faced unprecedented circumstances with increased workload pressures, exacerbating pre-existing low staffing levels and changing guidelines (Lingum et al., 2021, p. 238).

Growing evidence indicates that health professionals have experienced a deterioration in their mental health. High levels of depression, anxiety, burnout, insomnia, and stress have been reported (Recto et al., 2023, p. 63). Failure to retain health professionals in rural areas contributes to the poor health status of these communities through an inability to deliver reliable and consistent services (Millsteed, 2001). Many

rural health professionals have reported they feel isolated because of their lack of contact with other health professionals and their limited opportunity to discuss issues with colleagues (Manson et al., 2020, p. 31).

Home health services are medical services provided in the home by a skilled licensed provider (Rural Health Research Center, 2017). These services include skilled nursing, physical therapy, occupational therapy (OT), speech language pathology, medication management and medical social services, among others (Rural Health Research Center, 2017). Patients may be referred to home health services for post-acute care when they are discharged from the hospital or by their physician.

The Role of Occupational Therapy

OT uses everyday life activities (occupations) to promote health, well-being and your ability to participate in the important activities in your life (American Occupational Therapy Association [AOTA], 2025). Occupational therapy practitioners (OTPs) include occupational therapists and occupational therapy assistants that provide OT services. OTPs enable people of all ages to live life to its fullest by helping them promote health, and prevent—or live better with—injury, illness, or disability (AOTA, 2025).

OTPs are critical members of the home health care team, providing direct patient care, education, and advocacy in the community through provision of OT services (Roots & Li, 2013). In the home health setting, OTPs specialize in helping patients/clients improve their ability and independence with daily activities, provide education on adaptive techniques, recommend assistive devices and home modifications, and collaborate with other healthcare professionals to ensure a holistic approach to care

(Aveanna Healthcare, 2023).

Practice in rural home healthcare is an area of OT that has received minimal attention in the literature and is left with a limited research base (Peterson et al., 2009). The literature yields little information regarding OT practice in rural settings, let alone the roles and experiences of OTPs (Johnson et al., 2003). Of the little research available, two studies highlight the issues faced by rural OTPs. Johnson et al. (2003) interviewed and observed rural OTPs in Wisconsin doing their daily work. One of the major themes from the interviews was that of limited resources, which refers to the resources that support treatment. The rural OTPs talked specifically about the limited amount of equipment, the small and varied treatment spaces and fewer staff.

The findings of this study provided information to both educators and students involved in the OT program and put emphasis on the use of OT in rural and under-served region of the Upper Midwest. In this study, researchers hoped that information would be useful to practicing OTPs as it would aide in understanding the shortage of rural health professionals, including OT personnel.

A second study, Peterson et al. (2009), examined the availability of OT resources in rural Nebraska. A 20-item questionnaire was designed to gather information on demographics, OT services, distance and frequency of travel for OT services, practice areas and perceptions of rural healthcare of OT providers. Results indicated that there were numerous challenges including that of extensive travel and limited resources in rural areas. It also concluded that “a broad knowledge base seems to be a necessity in order to provide effective services in a rural health setting” (p. 59).

Challenges in Rural Home Healthcare

Rural home health OTPs face a number of challenges while providing their services. Some of these challenges include:

- 1. Access to technology and service area coverage.** Limited technology including poor or no cell phone coverage and little to no access to internet in many rural areas is both a safety risk and barrier to accessing crucial information and resources. Both patient and home health agencies not having up to date technology equipment is currently limiting access to wide array of information and community resources.
- 2. Caregiver resources.** Family members and close friends of homebound patients are very frequently involved in their care, but resources to train and support these informal caregivers are much more limited or unavailable in rural areas compared with urban areas.
- 3. Reimbursement/funding.** Reimbursement is a significant barrier that affects almost all aspects of home health agencies' work. Many rural home health OTPs travel great distances to service patients, which limits the number of home visits that can be made in a day, thereby lowering their productivity. Agencies will need to continue to adapt their practices as reimbursement models continue to evolve. Financial support from local governments, grants or other organizations are essential for some rural home health agencies to maintain their coverage areas.
- 4. Lack of appropriate Durable Medical Equipment (DME).** Issues regarding liability and infection control are both major concerns as to why home health

agencies do not directly have adaptive equipment (AE)/DME readily available for use with staff. Strong relationships between rural home health agencies and local hospitals, churches, loan closets, local areas on aging and community relations and DME companies are needed to enhance provision and delivery of needed DME. Having a list of these providers is recommended in order maximize community resources.

- 5. Changing policies/coverage.** Frequent changes and increasing complexity in Medicare and insurance companies' policies affecting home health services. Agencies not only have to educate themselves about changing rules and regulations, but they also have to educate the providers. This education process results in extra work for the agencies each time rules and regulations change.

Compounding the above challenges, rural areas are often harder hit by shortages of OT personnel than more urban areas (Collins, 1996; Johnson et al., 2003). OTPs have a lot of job options, and many pay better than home health care. Starting OTPs seldom begin their careers in home health care. The lack of supervision in home care, and or access to ready-made resource sites, makes it poorly suited for a new OTP.

Some OTPs have commented that they feel entering home environments to deliver services, especially in poor communities, pose personal safety risks. Home health OTPs may encounter patients in homes without electricity or running water complicating care. Many elderly rural patients have received less formal education, requiring home health OTPs to spend significant time teaching patients how to participate in their own care. This combined with isolation, can hinder home health OT recruitment and retention.

There is, therefore, a need for further exploration in how to retain and support rural OTPs in home health care. “As a profession we need to ensure that our colleagues who go to work in rural areas are well prepared; we need to provide the support they need before and after they get there” (Peterson et al., 2009, p. 56).

Context in Maine

Maine is a state in the northeast of the USA that covers 30,845 square miles with 1,405,012 people (U.S. Census Bureau, 2025). Maine is considered the most rural state in the nation. Fifty percent of Maine’s land is almost completely uninhabited (Maine Center for Disease Control and Prevention, 2025). Maine is also the oldest state by median age. Maine’s aging population is a result of declining birth rates and a growing number of older residents within the state (Maine Center for Disease Control and Prevention, 2025).

Health provider recruitment and retention in rural areas of Maine has been a topic of concern over recent years (Maine Center for Disease Control and Prevention, 2025). Maine’s Visiting Nursing Association, Vice President of Nursing and Patient Care Services Elizabeth Rolfe stated, “We are a poor, rural state with an aging population and workforce challenges. So, you’ve got to leverage anything you can to serve these rural communities” (Lukens & Lukens, 2020, p. 5).

As the average age of the population in Maine is increasing, “aging in place” and providing care in patient’s home environments is greatly on the rise (Lukens & Lukens, 2020). Home health OT practice in Maine has proven to be challenging and ever changing in the past few years. An overall aging workforce and patient population, coupled with the COVID-19 pandemic and recent vaccine mandates, have resulted in

severe staffing shortages in all aspects of healthcare in Maine. Some unfortunate consequences of these factors have resulted in patients not being able to access the type of care they need and/or patients being sent home from hospitals and rehabilitation centers too soon. Patients are often then forced to remain in their homes with unmet needs. Maine home health agencies are often referred in to care for these patients in these difficult situations. Disparities are often noted between rural and metropolitan areas of coverage. Maine home health OTPs are often asked to fill in service gaps during care for these complex patient situations.

Home health OTPs often work in isolation in patient's homes and with limited resources, making caring for these patients even more challenging. Due to these new types of tasks and job challenges, Maine home health OTPs often lack knowledge and confidence when providing care to their patients in the homecare settings. There are no formal support systems for Maine home health OTPs to gain needed knowledge and provide guidance for these issues. As a result, Maine home health OTPs often report increased episodes of professional burnout and poor job satisfaction.

The Proposed Project

The Occupational Therapy Practice Framework (OTPF-4; AOTA, 2020) describes the central concepts that ground OT practice. In the OTPF-4, *health management* is described as “activities related to developing, managing and maintaining health and wellness routines, including self-management, with the goal of improving or maintaining health to support participation in other occupations” (p. 45). Within the sub context of *health management*, the OTPF-4 further explains social and emotional health

promotion and maintenance as, “identifying personal strengths and assets, managing emotions, expressing needs effectively, seeking occupations and social engagement to support health and wellness, developing self-identity, making choices to improve quality of life in participation” (p. 45).

Maine Home Health United seeks to address these areas of the OTPF-4 by establishing an online community of practice (COP) to support home health OTPs in Maine. This author, a licensed Maine occupational therapist with prior home health experience, will be the program administrator for the program’s initial launch. Maine Home Health United will consist of two components: 1) a Project ECHO® education series using the Zoom platform, and 2) the establishment of a WhatsApp multimedia group. Maine Home Health United will have 12 weekly sessions that are 60 minutes in length; 30-minute teaching sessions by topic experts, and 30-minute participant discussion through case presentations and rounds format. Six of the 12 weekly topics will be pre-determined and include:

- 1) Sustaining compassion in home health care.
- 2) Stress management in home health care.
- 3) Supporting mental health in home health care.
- 4) Professional boundaries in home health care.
- 5) Professional communication skills.
- 6) Work-life rhythm in home health care.

The remaining six weekly topics will be determined from an initial needs assessment email sent out to Maine Home Health OTPs. All Zoom sessions will be

recorded, and each weekly session, along with other course resources, will be uploaded to an online library that participants can refer to later. The ultimate goals of this program are to increase overall confidence and skills during service delivery of patients, and to increase job satisfaction while decreasing the rate of professional burnout for home health OTPs in Maine.

Summary

Research shows that further resources and education are needed for rural home health OTPs in order to increase knowledge and confidence during provision of services in challenging home environments and contexts. The proposed program of Maine Home Health United aims to connect Maine home health OTPs through an online COP.

Engaging in Maine Home Health United has the potential to increase connectivity, social support and feelings of belonging among members by learning and sharing knowledge.

This connection has the potential to improve overall confidence with service delivery and in turn, decrease rates of professional burnout and improve job satisfaction amongst

Maine home health OTPs.

CHAPTER TWO – Project Theoretical and Evidence Base

Theoretical Framework

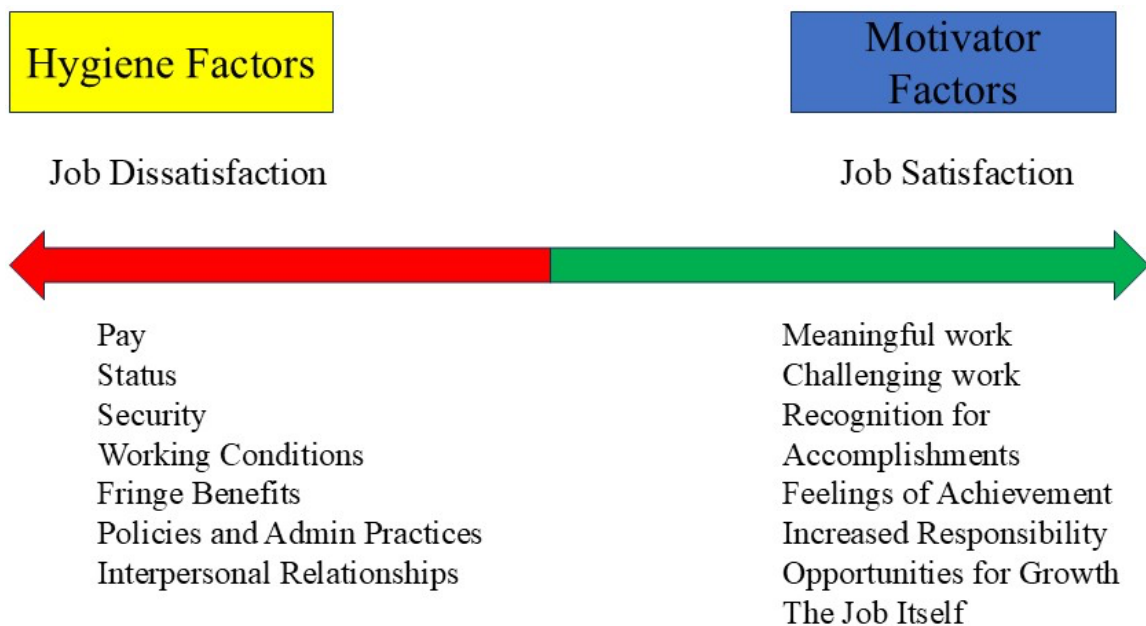
Herzberg's (1959) Motivation-Hygiene or Two Factor Theory is a helpful theoretical framework for understanding why rural home health professionals experience poor job satisfaction, isolation and burnout. The theory provides a conceptual lens by looking into the extrinsic and intrinsic needs of employees. Frederick Herzberg was an American clinical psychologist and first published this theory in 1959 (British Library, 2022). Herzberg's theory has since become one of the most commonly used theoretical frameworks in job satisfaction research (Nickerson, 2021). This theory states that there are specific factors in the workplace that cause job satisfaction, while a separate set of factors cause dissatisfaction. Herzberg explains that the two sets of factors are separate and distinct because they are concerned with two different sets of needs; however, they are not opposites (British Library, 2022). This runs contrary to the traditional view of job satisfaction, which posits that job satisfaction and dissatisfaction are interdependent (Nickerson, 2021).

Herzberg's theory outlines that humans are motivated by two factors: motivators and hygiene factors. Motivators encourage job satisfaction and hygiene factors prevent job dissatisfaction (Kurt, 2022). Herzberg further stated in his theory that motivation factors cover intrinsic needs. He identified six motivators: achievement; recognition; growth; advancement; responsibility; and the work itself (Kurt, 2022). These motivation factors allow employees to be content in their jobs and promote growth. Hygiene factors must be present in the workplace to prevent work dissatisfaction. Herzberg stated in his

theory that hygiene factors cover extrinsic needs. He identified ten hygiene factors: company policies and administration; quality of technical supervision; quality of interpersonal relations among peers, subordinates and peers; salary; job security; personal life; working conditions; and status (Kurt, 2022). Figure 2.1 presents a visual representation of the Model of Motivation and further outlines Herzberg's theory (Kurt, 2022).

Figure 2.1

Herzberg's Motivator-Hygiene Theory



It is important to understand that intrinsic and extrinsic needs are distinct (Kurt, 2022). Herzberg emphasizes in his theory that satisfaction and dissatisfaction are not on a continuum with one increasing as the other diminishes, but are independent phenomena (British Library, 2022). Administrators and managers must recognize and attend to both sets of characteristics and not assume that an increase in satisfaction leads to a decrease

in dissatisfaction (Kurt, 2022). Table 2.1 further outlines how the theory can be organized and explained.

Table 2.1

Herzberg's Motivator-Hygiene Theory Breakdown (Kurt, 2022)

Categories	Root Cause	Connectors	Byproducts
Hygiene factors	Extrinsic needs	Job context	Dissatisfiers
Motivators	Intrinsic needs	Job content	Satisfiers

Herzberg's two-factor theory has been widely used on studies related to staff satisfaction, however, most of the studies took place in other industries and occupational groups. Two studies (Alrawahi et al., 2020; Holmberg et al., 2018) specifically utilized this theory in studies with health professionals. Both studies offered a deeper understanding of how Herzberg's theory can explain what motivates health professionals. Both studies validated the importance of considering the intrinsic and extrinsic needs of employees when endorsing staff promotion and retention matters.

When relating this theory to the above stated problem of poor job satisfaction, isolation and burnout in rural home health professionals, it is crucial to understand the fundamental principal of the theoretical framework. Identifying precise motivating and hygiene factors within rural home health care job positions is imperative when considering a solution. Some of these factors are represented in the previously outlined explanatory model, and others have been identified in the literature. Motivating factors within rural home health care include: job advancement; supporting staff in their roles; providing ongoing education and training; and recognition for services rendered and

goals achieved. Hygiene factors within rural health care include: relationships among peers and supervisors; working conditions; having needed supplies and resources to safely do the job; salary and mileage reimbursement; policy development and overall safety within the work environment.

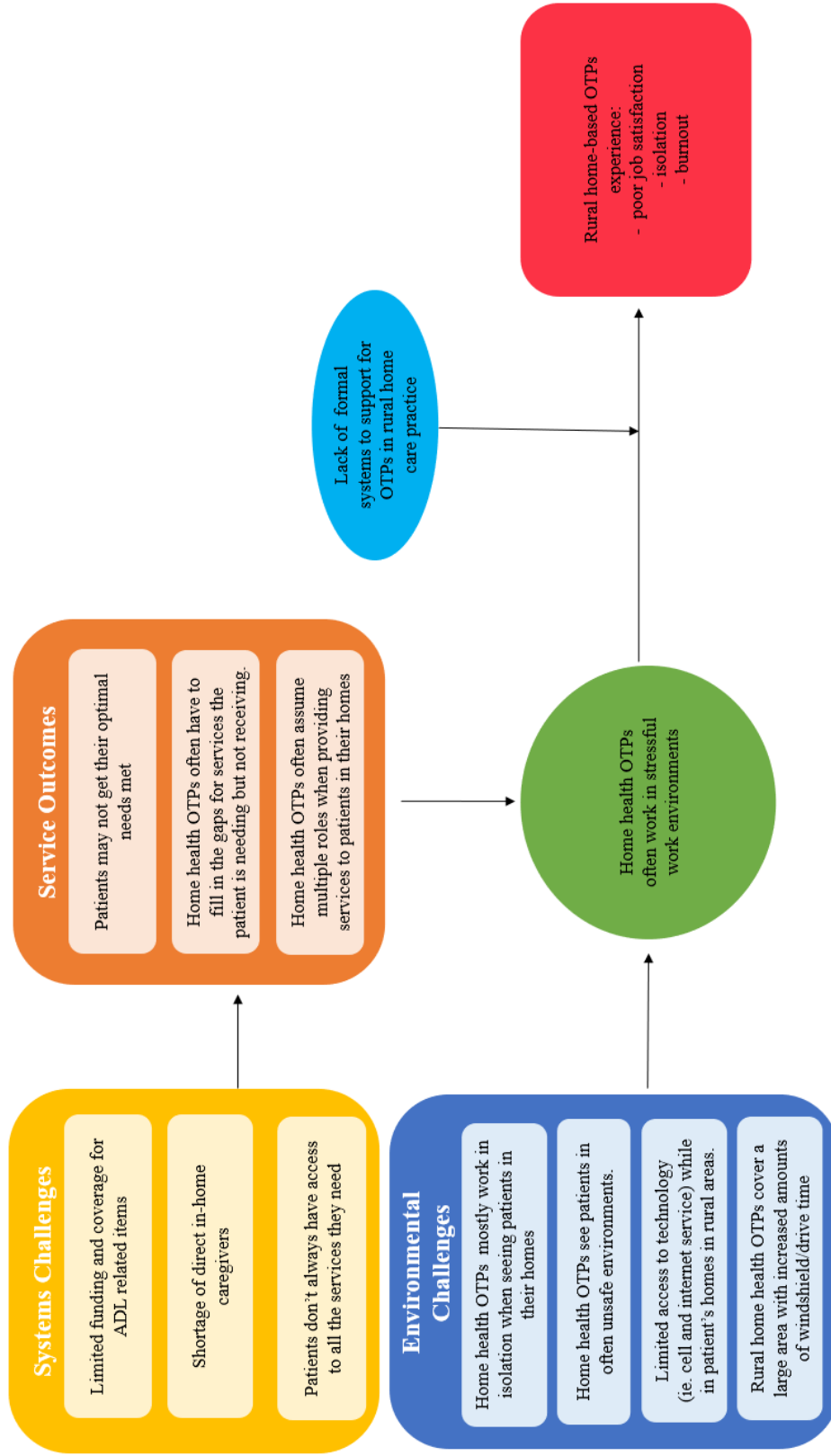
Herzberg's Motivator-Hygiene theory may help employers, in this case rural home health agencies, to identify approaches to keep employees engaged and satisfied. It is vital that workplaces offer emotional support and maintain positive relationships with their employees (Kurt, 2022). Managers can often increase workplace satisfaction by simply having a conversation with their colleagues to find out what they are unhappy with (Kurt, 2022). Supervisors should also reach out to employees to discover if there are any factors in their personal lives that may affect their job satisfaction. Overwhelmed and stressed employees are rarely productive and content (Kurt, 2022). It is also encouraged for managers to reevaluate the "human aspect" of their employees including their goals, values and hobbies (Kurt, 2022). By acknowledging their employee's loyalty and taking the time to talk to them, managers can aide in fulfilling an employee's intrinsic needs (Kurt, 2022). By taking into consideration both employees extrinsic needs (hygiene factors) and intrinsic needs (motivators), rural healthcare agencies have the potential to have more satisfied employees with less occurrences of job isolation and burnout. By improving these concerns, employees are more apt to stay in their current roles, decreasing the overall attrition rate of staff in an already sparse work area.

Explanatory Model of the Problem

Multiple sources have been identified as causal factors leading to the problem of rural home health OTPs not feeling supported in their in their jobs. An explanatory model can be created to visually display the relationships that each factor potentially has on the end problem. Some of these factors are specifically related to the patients and their needs, while others directly correlate to the OTPs and their assumed roles during patient care.

A shortage of direct in-home caregivers and limited funding for coverage of DME and other items needed for activities of daily living (ADLs) care can lead to deficiencies in getting patient's needs met. These in turn with clinical factors directly impacting OTPs including: 1) having to see patient in challenging and potentially unsafe environments; 2) a lack of formal support for OTPs in rural home care practice; 3) having limited access to technology (e.g., cell phone and internet service) while in patient's homes; 4) increased coverage areas resulting in increased windshield/drive time; and, 5) OTPs needing to assume multiple roles when providing services to patients in their homes can lead to overall stressful work conditions. These stressful working conditions leave the OTPs susceptible to feelings of: a) isolation; b) burnout; and c) poor job satisfaction. These negative feelings can directly result in the end problem of home-based OTPs not feeling supported in their jobs. Figure 2.2 presents a visual representation of this explanatory model of the problem.

Figure 2.2. Explanatory Model of the Problem



Literature Review on Factors Contributing to the Issue

As shown in the explanatory model of the problem, there is growing concern that health professionals in rural home health settings experience high levels of stress, isolation and burnout. A structured literature review was conducted to further investigate the factors which influence stress, isolation and burnout in rural home health professionals. The literature review sought out to answer the following research questions:

- 1) Is there evidence that rural home-based health professionals have poor job satisfaction?
- 2) What are the patient care challenges in rural home-based settings compared to urban settings?
- 3) Is there evidence that there is a lack of support systems for rural health professionals?

Databases including the Cumulative Index to Nursing and Allied Health Literature (CINAHL), APA PsycINFO and PubMed were searched to identify relevant articles. Sets of search terms were used in the databases, including variations of “rural”, “home-based”, “health professionals”, “job satisfaction”, “patient care”, “environmental” and “challenges”. The search terms for each research question are fully detailed in Tables 2.2 – 2.4. Results were limited to peer-reviewed articles published in English. The abstracts and full text were reviewed, and the most relevant articles were included in this literature review.

Table 2.2*Search Terms for Research Question 1*

Rural	Home-based	Health professionals	Job satisfaction
rural OR “low population” OR remote OR “non-urban”	“home based” OR “home care” OR “home health” OR community	“occupational therapy” OR “occupational therapist” OR physiotherapy OR physiotherapist OR “physical therapy” OR “physical therapist” OR “speech language pathology” OR “speech language pathologist” OR “speech pathology” OR “speech pathologist” OR “speech therapy” or “speech therapist” OR “language therapy” OR “language therapist” OR nutrition OR dietitian OR dietician OR dietetic OR nurs* OR “social work” OR “social worker” OR “personal support services” OR “home health aide” OR “home care aide” OR “certified nursing assistant”	“job satisfaction” OR burnout OR “compassion fatigue” OR stress OR attrition OR isolat* OR retention OR turnover OR “work satisfaction” OR “employee satisfaction”

Table 2.3*Search Terms for Research Question 2*

Patient care	Challenges	Rural	Home-based	Urban
“patient care” OR “patient outcome” OR “quality of care” OR “patient experience” OR “care outcomes”	challenges OR barriers OR difficulties OR issues OR problems OR obstacles OR limitations OR struggles OR complications	rural OR “low population” OR Remote OR “non-urban”	home based” OR “home care” OR “home health” OR community	urban or “high population” OR metropolitan OR city OR municipal OR suburban

Table 2.4*Search Terms for Research Question 3*

Rural	Home-based	Health professionals	Support systems
rural OR “low population” OR remote OR “non-urban”	home based” OR “home care” OR “home health” OR community	“occupational therapy” OR “occupational therapist” OR physiotherapy OR physiotherapist OR “physical therapy” OR “physical therapist” OR “speech language pathology” OR “speech language pathologist” OR “speech pathology” OR “speech pathologist” OR “speech therapy” or “speech therapist” OR “language therapy” OR “language therapist” OR nutrition OR dietitian OR dietician OR dietetic OR nurs* OR “social work” OR “social worker” OR “personal support services” OR “home health aide” OR “home care aide” OR “certified nursing assistant”	support OR “support systems OR “community of practice” OR “communities of practice”

Job Satisfaction Among Rural Home Health Professionals

To answer the first research question, a total of 13 articles were reviewed and information was extracted. Based upon this analysis, there is evidence in the literature that rural home health professionals have poor job satisfaction. Three key themes emerged within the articles, further clarifying the factors that encompass overall job satisfaction, as well as potential reasons and issues why rural health professionals have poor job satisfaction and leave their jobs.

One key theme was that the overall construct of job satisfaction was complex with a multitude of factors (Cosgrave et al., 2018; Jayasuriya et al., 2012; Stratton et al.,

1995). One article cites that factors that relate to job satisfaction of rural nurses are “diverse and different” (Jayasuriya et al., 2012, p. 2). Stratton et al. (1995) identified five factors related to job satisfaction including working conditions, tasks associated with the job itself, relationships with co-workers, salary, amount of control exercised by individuals in day-to-day activity (p. 74). Cosgrave et al. (2018) further identified three main influences that have been found to have either a pull effect (to take up a rural position or in deciding to stay), or, a push effect (to leave a rural position) for rural clinicians. These influences include workplace conditions, career advancement opportunities and social and personal factors (p. 3). The authors further state that team dynamics also strongly influenced professional satisfaction (p. 9).

A second key theme that emerged from articles reviewed was that home health nurses and allied health professionals had lower job satisfaction as compared to other settings (Cosgrave et al., 2018; Dunkin et al., 1992; Hegney et al, 2015; Juhl et al., 1993; Macleod et al., 2017). Three articles (Juhl et al., 2015; MacLeod et al., 2017; Hegney et al., 2015) all concluded that nurses working in community health and/or home health positions have the poorest levels of job satisfaction. Cosgrave et al. (2018) noted that “allied health professionals are twice as likely to leave their rural or remote position” and “an average allied health professional’s rural stay is 3 years and this reduces further in more rural areas” (p. 3). The paper also noted that rural health professionals’ satisfaction “had a lot to do with the extent of the individual’s sense of belonging towards the town.” (p. 10). Furthermore, Dunkin et al. (1992) suggested that even though home health nurses were dissatisfied with their jobs, leaving was not a part of their plans. These authors

purport that nurses may be “making the best of it” in regard to job satisfaction as they have no other alternative but to do so (p. 274).

A third key theme that emerged from the literature review was that poor job satisfaction in rural health professionals directly related to people leaving their jobs (Cosgrave et al, 2018; Cosgrave et al., 2019; Cosgrave, 2020; Kaasalainen et al., 2017; Jayasuriya et al., 2012; Penz et al., 2008; Sacks et al., n.d.; Stratton et al., 1995). Cosgrave (2020) and Cosgrave et al. (2019) found that job satisfaction is associated with increased retention. Lack of opportunities and resources were identified as reasons why health professionals left their job. Stratton et al. (1995) cites limited access to formal and informal education experiences as reasons why people left their positions in rural healthcare, while Sacks et al. (n.d.) offers that “lack of resources to do their jobs, lack of opportunities for advancement and feeling that they were not compensated fairly for their work” (p. 10). Rural health professionals also face challenges which are likely not experienced by their urban colleagues. Kaasalainen et al. (2017) highlighted that nurses who work in rural communities are faced with additional hardships such as separating their personal and professional lives, working alone in very isolated roles, travelling significant distances to provide care, and having limited access to continued education (p. 344). Organizational factors were also identified by Penz et al. (2018) who cite autonomy and control over practice, relationships with supervisors and peers, job stress, organizational commitment and organizational climate as additional challenges and reasons for health professionals to relocate to urban areas (p. 786–787). And lastly, social factors appear to also be influential. Jayasuriya et al. (2012) provides evidence that

“interpersonal relationships, work climate and supportive supervision are the most important influences of job satisfaction for rural nurses (p. 1). Ultimately, the reasons for leaving rural healthcare are numerous and varied. Cosgrave et al. (2018) concludes that a health professional’s choice to leave their job is determined by “the gap between the individuals’ professional and personal expectations and the reality of their current employment and rural-living experience” (p. 4511).

Patient Care Challenges in Rural Home Health

For the second research question a total of seven articles were reviewed and information was extracted regarding the specific challenges in the provision of rural home healthcare. Ohta et al. (2020) conducted focus groups with medical and home care professional teams. Following thematic analysis, it was determined that changing rural contexts, relationships among stakeholders and collaborations for sustainable healthy communities were some of the difficulties for provision of home care services to rural older people (p. 134). Additionally, Forbes & Edge (2009) acknowledged that “providing homecare services is becoming more challenging in rural and remote areas as there are fewer services, supports and caregivers” (p. 120). These authors further include “weather, limited transportation, cost of traveling long distances and inadequate or unfamiliar technology” as challenges that providers endure (p. 121).

Leipert et al. (2007) also shared challenges in their summative paper on multidisciplinary home care provider groups in rural areas. Some of these challenges include traveling over extensive distances and needing to be “well prepared generalists” (p. 7) so that they can address a variety of patient needs that may arise. These authors

also highlight “practice issues” (p. 9) related primarily to time, distance, communication and retention of staff, as well as “system issues” (p. 11) including a lack of understanding of rural practice by urban supervisors and schedulers as a major challenge in the effective and efficient provision of rural home care services. Specifically, the authors also found that “unsafe and unsanitary working conditions encountered in home care, the isolation and lack of support and stability in their work environment” (p. 122) are challenges that lead some rural home care providers to leave their jobs.

Two articles (Toze et al., 2019; Siconolfi et al., 2019) discussed the infrastructure challenges of rural home health care provision. Toze et al. (2019) cite extended travel distances for health professionals and highlight these issues may be further exacerbated by “low-capacity roads and geographic barriers such as rivers and coastlines” (p. 212–213). Siconolfi et al. (2019) point out limited cell phone coverage and landline connectivity in rural areas, as well as limited availability of additional private patient caregivers in the home as additional challenges to providing care to rural homecare patients.

Despite its challenges, rural home health care is an essential service for rural patients. Two of the articles reviewed did not directly address the research question, however, they did provide evidence to the benefit of home health services. Forbes et al. (2004) state that there is “strong evidence that home care enhances client’s quality of life and is cost effective alternative to recovery in a hospital or residential long term care settings.” (p. 228). Borowiak & Kostka (2013) concur and further highlight that “nursing care delivered at the patient’s home constitutes one of the most important elements of the

holistic approach to the health of rural older adults.” (p. 1264).

A common theme across the articles reviewed for the second research question was that there needs to be an interdisciplinary approach to the delivery of rural home care services and that there needs to be investment in rural infrastructure, training and resources for health professionals (Forbes & Edge, 2009; Leipert et al., 2007; Ohta et al., 2020; Toze et al., 2019).

Support Systems for Rural Home Health Professionals

For the third research question, ten articles were reviewed, and information was extracted. It is evident from review of these articles that rural health professionals feel a lack of support in their jobs. Solutions to offer this support through online technology platforms and videoconferencing, as well as mentorship programs were further explored in each article (Cassidy, 2011; Eriksson et al., 2015; Gibson, 2021; Johnsson et al., 2017; Kaplan et al., 2020; Quiliam et al., 2021; Rohatinsky et al., 2020; Zournazis et al., 2018).

Factors contributing to rural health professionals feeling a lack of support were explored in several articles. Gibson et al. (2021) cited education, economics, rural practice characteristics, rural demographics and health status as for the shortage of healthcare providers in rural areas (p. 88). These authors also specifically highlight that “training in an urban setting does not necessarily prepare one for practice in rural settings, making transition from urban to rural setting difficult to providers” (p. 88). These authors conclude that the above factors lead to health professionals feeling less supported in rural areas. Zournazis et al. (2018) offered information on the lack of support in rural healthcare and offered evidence on the “whole of community” facilitator

model to support preceptors to build placement capability and promote workforce development (p. 371).

Kaplan et al. (2020) suggested that a lack of support for rural health professionals directly impacts the overall recruitment and retention rates for these positions. The authors cite “rural connectedness or satisfaction within the community, having a mentor and supportive work environment and salary and benefits” (p. 163) as influences that impact the overall feeling of support in rural health professionals. Eriksson et al., (2015) suggest that their study provides guidance for managers when planning educational interventions to bolster support within their workforce. Similarly, Johnsson et al. (2017) stated that “professional isolation, high clinical demand and the lack of access to professional development opportunities are known to contribute to the retention of health professionals in rural and remote areas” (p. 694). They further postulate that “a focus should be on how we can best support and develop the skills of these professionals in order to remain in their roles” (p. 694). These authors strongly feel that “access to support and professional development can be key on breaking the cycle of challenges in rural recruitment and retention of healthcare workers” (p. 693). These authors suggest offering support to healthcare workers through online technology and platforms in order to access a more “responsive, collaborative and individualized professional support and training” (p. 696).

Other articles explored solutions which better support rural health professionals. Quiliam et al. (2021) offer a different perspective on the issue of decreased support in rural healthcare. These authors feel that by supporting and advocating for mature aged

students in the nursing and allied health care fields, that the overall number of health professionals in the rural areas would increase and in turn the health professionals within rural areas would feel more supported. Cassidy (2011) highlighted the use of technology such as videoconferencing, telehealth, wikis, listservs, email groups and similar computer-mediated communication tools as opportunities for exchange and interaction regarding practices in rural areas (p. 100). Lastly, Rohatinsky et al. (2020) discuss use of a rural mentorship program in order to offer support to healthcare workers. Three themes including connection, communication and support were offered as key considerations when implementing the program (p. 1–2). Data from this study suggests that “rural-specific mentorships are effective in terms of supporting relationships, easing workplace transition, strengthening community connections, and encouraging recruitment and retention in rural health care” (p. 2).

Two articles did not directly provide evidence on the lack of support for health professionals specifically, however, they did offer other potential information that could indirectly relate to the lack of support in general in rural areas (Sethi, 2015; Szelest et al., 2021). Sethi (2015) provided evidence that the general workforce in rural areas feel less supported than urban areas and offered support for further continuing education in these areas. Szelest et al. (2021) focused on the importance of community outreach workers in rural settings and offered evidence on the importance of these positions. One could correlate this need as a general lack of support in the rural sector and offer further advocacy for these types of programs.

Summary

This structured literature review sought out to further investigate the factors that influence stress, isolation, and burnout of rural health professionals through three specific research questions. A total of 30 articles were reviewed and evidence was extracted in order to support the answers to the research questions. Overall, it was determined that rural home health professionals do have poor job satisfaction. Key themes emerged in the research further clarifying the construct of job satisfaction, and, how job satisfaction directly relates to employee retention. After review of the articles, several factors were derived from the data regarding rural health care challenges and how this led to feelings of stress, isolation and burnout among rural health professionals. Finally, the research did show that rural health professionals feel a general lack of support. Data from within the articles supports alternative measures to provide this support. It should be noted that most of the research articles regarding rural healthcare were from other countries including Canada, Australia and Ghana. Surprisingly, studies in the USA were from the 1990's. This shows a lack of current research into challenges of rural healthcare within the USA and supports further research efforts in this area.

CHAPTER THREE – Overview of Current Approaches and Methods

Literature Review of Potential Solutions to the Problem

Communities of practice (COPs) may be an effective workforce development strategy. A COP is a group of people who share a common concern, a set of problems or interest in a topic and come together to fulfil both individual and group goals (Holden et al., 2015). “Communities of practice develop outcomes through three considered elements; work, co-learning and relationships” (Holden et al., 2015, p., 2).

To inform the design of a successful program that improves stress, isolation and burnout in rural home health professionals, a structured literature review was conducted. This analysis sought out to investigate any existing systems and/or programs and evaluate their effectiveness. The goal of the literature review was to answer the following research questions:

- 1) How have support programs and COPs been used to support rural health professionals?
- 2) How has Project ECHO[®] been used to address job satisfaction and burnout in rural health professionals?
- 3) How can connectivism be used in the development of support programs?

Databases including the CINAHL, APA PsycINFO and PubMed were searched to identify relevant articles. Sets of search terms were used in the databases, including variations of “rural”, “health professionals”, “Project ECHO”, “job satisfaction”, “connectivism”, “development”, and “support program(s)”. The search terms for each research questions are fully detailed in Tables 3.1 – 3.3. Results were limited to peer-

reviewed articles published in English. The abstracts and full text were reviewed, and the most relevant articles were included in this literature review.

Table 3.1

Search Terms for Research Question 1

Support program	Rural	Health professionals
“support program” OR “communities of practice” OR “community of practice” OR “support group” OR “support network”	rural OR “low population” OR remote OR “non-urban”	“occupational therapy” OR “occupational therapist” OR physiotherapy OR physiotherapist OR “physical therapy” OR “physical therapist” OR “speech language pathology” OR “Speech language pathologist” OR “speech pathology” OR “speech pathologist” OR “speech therapy” or “speech therapist” OR “language therapy” OR “language therapist” OR nutrition OR dietitian OR dietician OR dietetic OR nurs* OR “social work” OR “social worker” OR “personal support services” OR “home health aide” OR “home care aide” OR “certified nursing assistant” OR clinician OR “health professional” OR “health provider”

Table 3.2

Search Terms for Research Question 2

Project ECHO	Job Satisfaction	Rural	Health professionals
Project ECHO	“job satisfaction” OR burnout OR “compassion fatigue” OR stress OR attrition OR isolat* OR retention OR turnover OR “work satisfaction” OR “employee satisfaction”	rural OR “low population” OR remote OR “non-urban”	“occupational therapy” OR “occupational therapist” OR physiotherapy OR physiotherapist OR “physical therapy” OR “physical therapist” OR “speech language pathology” OR “Speech language pathologist” OR “speech pathology” OR “speech pathologist” OR “speech therapy” or “speech therapist” OR “language therapy” OR “language therapist” OR nutrition OR dietitian OR dietician OR dietetic OR nurs* OR “social work” OR “social worker” OR “personal support services” OR “home health aide” OR “home care aide” OR “certified nursing assistant” OR clinician OR “health professional” OR “health provider”

Table 3.3*Search Terms for Research Question 3*

Connectivism	Development	Support programs
connectivism or connectivist	develop* OR creat* OR establish*	“support program” OR “communities of practice” OR “community of practice” OR “support group” OR network

Rural Support Programs

To answer the first research question, a total of eight articles were reviewed and data was extracted. Various themes were identified in the included articles including the different types of programs and their structure, how health professionals benefited from the programs including common goals and outcomes, and guiding information on how to make these programs successful could be surmised from in depth evaluation of the articles.

The included articles discussed a range of programs and COPs that support rural health professionals. These included:

- 1. Project ECHO® clinic.** Sood et al. (2020) discussed a Project ECHO® clinic that was held at the same time twice every month and lasted for 75 minutes. The sessions followed a uniform format: 10-minute introduction and announcements, 15 minutes didactic by an invited expert, 20-minute question/answer session and 30-minute interactive case discussion facilitated by the clinic director. Self-reported knowledge, self-efficacy and collective efficacy reports were gathered to continually adapt to the needs of the learning community.

- 2. Communities of Practice.** Shaikh et al. (2014) describe the HEALTH COP that included teams from several clinics. These teams attended nine monthly, 90-minute interactive learning sessions delivered by multipoint videoconferencing. Access to a web-based toolkit of resources was also included. The first three sessions focused on participants gaining knowledge and skills, followed by six interactive collaborative learning sessions where teams planned and implemented practice-level changes to improve assessment skills. Abiodun (2020) also presented a COP, however, it was delivered on a smart phone over three sessions per week. Every week a new topic was introduced followed by a moderate discussion. This was followed two days later in a second session where the discussion was summarized. The third session, at the end of the week, provided relevant information on the topic discussed during the week.
- 3. Face-to-Face Workshop.** Holden et al. (2015) described a program that included an initial face-to-face, one-and-a-half-day workshop to meet peers and develop a common understanding of the how the COP would function, followed by meetings every six weeks over seven months. Sessions ran for approximately two hours and both teleconference and videoconference were used. Participants had exclusive access to an online database that included relevant evidence-based resources for the field. Sharing was encouraged through this database, and by email or phone.
- 4. Online Training & Resources.** Zournazis & Marlow (2015) discussed Professional Experience Placement (PEP) web pages which include a range of

information and educational tools relevant to clinicians' roles. Monthly video conferencing sessions and networking opportunities were also included.

Other studies also described the use of online training and resources; however, limited information was presented. For example, Davis et al. (2010) provided limited details about the structure of their training, other than stating that the health professionals received online training. Also, in their discussion paper, Cassidy (2011) did not cite a specific study, however, they noted that the use of technology such as videoconferencing, telehealth, wikis, listservs, email groups and similar computer-mediated communication tools could increase the opportunities for exchange and interactions amongst members of the COP.

While different interventions were implemented, the programs each noted benefits to clinicians. Sood et al. (2020) cited how COPs “facilitated knowledge translation by helping knowledge users become aware of multi-disciplinary knowledge and facilitating their use of it in their day-to-day work and decision making” (p. 2). The authors further stated that by interacting on a regular basis, the COP members increased their own expertise, and the program improved the confidence of people in rural areas. An important factor that was emphasized in the article is that these types of programs encompass more of a “holistic view” that traditional continuing medical evaluation and continuing professional development models making it easier to “close the gap between evidence and practice” (p. 2).

Two studies discussed belonging and participants feeling less isolated. Abiodun et al. (2020) noted that rural nurses valued “sense of belonging” and that the socio-

professional outcomes of “bonding, professional identity and application of theory in practice” were found to be significantly higher after participating in the program. Cassidy (2011) surmised that by constructing collaborative practice environments nurses in rural areas are supported and “reduce their sense of isolation in practice, increase opportunities for shared coordination of patient care, provide resources to advance care skills and increase multidisciplinary communication” (p. 105).

Other studies discussed the benefit to participants’ professional roles. Holden et al. (2015) indicated that participants reported “mental improvement in their roles through de-briefing and giving reassurance in a collegial way” (p. 7). Holden et al. further share that the elements that contributed to the success of the program included the “joint problem solving, knowledge sharing and regular communication with a group of like-minded colleagues” (p. 8). Additionally, Zournazis & Marlow (2015) found that participation in videoconferencing forums “elicits an exchange of knowledge and experiences between clinicians” (p. 121) that is “fundamental to their professional role and growth by reducing professional isolation and increasing professional support” (p. 123). Lastly, Shaikh et al. (2014) found that through participation in learning sessions, team members learned how to identify goals for improvement, formulate and implement strategies to achieve goals and overcome barriers, evaluate whether strategies are successful and use “rapid cycles of change” to make continuous improvement (p. 468).

In addition to discussing the program benefits to health professionals, some articles discussed considerations for implementation. Zournazis & Maslow (2015) state that “while this technology is valuable for professional education for those who live and

work in rural and remote communities and in non-traditional areas of practice, it must be noted that acceptance, engagement and interaction with the technology is essential to ensure success of program delivery.” (p. 120). This offers the importance that motivation and time to participate in these programs and/or COPs is crucial.

Use of Project ECHO® to Address Job Satisfaction and Burnout

Project ECHO® has been used around the world to improve knowledge and confidence and reduce the isolation felt by rural health professionals in a variety of fields (Manson et al., 2020). Developed in 2003 at the University of New Mexico School of Medicine, Project ECHO® COPs use a *Hub* and *Spoke* model of knowledge dissemination and collaborative learning. Knowledge is exchanged between interprofessional teams of specialists at an academic center (Hubs) with primary care providers (Spokes) particularly those in rural areas (Lingum et al., 2021, p. 239). Online COPs have been found to benefit health professionals’ utility, competence, and confidence (Hodge et al., 2022, p. 52). Project ECHO® bridges the gap between emerging best evidence and the application of the evidence (Lingum et al., 2021, p. 239). Online COPs have been shown to facilitate peer communication and knowledge sharing, reduce isolation, and increase intention to work in rural areas (Bikinesi et al., 2020, p. 2).

For the second research question, a total of six articles were reviewed and information was examined. The articles reviewed indicate that a Project ECHO® model of delivery can be effective in both developing an online COP and impacting rural health professionals’ job satisfaction and burnout. Key themes included: supporting evidence regarding rural health professionals’ mental health and job satisfaction, how Project

ECHO[®]'s structure specifically impacted rural health professionals by developing an online COP, and how job satisfaction was measured and impacted by implementation of a Project ECHO[®] model of delivery. Each article reviewed provided both qualitative and quantitative results regarding the effectiveness of Project ECHO[®] within the studies.

Lingum et al. (2021) conducted a study where Project ECHO[®] was used to provide an online education program to support long term care teams in Ontario, Canada. The authors utilized self-efficacy questionnaires and reported that participants demonstrated “high weekly satisfaction ratings” after engaging in the program (p. 12). They note that participation in this type of online COP affirms that others working in the same field/situation are dealing with the same issues. The study found that comfort levels increased significantly and feelings of increased connectedness through the shared experience of others were insightful and affirming. The authors further discuss how transfer of knowledge is beneficial and increased both job satisfaction and confidence amongst participants.

Hodge et al. (2022) conducted a study where Project ECHO[®] was used to provide end of life care programs to ambulance workers in the United Kingdom. The authors discuss how Project ECHO[®] develops a “ripple effect” in clinical practice by disseminating skills learned and discussed within sessions with participants beyond the actual program (p. 55). Improved self-confidence and clinical competence were achieved. The authors suggest that Project ECHO[®] should be considered as an option for enhancing education and supervision for remote clinical teams, as this represents a unique opportunity to connect health professionals and develop practice.

Manson et al. (2020) conducted a study where Project ECHO® was used to develop a COP to increase both knowledge and confidence of domiciliary care workers providing palliative care in the United Kingdom. The authors point out qualitative findings that participants “valued the opportunity to discuss issues with colleagues and enjoyed the COP that the sessions developed” (p. 35). They conclude that Project ECHO® has the potential to improve self-assessed knowledge and confidence and reduce isolation by developing a COP with other rural health professionals (p. 35).

Bikinesi et al. (2020) conducted a study where Project ECHO® was piloted in Africa to increase clinical capacity and reduce isolation while addressing the human immunodeficiency virus (HIV) services challenge. In the study, 66% of the participants experienced reduced feelings of professional isolation (p. 4–5). The authors also surmised that participants demonstrated increased knowledge, reported increased capacity and improvements in their clinical practice, expressed reduced feelings of professional isolation and cited “promotion of peer-to-peer cross facility learning” as an important motivator for attending sessions (p. 7).

Recto et al. (2023) conducted a study where Project ECHO® was used to increase the mental health of community health workers in the USA. The study found that Project ECHO® fostered an environment that allowed participants to make connections and build relationships while acquiring knowledge. They suggested that implementation of Project ECHO® can greatly impact the mental health of rural health professionals and “support from peers may help rural healthcare workers maintain healthy emotional states” (p. 70). Participants in this study explained that the program provided support such that it

“fostered a sense of togetherness and allowed them to share their personal experiences” (p. 69). These authors conclude that “when stress overpowers resilience, the well-being of healthcare workers may begin to deteriorate as well as their ability to aid their clients. This underscores the importance of supporting the mental health of health care workers as it will contribute to better efficacy of their work and ensure that healthcare workers are better able to serve their communities” (p. 70).

Use of Connectivism in Program Development

Connectivism is a conceptual framework which views learning as a “network phenomenon influenced by technology and socialization” (Goldie, 2016, p. 1064). Connectivism’s four main principles include autonomy, connectedness, diversity, and openness. These are centered around connecting nodes, which can be individuals, groups, systems, fields ideas or communities (Natt och Dag, 2017, p. 300). Connectivism seeks to explain learning in a digital age (Bozkurt & Keefer, 2018). Nurturing and maintaining connections are needed to facilitate continual learning (Goldie, 2016, p. 1065).

For the third research question, a total of seven articles were reviewed and information was explored regarding how connectivism theory was used to develop support groups. Five out of the seven articles (Bozkurt & Keefer, 2018; Davis, 2015; Goldie, 2016; Hurtubise et al., 2016; Natt och Dag, 2017) provided information relative to the research question, while two out of the seven articles (Clara & Barbera, 2014; Joksimovic et al., 2018) provided little value or limited information regarding the research question. Relative information that was synthesized from the articles included background information and main principles on connectivism; concepts and clinical

relevance on personal learning networks (PLN's), online COPs and knowledge brokers (KB's); and, how the integration of Kirkpatrick's four level model of learning was effective in the development of any online support platform or training.

The identified studies described how the use of connectivism theory can lead to the development of online COPs and PLNs. Nag och Dag (2017) described how connectivism theory was used to inform the development of a leadership program for physicians in the USA. These authors highlight that “promoting collaborations between resources and people enable participants to network and engage with each other to form PLNs.” (p. 297). The authors also state that the emergence of PLNs was a gradual process and that participants would seek each other out and share or ask colleagues about specific issues (p. 299). They further discuss that PLNs have the potential to affect both professional and personal learning by “boosting energy, stimulating growth and can lead to a revitalized individual practice” (p. 304).

Goldie (2016) discussed how background information on connectivism can be utilized to develop online learning networks. He purports that by using digital platforms such as blogs, wikis and social media, learners improve overall construct knowledge. The author further states that “creating online communities using social media promotes connectivity”, and that “using social media in medical education promotes learning engagement, feedback and collaboration, and the development of professionalism” (p. 1067). It is further suggested that “multidisciplinary collaboration could be promoted by building communities of practice that include other types of health professionals” (p. 1067).

Davis (2015) also described how connectivism theory was utilized to develop a COP for US school teachers with the use of Twitter. He states that the theory of connectivism can be used to establish online learning platforms and provide a way for professionals to “step outside of their physical workspace and find support with different professionals globally” (p. 1552). The author further states that accessibility to COPs utilizing a connectivism approach can “reduce feelings of isolation in professions that have limited opportunities to socialize with peers during the day” (p. 1552) and provide a “place to experience emotional support from colleagues” (p. 1557).

Lastly, Bozkurt & Keefer (2018) offer a lens into how connectivism theory can be employed while developing global massive open online courses (MOOCs) (p. 776). These authors offer knowledge and insight into exploring both “internal and external drives” when developing a healthcare COP (p. 776). Examples of these drives relative to the research question include (*internal*), “being emotionally present and creating a welcoming, safe space for participants to feel supported”, and (*external*) “providing opportunities to connect to personally meaningful sources or nodes” (p. 776).

Hurtubise et al. (2016) offer a descriptive design to understanding how connectivism can be employed within a COP of pediatric physiotherapists in Canada. The authors explained that COPs can contribute to improving health care measured through cost savings, increased professional competencies, the reduction of geographical and organizational barriers and professional isolation, and the implementation of new processes and technologies. These authors further explain that a common model in COPs of health care is to have a core group composed of a coordinator and clinical leaders, who

act as facilitators, have content expertise, and enable social processes. These authors highlight in their article that importance of knowledge brokers (KBs). KBs are “individuals positioned at the interface between researchers and knowledge users who can enhance communication to facilitate research uptake and bridge the research to practice gap” (p. 187). These KBs often lead the development of ideas, or management of a particular common interest shared by their colleagues and facilitate learning. It can be concluded from reviewing this article that the role of knowledge broker is important to include within the development of any PLN or COP to foster support among group members. Program developers should take this into consideration and include this position in any program design.

One article also discussed aspects of program evaluation relating to connectivism. Natt och Dag (2017) discuss how the program within the study was evaluated based on Kirkpatrick’s four level model of learning using a pre and post questionnaire. These four levels include:

1. **Reaction.** This measures participants reactions to a course.
2. **Learning.** This assesses whether the learning objectives have been met.
3. **Behavior.** This measures change in job performance.
4. **Results.** This measures impact, morale, and teamwork.

The author further explained Kirkpatrick’s model assumptions and how they relate to an organization’s success. Important information surmised from this review include, that an organization with better opportunities for training and support can attract and hire better employees, employees will stay longer with an organization that provides

better opportunities for training and connection, and employees within an organization that provides this better training will perform more successfully as a whole. This information showed that connectivism as a platform for developing LPNs and COPs could be very beneficial and offer further justification for various programs of this kind.

Summary

This structured literature review sought out to further investigate any systems and/or programs that are currently in place to support rural health professionals through three specific research questions. A total of 21 articles were reviewed and evidence was extracted to support the answers to the research questions. It was determined that rural home health professionals can be supported with the use of PLNs and/or online COPs.

Analysis of these articles suggests that a successful program could be developed by using a Project ECHO[®] model grounded on principles from connectivism theory. Suggestions for the layout and structure of this type of program could also be extracted and summarized. Sessions should include topics that are motivating to the participants. Key program elements including the use of a KB and content based on Kirkpatrick's four levels of learning should be considered to provide a more robust program. Programs should include both qualitative and quantitative outcomes using pre- and post-program assessments in the areas of clinical knowledge, self-efficacy, and professional satisfaction. By implementing these suggestions derived from this literature review, program developers have a better chance of developing a program that is both sustainable and effective in supporting rural health professionals.

CHAPTER FOUR – Description of the Proposed Program

Project Description

Maine Home Health United is an online COP and support system developed for Maine home health OTPs. This support system will consist of two components; 1) an education series that uses the Project ECHO[®] model, and 2) the establishment of a WhatsApp multimedia group. Project ECHO[®] was developed by the University of New Mexico enable knowledge-sharing using an ‘All teach. All learn.’ approach. Project ECHO[®] is delivered online, typically using the Zoom platform. ECHO participants partake in educational discussion on pre-established topics and engage in a virtual community with their peers where they share support, guidance and feedback. As a result, collective understanding of how to implement best practices and support amongst the group emerges (University of New Mexico, 2021). WhatsApp is a free, cross-platform centralized instant messaging program. Groups of users can be formed to establish collective conversations with others (WhatsApp, 2021). The combination of these technology platforms allows for greater connectivity and opportunities for interactions amongst the participants. This in turn will lead to the development of an online COP for Maine home health OTPs.

Basis of the Proposed Program

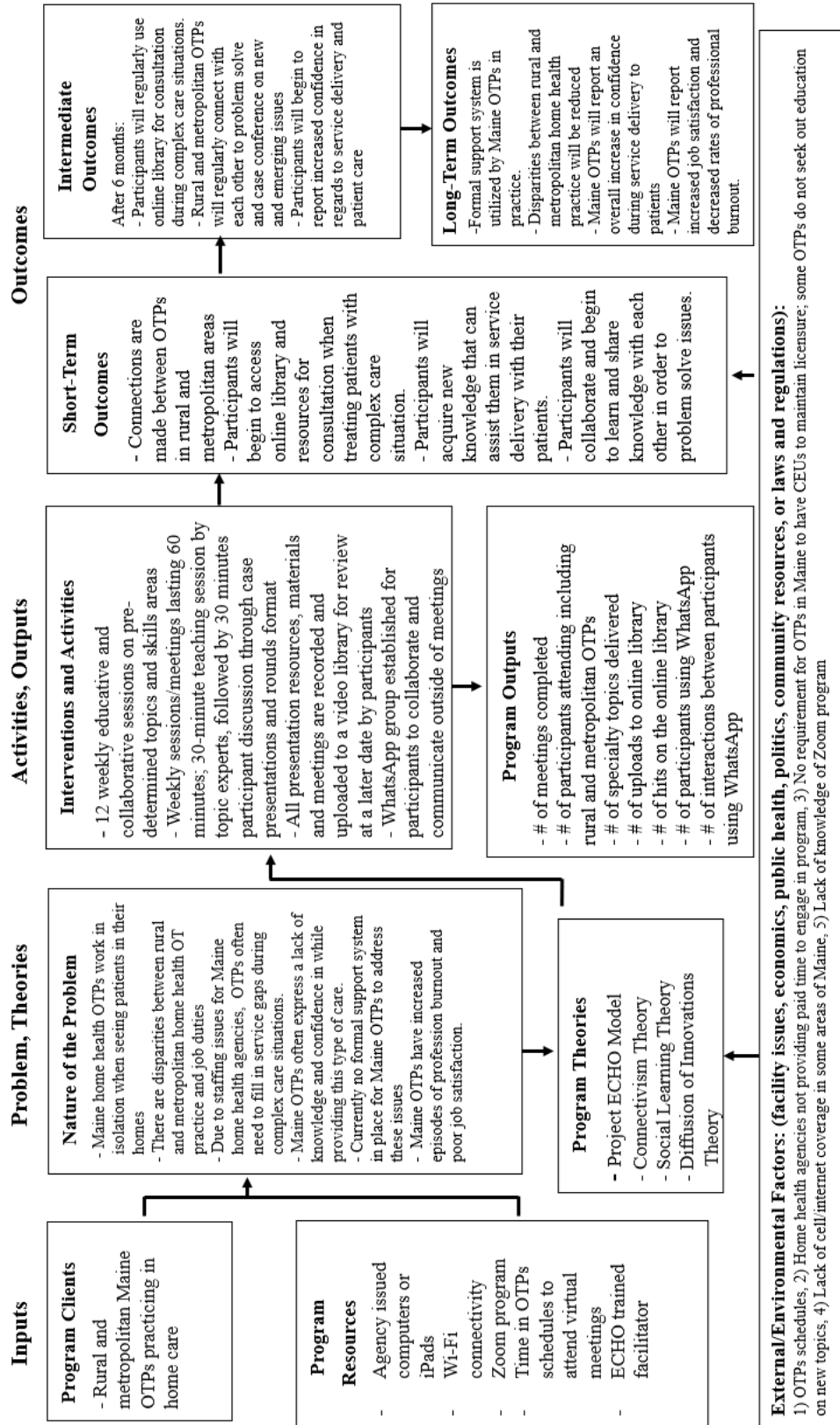
A literature review presented in Chapter 2 revealed there are limited studies with regards to the challenges of home health OT within the USA. There are also limited studies that specifically suggest how to address the problems outlined in the preceding chapters of this paper. Although there is a dearth of evidence, two studies (Peterson et al.,

2009; Johnson et al., 2003) do provide some insight into the problem and offer a vision into a solution. Johnson et al. (2003) highlights a “broad knowledge base seems to be a necessity in order to provide effective services in regard to homecare” (p. 59). Peterson et al. (2009) further advise “as a profession, we need to ensure that our colleagues who go to work are well prepared” and “we need to provide the support and knowledge they need before and after they get there” (p. 56). Neither article specifically state strategies on how that knowledge and support can be provided. Upon an expanded review of literature to include areas outside of the USA, there is recent evidence of a Project ECHO[®] program being carried out with palliative care OTPs in Ireland (Usher et al., 2021). Due to an overall lack of evidence within the USA, one could conclude there is an opportunity for further intervention and subsequent research on the program’s effectiveness for home health professionals within the USA.

Full Logic Model

The Maine Home Health United program looks to directly address the above problem with regards to service delivery among Maine home health OTPs. The logic model in Figure 4.1 is a visual representation that illustrates how the author’s proposed program will work.

Figure 4.1. Logic Model for Maine Home Health United



Program Participants

Maine home health OTPs will be directly served by this program. This platform will link rural and metropolitan therapists together in order to provide information and strategies to decrease disparities that are often seen when providing care in rural areas of Maine. Maine home health OTPs are the primary participants for this project; however, other participants may include: 1) board members of Maine Occupational Therapy Association (MEOTA), 2) OT program directors from Maine colleges and universities, 3) rehabilitation directors and/or managers of clinical operations from Maine home health agencies, and 4) research faculty from Boston University. These additional participants will allow for greater financial and educational resources for Maine home health OTPs to be able to engage in the program, help to establish a circle of Hub experts, and ensure that the program is carried out ethically and efficiently. Vignettes of two individuals that may benefit from Maine Home Health United are presented below in Figure 4.2.

Figure 4.2

Vignettes

Carol-Ann

Carol-Ann is home health OTP in a rural area of Maine. She is feeling stressed with her current caseload. She feels that her patients have increased care needs in the home. She has feelings of inadequacy regarding new and effective treatments that she can provide to these complex care patients. She also feels alone and would like to explore opportunities to increase her skill set and seek out emotional support regarding her job duties. She has explored Facebook groups but finds them impersonal and she has no real connection with the members. Carol-Ann would likely benefit from the Maine Health Care United program. Information about the program and how it may impact professional burnout, confidence with knowledge base and job satisfaction would likely pique her interest. Having testimonials on program topics, how participants interacted during the program and on the sustainability of the program would also provide good information and encourage her to participate in the next session.

Diane

Diane is a rehabilitation manager of a rural home health agency in Maine. She is concerned that due to the recent COVID 19 vaccine mandate imposed by the governor that her agency will lose valued clinicians putting further strain on her remaining staff. She knows that her staff is already stressed due to the types of patients they are seeing in the home. She is looking to offer educational sessions to support her team, but she is unsure of options and how to proceed. She is also looking to connect therapy staff from her agency to other agencies in order to offer support to each other but is unsure of her options. Diane would likely benefit from information regarding the Maine Home Health United program. Having access to outcomes data regarding the effectiveness of this program on professional burnout and job satisfaction may be beneficial to her. Diane could use this data with her administration team to advocate for her staff to engage in the program in order to promote staff retention within her department.

Participant Recruitment

The Maine Home Health United program looks to directly involve and impact Maine home health OTPs. Contact with these OTPs will first be done by identifying all home health agencies in Maine. Target letters will then be sent out to OTPs in each agency. The letter will briefly introduce the Maine Home Health United program, its components and goals. Emphasis will be given on how the program will offer new knowledge to the OTPs through means of educational sessions. Most importantly the letter will stress how connecting and collaborating with other therapists will help promote feelings of connectivity and support. A needs assessment will also be included to assist in determining session topics.

Accompanying letters to rehabilitation directors and managers of clinical operations for each home health agency in Maine will also be included. Information on how this program will look to decrease disparities between rural and metropolitan areas, connect OTPs from different agencies together to maximize resources, improve the

knowledge base of their OT staff and decrease the rate of professional burnout will also be emphasized. In addition, a statement of how improving the knowledge base and quality of life amongst their team will likely lead to more robust and productive delivery of services to the patients will also be provided.

As mentioned in prior, it is important to include both MEOTA, as well as the program directors for OT programs at Maine's colleges and universities as sponsors and collaborators in this program. Contact with these entities will be done via email and include material regarding program specifics, outcomes and goals. Emphasis on how this program can create an online COP and foster innovative research to contribute to evidence-based practice will also be stressed. Support and marketing of this program through these entities' online platform and social media outlets will also be requested.

Program Resources

This author will serve as the facilitator and program administrator for the Maine Home Health United program. This author will also partner with research personnel and the online academic team at Boston University for development of the program. It is important to specifically include the Director for Interprofessional Education and Practice, as well as, the Program Director of the Online Post-professional Occupational Therapy Program as these individuals have previously teamed up to deliver a similar Project ECHO® initiative at Boston University. It is important to have collaboration and guidance of the above individuals to ensure that the program and subsequent research is being provided ethically and effectively, and, that the Project ECHO® is being executed according to the model.

As this program uses a Project ECHO[®] form of delivery and will develop an online COP, it is important that participants have resources to access this program. These may include: 1) home health agency issues laptops, computers or iPads; 2) Zoom and WhatsApp programs loaded onto these devices; 3) WiFi connectivity; and 4) time for participants to attend online meetings within the Maine Home Health United program.

Intervention and Activities

As mentioned previously, this author will collaborate with Boston University and its research affiliates in regard to training requirements and protocols for establishing a Project ECHO[®] based program. Within Project ECHO[®] sessions, there are experts (Hub) and participants (Spokes). Project ECHO[®] trained staff and research affiliates with Boston University will work to determine the experts (Hub) for each weekly session. Each expert in the Hub will lead a 20–30-minute discussion on the pre-determined topic for the week. After this has been presented, the participants (Spokes) will have an opportunity to participate in a case study discussion relating to a real-life scenario that has been presented by one of the participants. In this discussion, participants will listen to the real-life scenario described by one of their peers, then have an opportunity to ask questions to facilitate a better understanding of issue, and then problem-solve as a group how the presenter might approach the situation using strategies or concepts from the expert presentation or their own experience. The Maine Home Health United program will be delivered via Zoom platform. All Zoom sessions will be recorded and these weekly sessions, along with any other course resources, will be uploaded to an online library that participants can refer to at a later date.

In addition to the educational sessions in Maine Home Health United, participants will have the opportunity to contribute to a WhatsApp group to further encourage connectivity amongst the group. Participants will have the opportunity to interact with each other to further discuss information related to specific sessions, as well as build upon shared experiences from case studies presented. It is important to highlight that participants will be to continue their relationships after the 12-week program with the use of this WhatsApp group. Routine contact from the program facilitator regarding feedback from sessions, overall comments and suggestions for other topics will be discussed.

The Maine Home Health United program will consist of 12 weekly sessions. Sessions will be roughly 60 minutes in length with 30 minutes of teaching by the weekly expert, and 30 minutes of further discussion through base presentations and rounds format. Six of the 12 weekly sessions will focus on pre-determined topics, while the other six will be developed as a result of responses on the needs assessment. The six pre-determined topics included are:

- 1) **Sustaining Compassion in Home Health Care.** Learn about compassion fatigue and how to cope with the cumulative effects of caring for others.
- 2) **Stress Management in Home Health Care.** Understand the impact of stress and implement new approaches to add to your toolbox
- 3) **Supporting Mental Health in Home Health Care.** Recognize mental distress and provide supportive and practical interventions to help
- 4) **Professional Boundaries in Home Health Care.** Identify and implement appropriate boundaries with clients and colleagues.

- 5) **Professional Communication Skills.** Facilitate constructive teamwork and great service through clear communication and effective listening.
- 6) **Work-Life Rhythm in Home Health Care.** Ways to manage the demands of work and personal life for long term success.

Session plans for two sessions are presented in Appendix A.

Program Output and Outcomes

The Maine Home Health United program has immediate goals and outcomes of connecting rural and metro Maine home health OTPs together. Other short term and immediate outcomes of this program include participants gaining knowledge from experts in order to assist them with service delivery with patients and to promote positive mental health and wellbeing for themselves. Participants will hopefully access the online library of uploaded resources in order to further carryover skills learned in individual sessions. These immediate and short-term results will then help to form longer and sustainable outcomes including the development of an online COP among participants and reducing the disparities between rural and metro levels of service delivery. The ultimate end goals of this program are to increase overall confidence during service delivery of patients and to increase job satisfaction while decreasing rates of professional burnout.

Anticipated Barriers and Challenges

There are several barriers and challenges that may arise that could impact the Maine Home Health United program. The two most significant barriers include the interest and buy-in of participants and the dedicated time in the participants schedule to

participate in the program. Without major interest and buy-in of the home health OTPs this program will likely not be successful. Including a small incentive like a gift card for filling out the corresponding needs assessment in the initial letter sent out to participants may both be able to gauge participant interest levels and drive topics within the program to the specific needs of the participants. Including home health administrators in this process will also help to provide support for employees in order to advocate for dedicated time to participate in the program.

Another challenge in the development of the Maine Home Health United program will be the funding to hire the session experts and program facilitator. Including these issues in the funding plan for the program will be imperative as well to its success in getting off the ground.

Summary

The Maine Home Health United program aims to connect Maine home health OTPs together through an online COP. Participants have the opportunity to interact with others through educational and collaborative sessions based upon a Project ECHO® delivery model combined with an interactive WhatsApp social group. Pre-determined topics to support the mental health of participants will be established with goals of adding new topics geared to the needs of the participants. Primary outcomes of this program will be to increase confidence with service delivery to patients and decrease risk of professional burnout.

As the Maine Home Health United is currently only geared to home health OTPs in Maine, it is imperative to emphasize how impacts of this program can be utilized for

other health professionals, disciplines and regions. As there is a dearth of evidence on the overall problem and means to resolve it, it would be vital for program developers and research personnel associated with the Maine Health United program to tap into this. Advocation and evidence for further programs like this could be very beneficial to close the gap on the overall problem of health professionals feeling unsupported and unsatisfied in their jobs. This could lead to more evidence-based practice being implemented in the greater healthcare field.

CHAPTER FIVE – Program Evaluation Research Plan

Program Scenario and Stakeholders

Maine Home Health United is an educational and informative support system developed for Maine home health OTPs. This support system will consist of two components; 1) a Project ECHO[®] education series using the Zoom platform, and 2) the establishment of a WhatsApp multimedia group. Project ECHO[®] stands for *Extension for Community Healthcare Outcomes*. ECHO participants partake in educational discussion on pre-established topics and engage in an online community with their peers where they share support, guidance and feedback. As a result, collective understanding of how to implement best practices and support amongst the group emerges (University of New Mexico, 2021). WhatsApp is a free, cross-platform centralized instant messaging program. Groups of users can be formed to establish collective conversations with others (WhatsApp, 2021). The combination of these technology platforms allows for greater connectivity and opportunities for interactions amongst the participants. This in turn will lead to the development of an online COP for Maine home health OTPs.

Maine home health OTPs will be directly served by this program. This platform will link rural and metropolitan OTPs together in order to provide information and strategies to decrease disparities that are often seen when providing care in rural areas of Maine. Maine home health OTPs are the primary stakeholders for this project; however, other stakeholders may include: 1) board members of MEOTA, 2) OT program directors from Husson University, University of Southern Maine and University of New England, 3) rehabilitation directors and/or managers of clinical operations from various Maine

home health agencies, as well as, 4) research faculty from Boston University. These additional stakeholders will allow for greater financial and educational resources for Maine home health OTPs to be able to engage in the program, help to establish a circle of Hub experts, and ensure that the program is carried out ethically and efficiently.

Vision for the Program Evaluation Research

Maine Home Health United looks to establish an online COP to support home health OTPs in Maine. With its innovative and collaborative use of technology, the program envisions providing education and support through use of Project ECHO® sessions and engagement in a WhatsApp group. Embedded within the program will be opportunities for program evaluation. This program evaluation research will not only be important to the developers of the program but will be important to all stakeholders involved. Providing both quantitative and qualitative data will offer strong evidence for the operation and effectiveness in the short and long term. Short term data will show if outcomes and initial objectives are being met. Long term data will show the overall effectiveness and sustainability of the program. This data will be important to offer greater research into use of this type of program in other states and for the greater OT community and healthcare systems at large.

Engagement of Stakeholders

The engagement and buy-in of stakeholders are central components to any research endeavor. It is important when identifying these stakeholders that specific information be tailored to each individual and/or group in order to achieve maximum acceptance and willingness to support and participate in the research project. Contact and

collaboration with stakeholders in the Maine Home Health United program is critical to both its program development, implementation and overall success. The following paragraphs highlight each specific stakeholder for the program and outline strategies of how both initial contact and active engagement with the stakeholder will be achieved. All stakeholders will then be invited to participate in an online information session and focus group at a later date.

The most important and primary stakeholder group for the Maine Home Health United program will be the Maine home health OTPs. Contact with these OTPs will first be done by identifying all home health agencies in Maine. Target letters will then be sent out to OTPs in each agency. The letter will briefly introduce the Maine Home Health United program, its components and goals. Emphasis will be given on how the program will offer new knowledge to the OTPs through means of educational sessions. Most importantly the letter will stress how connecting and collaborating with other OTPs will help promote feelings of connectivity and support.

A second stakeholder group will be the MEOTA. Contact with this group will be done via email to the chairperson of the board. Similar content on the components and goals of Maine Home Health United as identified previously in the letter to Maine home health OTPs will also be provided to the MEOTA chairperson. Emphasis on how this program will create an online COP will be highlighted. Support and marketing of this program through MEOTA's online platform and social media outlets will also be requested. Information and request for collaboration in regard to funding and/or grant writing will also be requested from this group.

Program directors for OT programs at Maine's universities will make up the third stakeholder group. An email will be sent to each program director. Background information regarding program details, outcomes and goals will also be shared. Information regarding how these universities can help foster innovative research and contribute to evidence-based practice will be stressed.

Accompanying letters to rehabilitation directors and managers of clinical operations for each home health agency in Maine will make up the fourth group of stakeholders. Information on how this program will look to decrease disparities between rural and metropolitan areas, connect OTPs from different agencies together to maximize resources, improve the knowledge base of their OT staff and decrease the rate of professional burnout will also be emphasized. In addition, a statement of how improving the knowledge base and quality of life amongst their team will likely lead to more robust and productive delivery of services to the patients will also be provided.

A final group of stakeholders that is important to consider is the research personnel and academic team at Boston University. It is important to specifically include the Director for Interprofessional Education and Practice, as well as the Program Director of the Online Post-professional OT Program at Boston University as they have previously teamed up to deliver training using Project ECHO®. It is important to have collaboration and guidance of the above individuals in order to ensure that research is being provided ethically and effectively, and that the Project ECHO® is being executed according to the model. These members will be important in designing and facilitating the online focus group and informational meeting session that will be conducted later.

Simplified Logic Model for Use with Stakeholders

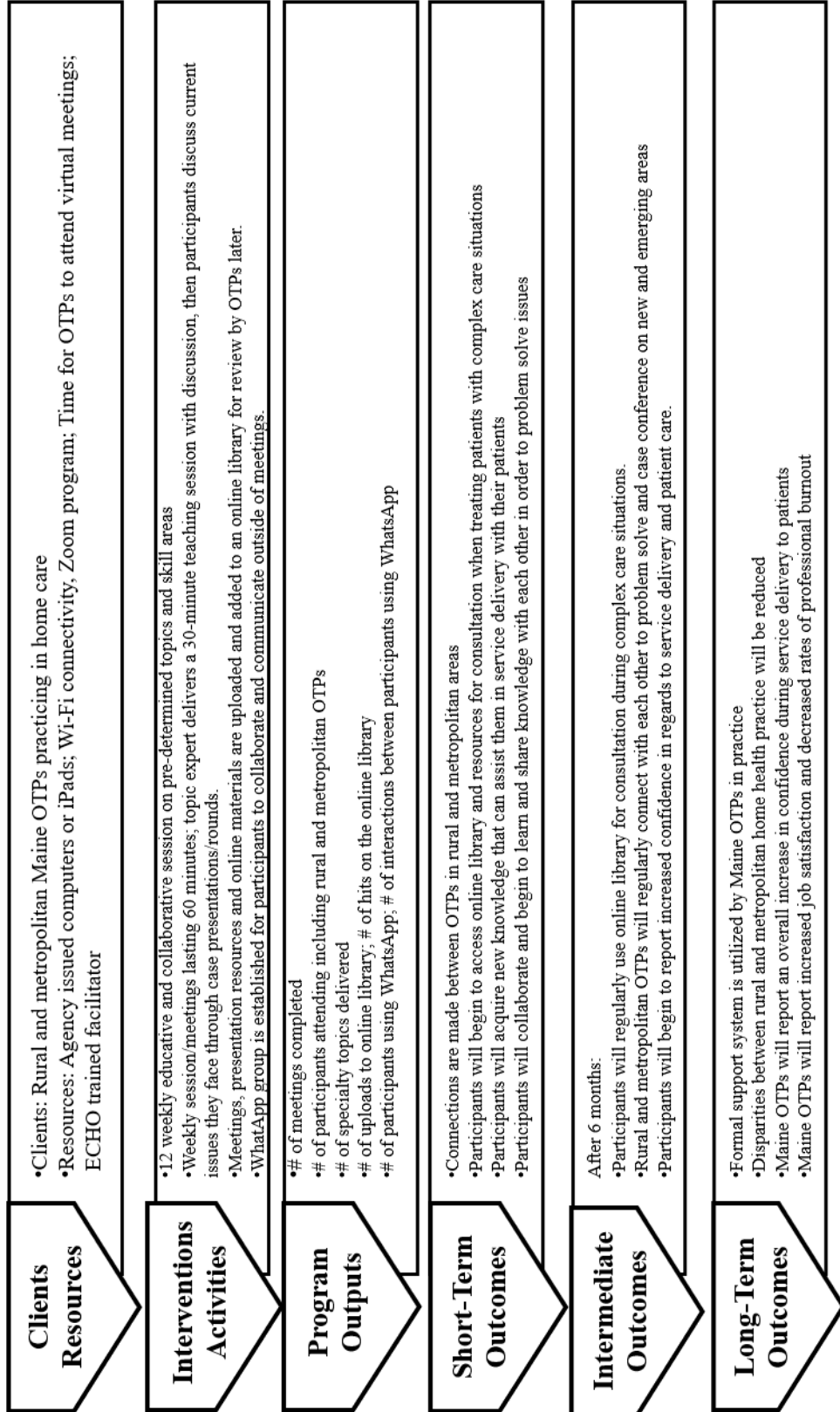
To outline how the Maine Home Health United program looks to solve the problem of decreased confidence and knowledge with complex care situations, increased rates of profession burnout and decreased job satisfaction a simplified logic model is provided in Figure 5.1. This model details expected program inputs and outputs, as well as short-term, immediate and long-term outcomes. This simplified logic model will be shared with stakeholders during the confirmatory process and online focus group.

Preliminary Exploration and Confirmatory Process

Given the wide variety of stakeholders and their perspective physical locations, an online informational meeting and focus group will be completed. The invitation for this meeting, as well as preliminary information regarding the Maine Home Health United program will be sent to stakeholders in the initial contact letter or email. A meeting agenda including topics, structure and participants will also be forwarded onto each stakeholder.

During the online meeting, there will be time for quick introductions of each participant. The meeting facilitator will specifically acknowledge and honor the perspectives and values that each participant will bring to the project. There will then be a Power Point presentation that will include background information on the problem (Johnson et al., 2003; Peterson et al., 2009), information regarding Project ECHO®

Figure 5.1. Simplified Logic Model



(University of New Mexico, 2021) followed by a short You Tube video on Project ECHO® (Robert Wood Johnson Foundation, 2014), as well as a reference to frequently asked questions about Project ECHO® (Hospice UK, 2021). The facilitator will then share the simplified logic model with participants in order to provide a theoretic outline and structure of how Maine Home Health United should achieve the intended outcomes. The facilitator will then open the floor for questions and discussion regarding the program. Participants will have the opportunity to provide direct input into this process to assure stakeholder support and buy-in of the program.

Program Evaluation Research Questions by Stakeholder Group

As mentioned earlier, each stakeholder will have a different perspective and set of goals, but all will likely share the united goal of increasing knowledge base and establishing a support system for Maine home health OTPs. Table 5.1 presents stakeholder-specific questions to be addressed by program research during soft launch of the program. These are merely proposed questions and should be confirmed with each stakeholder to ensure that assumptions about their priorities are correct.

Table 5.1*Research Questions by Stakeholder*

Stakeholder or Stakeholder Group	Types of Program Evaluation Research Questions
Primary researcher	<p><i>Qualitative:</i></p> <ul style="list-style-type: none"> • What topics were discussed during each education session? • Do participants find each topic area/session beneficial? • What do participants like about each session? • Do participants feel that they are learning new skills that will help them in providing care to complex care patients? • What new skills are they learning? • Are the participants accessing the online library? • What topics are accessed on the online library • How are participants using WhatsApp to interact with colleagues in the program? • Are participants satisfied with the structure of the Maine Home Health United program? <p><i>Quantitative:</i></p> <ul style="list-style-type: none"> • Does participation in Maine Home Health United program increase confidence levels in Maine home health OTPs? • Is professional burnout reduced amongst Maine home health OTPs after participation in the Maine Home Health United program? • How supported to home health OTPs feels after participating in the program?
Maine home health OTPs	<p><i>Qualitative:</i></p> <ul style="list-style-type: none"> • What was your overall experience with participating in Maine Home Health United? • Do you feel that topics are relevant to your practice area? • Do you feel that experts/Hub are knowledgeable on the topics they presented? • Do you feel that engaging in Maine Home Health United is a good use of your time? • Would you recommend engaging in this type of program to a colleague or professional from another discipline? • Do you feel the online library is beneficial to the program? • What suggestions would you have as a participant to improve the program?

	<p>Quantitative:</p> <ul style="list-style-type: none"> • Did participation in Maine Home Health United improve your confidence in complex care situations? • Do you feel you are less burnt out during your job after participating in Maine Home Health United? • Do you feel like you have a good support system after participating in Maine Home Health United?
MEOTA (Maine OT Association)	<p>Qualitative:</p> <ul style="list-style-type: none"> • What areas do Maine home health OTPs not feel confident in with regards to service delivery to complex care patients? • What types of topics are discussed during each education session? • Do participants feel that they are learning new skills that will help them in providing care to complex care patients? • Are participants satisfied with the structure of the Maine Home Health United program? <p>Quantitative:</p> <ul style="list-style-type: none"> • Does participation in Maine Home Health United program increase confidence levels in Maine home health OTPs? • Is professional burnout reduced amongst Maine home health OTPs after participation in the Maine Home Health United program? • Does Maine Home Health United program establish a sustainable support system for Maine home health OTPs?
OT Program Directors (Husson University, University of Southern Maine and University of New England)	<p>Qualitative:</p> <ul style="list-style-type: none"> • What topics were discussed during each education session? • Do participants feel that experts/Hub are knowledgeable on the topics they presented? • Did participants feel that they are learning new skills that will help them in providing care to complex care patients? • Are participants utilizing the online library during the program? <p>Quantitative:</p> <ul style="list-style-type: none"> • Does participation in Maine Home Health United program increase confidence levels in Maine home health OTPs? • Is professional burnout reduced amongst Maine home health OTPs after participation in the Maine Home Health United program? • Does Maine Home Health United program establish a sustainable support system for Maine home health OTPs? • Will program data from Maine Home Health United impact the current evidence for use of this type of program in OT practice?

<p>Rehabilitation Directors and MCOs of Maine Home Health Agencies</p>	<p>Qualitative:</p> <ul style="list-style-type: none"> • What areas do Maine home health OTPs not feel confident in with regards to service delivery to complex care patients? • What types of topics are being discussed during each education session? • Do participants find each session beneficial? Do participants find each session as a good use of their time? • Do participants feel that they are learning new skills that will help them in providing care to complex care patients? • Are participants using new knowledge gained while participating in Maine Home Health United program? <p>Quantitative:</p> <ul style="list-style-type: none"> • Does participation in Maine Home Health United program increase confidence levels in Maine home health OTPs? • Is professional burnout reduced amongst Maine home health OTPs after participation in the Maine Home Health United program? • Does Maine Home Health United program establish a sustainable support system for Maine home health OTPs? • Has Maine Home Health United positively impacted employee reported job satisfaction?
<p>Boston University Research Personnel</p>	<p>Qualitative:</p> <ul style="list-style-type: none"> • Was the information presented during Project ECHO® session relevant to participants needs? • Was the Maine Home Health United program of adequate duration? • Is there anything that should be changed to improve program content or delivery of the Maine Home Health United program? • Are there additional topics that should be added to Project ECHO® sessions? <p>Quantitative:</p> <ul style="list-style-type: none"> • Does participation in Maine Home Health United program increase confidence levels in Maine home health OTPs? • Is professional burnout reduced amongst Maine home health OTPs after participation in the Maine Home Health United program? • Does Maine Home Health United program establish a sustainable support system for Maine home health OTPs? • Will program data from Maine Home Health United impact the current evidence for use of this type of program in OT practice?

Research Design/Data Collection Methods and Analysis

Data Collection Methods

Maine Home Health United will employ a mixed methods research design using both qualitative and quantitative approaches to data collection. Both formative and summative design components will be utilized prior to participation in the program, during the implementation of the program, directly after the program and six months following completion of the program. Surveys will incorporate both quantitative data collection with use of Likert scales and descriptive data, as well as qualitative data collection with use of open-ended questions. These surveys will be generated with use of Qualtrics. The Maslach Burnout Inventory is the most widely used instrument by researchers to measure burnout (Poghosyan et al., 2009). The Maslach Burnout Inventory captures three dimensions of burnout: emotional exhaustion (EE), depersonalization (DP) and personal accomplishment (PA) (Poghosyan et al., 2009). The Maslach Burnout Inventory will also be administered online using Qualtrics and provide quantitative summative data. Focus groups will be completed and recorded over the Zoom platform and audio will be transcribed into text format. These focus groups will provide an opportunity to capture qualitative data, that is both formative and summative in nature throughout the implementation of the program.

As program evaluation data will be imbedded throughout the program, it is important to identify these key timeframes, highlight what data are being obtained and with what type of measure, and offer a goal/intention for the data. Table 5.2 presents a summary of data collection at each phase of the program.

Table 5.2*Summary of Data Collection During the Program*

Phase	Data Collection
<i>Program Development:</i>	At this phase, a self-developed questionnaire/survey will be administered to Maine home health OTPs. The goal of data analysis is to identify specific trends/topics that these participants would like to be covered within the Project ECHO® program. Once data from this needs assessment has been analyzed, a focus group between program developers and experts could then be initiated in order to develop a specific curriculum for the ECHO program. It is important to gather this type of formative qualitative data through a needs assessment survey in order to specifically tailor the program to the participants.
<i>Pre-execution of the Program:</i>	At this phase, an online survey will be administered to get baseline data of participants. This survey will include both quantitative and qualitative data areas. Quantitative data will include use of Likert scales regarding confidence and job satisfaction. Qualitative data will be obtained from open ended questions to derive descriptive information on what participants feelings and experiences are in relation to education session topic areas. The Maslach Burnout Inventory will also be administered at this time to establish levels of professional burnout amongst participants prior to partaking in the Maine Home Health United program. This information will be considered quantitative pre-summative data .
<i>Execution of the Program:</i>	Embedded within the ECHO program model and after each education session, participants will complete a brief online survey. The goal of formative qualitative data is to identify the experiences and feelings the participants are having while engaging in the program to see if the program is meeting intended outcomes and short-term goals as outlined in the program's logic model. Program feedback will also be derived from this data in order to make needed changes in the program prior to its completion.
<i>Directly after completion of program:</i>	At this point in the program, the online survey that was administered during pre-execution of the program will be readministered to participants. This will provide an opportunity to gather both quantitative and qualitative summative data on participants levels of confidence with complex care situations and job isolation after engaging in the ECHO program. In this phase, it will be important to gear questions and elicit responses that highlight

	<p>testimonials of the participants to derive the effects the program had on the participants. The Maslach Burnout Inventory will also be administered at this time in order to provide quantitative summative data on the effects that the program may have had on levels of professional burnout amongst participants. Further at this point in the program, a focus group of select participants will also be conducted in order to provide qualitative summative information and experiences they had in the program. A goal for this area of data collection would be to see if long term goals were achieved. This could also offer opportunity to gather formative data on how to refine topic areas, structure and delivery of future ECHO programs.</p>
<p><i>Six Month Follow up:</i></p>	<p>This phase would include an online survey to see if participants are utilizing skills and knowledge gained in the program. An opportunity for a focus group at this stage would also be appropriate. A goal of this type of formative data collection would offer justification for sustainability of the program. This information could then be presented to stakeholders in development of further programs and as a means to provide evidence on the effectiveness of Project ECHO® type programs.</p>

Confidentiality

During data collection throughout the program, it is imperative that confidentiality be maintained. There are several avenues that program developers at Maine Home Health United will take to ensure this. Since all focus groups and Project ECHO® education sessions will be delivered via Zoom, a permission to record will be required at the start of all online meetings. Participants will be guaranteed that all data collected will be confidential. In regard to completion of online surveys, participant names will be replaced with a non-identified ID. When using Qualtrics, pre- and post-surveys by respondents will be linked together using non-identified ID. Only members of the research team will be able to match IDs to participants names. All qualitative reports will also be reviewed to ensure comments from surveys or focus groups do not

inadvertently reveal the identity of the person. All information will be maintained on a secure server through Boston University.

As there will be collaboration with academic advisors and research personnel through Boston University, it will likely benefit the primary researcher to collaborate with Boston University's Institutional Review Board (IRB) in regard to implementation of the Maine Home Health United program. Initial contact will be made with Boston University's IRB department to request review of the program prior to any implementation of any components of the program. This will ensure appropriate ethical responsibility on the part of the primary researcher.

Data Management and Analysis

Since the program evaluation for Maine Home Health United utilizes a mixed methods approach and generates both qualitative and quantitative data, a computer program that specializes in analysis of this data will be utilized. Primary researchers will collaborate with Boston University research personnel to determine the most appropriate program to generate the thematic analysis and descriptive statistics intended.

Qualitative data generated from open ended questions will be analyzed by researchers for themes using thematic analysis. Descriptive codes will have been predetermined based on research questions. Responses will be reviewed with themes classified by code. These codes then will further be analyzed to develop themes within the data. These themes can then be provided within the overall findings to provide evidence for overall impact and effectiveness of the Maine Home Health United program.

Quantitative data will be generated from both responses on surveys and by completing the Maslach Burnout Inventory prior to engaging in the Maine Home Health United program and after completion of the program. Survey responses and completion of the Maslach Burnout Inventory will be entered and collected by utilizing Qualtrics. An analytic feature of Qualtrics is to generate descriptive statistics. This data will be utilized to demonstrate the degree of change on dependent variables by the independent variable. The Maine Home Health United program would be considered the independent variable and participant knowledge, levels of job satisfaction, confidence and burnout would all be considered dependent variables. Preliminary inferential statistics would be generated at this time as well to determine the overall degree of change from pre- to post-program.

Appropriate analysis of data from program evaluation of the Maine Home Health United program is crucial to determine the overall effects of the program on the participants and to see whether the program did what it was intended to do. This would further provide explanatory methods by establishing causal connections between the program and its outcomes.

Disseminating the Findings of Program Evaluation Research

When disseminating findings regarding the Maine Home Health United program, it is important to consider each stakeholder group. It is important to generate a means of communication and style that catches their interest, provides key information at a glance, is easy to read and follow and answers their questions. Below is a list of suggested communication for each stakeholder group involved with the Maine Home Health United program.

The first and most important stakeholder group is that of the Maine home health OTPs. It is suggested at first that a critical statement be written to highlight results including the connectivity and support among participants, as well as the data rates for professional burnout. A two-page executive summary could then be provided as a secondary form of communication upon request. This report could further highlight program methodology and findings.

The second stakeholder group for this program is that of MEOTA. A two-page executive summary highlighting the findings with emphasis on how this program establishes an online COP for Maine home health OTPs. Leaders of MEOTA then may request a formal technical report to provide further evidence on the program.

As program directors of OT programs at Maine's universities make up the third stakeholder group, it is important to include them in the dissemination of findings. Since this group is primarily compiled of researchers and academicians, it would be imperative to provide a formal technical report outlining the innovative research and evidence-based practice data and results in their communication. Providing a more robust report to this group will also increase the buy in for future endeavors and to include programs like this for other disciplines.

The fourth stakeholder group for the Maine Home Health United program is that of the rehabilitation directors and managers of clinical operations for each of Maine's home health agencies. As these individuals are extremely busy, a critical statement sent via email is likely to pique their interest. Emphasizing how the program effected professional burnout amongst participants would be of the most impact. These

stakeholders may then request further information at which time an outline report may be best suited to highlight key points and results of the program.

The final stakeholder group includes that of Boston University faculty. Much like the program directors of Maine's universities, this group will include researchers, academic mentors and advisors. A technical report is best suited for this group of stakeholders. Information including the innovative research and evidence-based practice should be emphasized.

As Maine Home Health United is specifically geared to Maine home health OTPs at time of soft launch, it is imperative to emphasize how the results of this program evaluation can potentially be utilized for other health professionals and disciplines. As there is a dearth of evidence on the overall problem and means to resolve it, it would be vital for program developers and research personnel associated with the Maine Home Health United program to tap into this. Advocation and evidence for further programs like this could be very beneficial in order to close the gap on the overall problem of healthcare workers feeling unsupported and unsatisfied in their jobs. This could lead to more evidence-based practice being implemented in the greater healthcare field at large.

CHAPTER SIX – Dissemination Plan

Summary of Proposed Program

Maine Home Health United is an online COP for Maine home health OTPs. This program aims to connect Maine home health OTPs together by utilizing a Project ECHO® delivery model combined with an interactive WhatsApp social group. This program will include 12 weekly sessions that are 60 minutes in length; 30-minute teaching sessions by topic experts, and 30-minute participant discussion through case presentations and rounds format. Through use of a Zoom platform, participants will engage in educational conversations and discussions on pre-established topics to support the mental health of Maine home health OTPs, as well as identify subsequent session topics geared to the specific needs of these practitioners. All Zoom sessions will be recorded and each weekly session, along with other course resources, will be uploaded to an online library that participants can refer to later. As a result, collective understanding of how to implement best practices and support amongst the group emerges (University of New Mexico, 2021). WhatsApp is a free, cross platform centralized instant messaging program. Groups of users can be formed to establish collective conversations with others (WhatsApp, 2021). The combination of these technology platforms allows for greater connectivity and opportunities for interactions amongst the participants. This in turn will lead to development of an online COP for Maine home health OTPs.

Dissemination Goals

The dissemination of Maine Home Health United looks to achieve both immediate/short term and overarching/long-term goals. The immediate/short term goals of Maine Home Health United are prior to implementation of the program and include:

- 1) generate awareness regarding professional burnout in home health OTPs,
- 2) identify how communities of practice have looked to support home health OTPs, and
- 3) share how use of Project ECHO[®] based models has been used to address job satisfaction and burnout in home healthcare OTPs.

More overarching/long term goals of Maine Home Health United are after implementation of the program and include:

- 1) establish a formal support system and community of practice for Maine home health OTPs,
- 2) share if engagement in Maine Home Health United has increased confidence in Maine home health OTPs,
- 3) share if overall job satisfaction and professional burnout rates have been impacted by implementation of Maine Home Health United, and
- 4) share if outcomes of Maine Home Health United can be generalized to other healthcare practitioners.

Table 6.1 further outlines these dissemination goals.

Table 6.1*Dissemination Goals*

<p>Short Term Goals: (before implementation)</p> <ul style="list-style-type: none"> • Generate awareness regarding professional burnout in home health OTPs. • Identify how COPs have looked to support home health OTPs. • Share how use of Project ECHO® based models has been used to address job satisfaction and burnout in home health OTPs.
<p>Long Term Goals: (after implementation)</p> <ul style="list-style-type: none"> • Establish a formal support system and COP for Maine home health OTPs through Maine Home Health United. • Share if engagement in Maine Home Health United has increased confidence in Maine home health OTPs. • Share if overall job satisfaction and professional burnout rates have been impacted by implementation of Maine Home Health United. • Share if outcomes of Maine Home Health United can be generalized to other healthcare practitioners.

Target Audiences

The dissemination plan for Maine Home Health United involves three target audiences. These include:

- Primary: Maine home health OTPs.
- Secondary: MEOTA.
- Tertiary: Rehabilitation directors and/or managers of clinical operations from Maine home health agencies.

Key Messages

Table 6.2 includes key messages for each audience, primary, secondary and tertiary detailing important information about Maine Home Health United.

Table 6.2*Key Audience Messages*

<p>Primary Audience (Maine home health OTPs)</p> <ol style="list-style-type: none"> 1. Home health care practice can lead to isolation, professional burnout and poor job satisfaction. 2. Project ECHO® participants partake in educational discussion and engage in a virtual COP to share support, guidance and feedback. 3. Engaging in Maine Home Health United has the potential to increase connectivity and social support amongst members by learning and sharing knowledge with each other. 4. Participants can gain knowledge and have access to an online library from each session to review later. This can be helpful when treating patients with complex care situations. 5. Participation in the WhatsApp portion of Maine Home Health United has the potential to increase feelings of belonging amongst participants. 6. Participation in Maine Home Health United has the potential to improve confidence with service delivery and patient care.
<p>Secondary Audience (MEOTA)</p> <ol style="list-style-type: none"> 1. Maine home health OTPs often work in isolation when seeing patients in their homes. 2. There are disparities between rural and metropolitan Maine home health OTPs. 3. Maine OTPs often express a lack of knowledge and confidence while providing care. 4. Currently there is no formal support system in place for Maine OT home health practitioners to address these issues. 5. Maine Home Health United utilizes a Project ECHO® model combined with WhatsApp social program to connect Maine home health OTPs together. 6. This connection has the potential to improve overall confidence with service delivery and in turn decrease rates of professional burnout and job satisfaction amongst Maine home health OTPs.
<p>Tertiary Audience (Rehabilitation Directors and Managers of Clinical Operations)</p> <ol style="list-style-type: none"> 1. Maine home health OTPs have increased episodes of professional burnout and poor job satisfaction. 2. Maine home health OTPs often do not feel supported in their jobs. 3. Maine home health OTPs lack knowledge in specific service delivery areas. 4. Engagement in Maine Home Health United has the potential to create a virtual COP leading to regular connection with others to problem solve and case conference on new and emerging areas. 5. Engagement in Maine Home Health United has the potential for participants to report increased job satisfaction and decreased rates of professional burnout leading to overall decreased attrition rates of practitioners.

Source/Messengers***Primary Audience***

This author, Sarah B. Harvey OTR/L, is a licensed occupational therapist in Maine and practiced in home health services from 2016–2022. This author personally struggled with burnout and decreased job satisfaction and looked to find a source of support and connectivity during her time as a home health OTP, hence applying to the Post Professional Occupational Therapy Doctorate (PP-OTD) program at Boston University. This author will be able to connect with the primary audience given her personal history with the subject matter. The primary audience will likely be able to relate and be more forthcoming with information regarding further development of Maine Home Health United

Secondary Audience

This author has contacted the current President of MEOTA directly regarding the Maine Home Health United program. She provided information and suggestions to this author in regard to working with the special interest section for adult rehabilitation in MEOTA, and submitting a proposal for a presentation at state conferences.

Tertiary Audience

The Director of Community Outreach and Philanthropy Officer for Northern Light Mayo Regional Hospital in Dover-Foxcroft, Maine has access to various community leaders and agencies that could assist this author with disseminating information to home health agencies in Maine, as well as potential funding sources. She will also be able to assist this author with marketing and social media posts regarding

Maine Home Health United through various Northern Light Health channels.

Dissemination activities, tools/techniques, timing, and responsibilities

To disseminate information regarding the Maine Home Health United program, this author will have to create and engage in various activities and tools to reach each specific audience. These can be categorized as written information, electronic media and person-to-person contact. The following paragraphs will highlight each target audience and the specific dissemination activities and tools that will be created.

Preliminary Activities

Prior to the execution of dissemination activities and tools to each audience, this author will create various pieces of written information including a two-page fact sheet that will include information on the Maine Home Health United program with specific emphasis on the six session topics focused on supporting the mental health of Maine home health OTPs, as well as a formal Executive Summary on Maine Home Health United that provides more in-depth information and research basis for the program. Lastly, this author will participate in an electronic media *Health Matters* podcast through Boston University in order to provide a free link to all three audiences.

Primary audience activities

For the primary audience of Maine home health OTPs, this author will begin by identifying all home health agencies in Maine. Next, a target email (written electronic media) will be sent to each OTP in the agencies. A simple introduction about Maine Home Health United followed by attachment of the two-page fact sheet (written information) and link to Boston University podcast (electronic media) will be included.

Lastly, a link to an online survey (electronic media) that includes the Maslach Burnout Inventory and other Likert scales regarding job satisfaction and confidence will be provided. For each completed survey this author will send practitioners a \$5.00 Dunkin (coffee shop) card. This will help the author to gauge interest in the program, as well as formative data regarding the job satisfaction and confidence of Maine home health OTPs.

Secondary Audience Activities

For the secondary audience, this author will send a target email (written electronic media) to the president of MEOTA with a copy of the executive summary on Maine Home Health United (written information), link to Boston University (electronic media) and data from the survey provided from questions generated to Maine home health OTPs. This author will request support and marketing of the Maine Home Health United program through MEOTA website and social media platforms. This will help to further promote and endorse engagement in the program. This author will also have the potential of presenting this proposal at the MEOTA annual conference (person-to-person contact).

Tertiary Audience Activities

For the tertiary audience of rehabilitation directors and managers of clinical operations of Maine home health agencies, a similar target email including a copy of the executive summary on Maine Home Health United (written information), link to Boston University (electronic media) and data from the survey provided from questions generated to Maine home health OTPs will also be provided. This author will again request support and marketing of the Maine Home Health United program through agency websites and social media platforms.

Final Activities

After implementing all the above activities with each audience, a final online meeting and focus group will be established. An online PowerPoint presentation (written electronic media) will be shared. Further explanation and outline of simplified logic models (written electronic media) will be shared with participants. Participants will then be able to engage in a question-and-answer period. This may lead to identifying further topics to add to the remaining six Maine Home Health United sessions.

Budget

Table 6.3 outlines the preliminary budget for dissemination costs. The costs related to the needs assessment, survey and Dunkin gift cards to practitioners that respond to target emails are already included and factored into other areas of the budget noted in Chapter 7. This should be pointed out as to not incur double costs for these activities.

Table 6.3

Dissemination Costs

Audience	Expenses	Cost
Primary (Maine home health OTPs)	Target Emails Fact Sheet Podcast Link Needs Assessment Survey https://www.mindgarden.com/maslach-burnout-inventory-mbi/765-mbi-license-to-administer.html Dunkin gift cards	\$0 (Microsoft Word and Outlook programs available to author). **Funds for Maslach Burnout Inventory (MBI) \$137.50–193 are included in Chapter 7 Funding Plan (Funds for Dunkin gift cards \$250–500 are included in Chapter 7)

Secondary (MEOTA)	<p>MEOTA Dues and participation https://www.maineot.org/membership</p> <p>Target Emails Executive Summary Podcast Link</p> <p>Needs Assessment Survey data (as above)</p>	<p>\$50 MEOTA Annual Dues \$0 for program proposal to MEOTA \$500 potential travel, hotel and meals cost to attend and present at MEOTA conference</p> <p>\$0 as these are part of use of Microsoft Word and Outlook programs available to author.</p> <p>(Funds for Maslach Burnout Inventory (MBI) \$137.50–193 are included in Chapter 7 Funding Plan)</p>
Tertiary (Rehabilitation Directors and Managers of Clinical Operations)	<p>Target Emails Executive Summary Podcast Link</p> <p>Needs Assessment Survey data (as above)</p>	<p>\$0 as these are part of use of Microsoft Word and Outlook programs available to author.</p> <p>(Funds for Maslach Burnout Inventory (MBI) \$137.50–193 are included in Chapter 7 Funding Plan)</p>
Total Dissemination Costs		<p>\$550</p> <p>(\$387.50–693 costs already included in Chapter 7 Funding Plan)</p>

Evaluation

To determine the effectiveness of the dissemination of Maine Home Health United, this author will evaluate all aspects of dissemination and determine how impactful they have been. This will also help in refining further dissemination activities and tools. This author will use a number of follow up metrics across all dissemination activities and tools as a measurement of effectiveness and impact. These include: 1) number of general responses to target emails sent out to the various audiences; 2) number of responses to needs assessment survey by Maine home health OTPs; 3) number of podcast views; 4) number of attendees at an online meeting; and lastly, 5) number of Maine home health OTPs that sign up for Maine Home Health United.

Conclusion

This chapter outlines the dissemination plan for the Maine Home Health United program. Goals, target audiences, key messages, sources/messengers, dissemination activities and tools, overall budget and evaluation metrics were identified. Through execution of this dissemination plan, Maine Home Health United has better success of being actively launched, as well as including a robust support system for the program. This will ultimately lead to positive outcomes and successes for all participants.

CHAPTER SEVEN – Funding Plan

Summary of Proposed Program

Maine Home Health United is an online COP designed to support home health OTPs in the state of Maine. This support system will consist of two components; 1) a Project ECHO® education series using Zoom, and 2) the establishment of a WhatsApp multimedia group. Through Project ECHO®, participants partake in educational discussion on pre-established topics and engage in an online community with their peers where they share support, guidance and feedback. Maine Home Health United will have 12 weekly sessions that are 60 minutes in length; 30-minute teaching sessions by topic experts, and 30-minute participant discussion through case presentations and rounds format. Six of the 12 weekly topics will be pre-determined and include:

- 1) Sustaining compassion in home health care.
- 2) Stress management in home health care.
- 3) Supporting mental health in home health care.
- 4) Professional boundaries in home health care.
- 5) Professional communication skills.
- 6) Work-life rhythm in home health care.

The remaining six weekly topics will be determined from the initial needs assessment email sent out to Maine Home Health OTPs. All Zoom sessions will be recorded and each weekly session, along with other course resources, will be uploaded to an online library that participants can refer to at a later date. In addition to the 12 weekly sessions, participants will have the opportunity to contribute to a WhatsApp group to

further encourage connectivity amongst the group. The ultimate goals of this program are to increase overall confidence and skills during service delivery of patients, and to increase job satisfaction while decreasing rate of professional burnout for home health OTPs in Maine.

When creating and proposing Maine Home Health United, it is important to research the cost of running a Project ECHO® program. Via email the Outreach Manager of Project ECHO® stated that use of the ECHO model, access to the resource library and collaborative community, all training and continued support, use of the iECHO platform to schedule and collect data on the program and its participants, and a Zoom license is free of charge to all signed partners with Project ECHO®. He also stated that there are some administrative costs an organization may incur; however, these are highly variable based on the size and scope of the ECHO program and the infrastructure an organization may already have to absorb the workload for launching and continuing the program. These costs might include salary for a part- or full-time program administrator and stipends for session experts.

The first important step to beginning Maine Home Health United is to identify a program administrator. This author, a licensed Maine occupational therapist with prior home health experience, is the program administrator for the initial launch of Maine Home Health United. Once a program administrator has been selected, the next vital step to launching Maine Home Health United is to become a partner with Project ECHO®. This can be easily done through their online website and includes signed partnership agreement documents. After a two-week processing time, partners will then have access

to the “Becoming a Partner” email series. This series includes: 1) Introduction to ECHO sessions, 2) ECHO partner launch trainings and, 3) other self-paced online training to prepare launch for the Maine Home Health United Project ECHO® program. Program administrators are then recommended to complete ECHO Partner Launch Training. This can be done online and typically takes 2.5 days. The objectives of Partner Launch Training include: 1) providing access to online resources to operate as an ECHO Hub and assist with program launch, 2) prepare participants to run ECHO sessions, and 3) introduce participants to Project ECHO®’s ongoing opportunities and responsibilities.

Available Local Resources

When establishing Maine Home Health United, it is important to consider available in-kind local resources and personnel that are available to help the program administrator. These resources can help design, support, promote and execute the program.

As outlined previously, becoming a partner with Project ECHO® is central to its success and execution. This author/program administrator has been in contact with the Outreach Manager for Project ECHO®. He is available to assist this author/program administrator with establishing a partnership with Project ECHO® and facilitate Launch Training.

As the author/program administrator of Maine Home Health United is a post professional doctorate of OT student at Boston University, access to some of its faculty and resources are also key to offering suggestions and support to the author/program administrator. Specifically, Karen Jacobs, OT, EdD, OTR, CPE, FAOTA, and Craig

Slater, PhD, MPH, OT, are faculty members that recently developed an *Interprofessional Leadership in Healthcare Certificate* using a Project ECHO® model. Both of these individuals highlight the success and ease of utilizing a Project ECHO®.

Another significant local resource to highlight is the MEOTA. This professional group of OTPs can help in supporting Maine Home Health United by disseminating and marketing information about the program, as well as assist in funding and grant writing as needed to further support the program.

A final local resource that should be considered is the Director of Community Outreach Philanthropy Officer for Northern Light Mayo Hospital in Dover-Foxcroft, Maine. She is a valuable resource to assist with funding and grant writing as needed, as well as advocating for participation in this program through Northern Light Mayo Hospital social media accounts.

One can see that by including these in-kind local resources into the funding plan of this program, that Maine Home Health United will have a stronger foundation and program execution for its participants.

Needed Resources and Budget

When developing a funding plan for Maine Home Health United, it is important to consider all materials and costs needed to deliver the program. As highlighted earlier, use of the ECHO model, access to the resource library and collaborative community, training and virtual support, use of iECHO platform and Zoom license are all free for signed Project ECHO® partners. Participants of the program will be able to access and attend sessions with use of a computer, iPad or smart phone. Typically, all home health

OTPs, have one of these devices for their job, so additional technology materials are not necessary to include in the budget. The use of Project ECHO[®] and use of the OTPs’ own technology devices allows for only minimal overhead costs to execute the program. The majority of these remaining expenses will be money needed to reimburse the program administrator’s time, fees for session experts, permission to administer the Maslach Burnout Inventory online as part of the needs assessment, and other material costs including incentives for completion of needs assessment. These are outlined in Table 7.1.

Table 7.1

Budget

Projected expenses	Year 1	Year 2
Project ECHO[®] <i>Use of Project ECHO[®], access to library, training and virtual support, iECHO platform and Zoom</i> https://iecho.org/become-a-partner/	Free to signed partners of Project ECHO [®] Total Cost: \$0	Free to signed partners of Project ECHO [®] Total Cost: \$0
Program Administrator <i>Licensed Occupational Therapist in the State of Maine</i>	\$42.25 hourly rate Hours to attend ECHO training (2.5 days = 20 hours) Hours to complete Needs Assessment and follow up (40 hours) Hours to facilitate Project ECHO [®] sessions and follow up (12 hours) Total hours: 72 Total Cost \$3,042	*Pending COLA (cost of living adjustment) wage increase (3%) \$43.52 hour rate Hours to complete Needs Assessment and follow up (40 hours) Hours to facilitate Project ECHO [®] sessions and follow up (12 hours) Total hours: 52 Total Cost \$2,263

<p>Session Experts <i>Names and disciplines to be determined</i></p>	<p>\$100 per hour</p> <p>12 60-minute sessions (12 hours)</p> <p>Total hours: 12 Total Cost: \$1,200</p>	<p>\$125 per hour</p> <p>12 60-minute sessions (12 hours)</p> <p>Total hours: 12 Total Cost: \$1,500</p>
<p>Maslach Burnout Inventory (MBI) <i>Allows program administrator to administer the MBI as an online survey or a pen and pencil survey.</i></p> <p><i>Includes: 5 MBI forms, scoring keys and permissions for up to the quantity purchased</i> https://www.mindgarden.com/maslach-burnout-inventory-mpi/765-mpi-license-to-administer.html</p>	<p>Minimum of 50: \$137.50 50–100 therapists in program Total Cost: \$137.50–193.00</p>	<p>Minimum of 50: \$137.50 50–100 therapists in program Total Cost: \$137.50–193.00</p> <p>****cost will increase if program expands to over 100</p>
<p>Dunkin Donuts Gift Card for Needs Assessment Participation</p>	<p>\$5.00 per therapist submission 50–100 therapists Total Cost: \$250–500</p>	<p>\$5.00 per therapist submission 50–100 therapists Total Cost: \$250–500</p>
<p>Communication and Participation in ECHO for participants <i>Agency issued computers, iPads or smart phones</i> <i>Use of Outlook email</i> <i>Use of WhatsApp</i></p>	<p>Free</p> <p>Total Cost: \$0</p>	<p>Free</p> <p>Total Cost: \$0</p>
<p>Dissemination Costs</p>	<p>Total Cost: \$550</p>	<p>Total Cost: \$550</p>
<p>Total Program Costs</p>	<p>\$5,485 (maximum)</p>	<p>\$5,006 (maximum)</p>

Potential funding sources

While overall costs to implement the Maine Home Health United Project ECHO[®] are fairly low, it is important to research potential funding sources. Project ECHO[®]'s website indicates that there is no dedicated federal funding, however, certain grants like the Robert Wood Johnson Foundation and Helmsley Charitable Trust offer potential funding sources on the national level. Project ECHO[®]'s website also suggests partnerships and collaborations with healthcare organization and institutions to share funding and resources. As this author/program administrator is a student through Boston University, collaborating with student research grant opportunities could also prove effective. On the local level, collaboration with MEOTA and the Director of Community Outreach Philanthropy Officer at Northern Light Health, could offer funding sources on the rural/local level. These potential funding sources are outlined in Table 7.2.

It is important to note that these funding sources change frequently and often have new opportunities. It is recommended to create accounts and searches with these funding sources and check back often to see if new opportunities have arisen.

Table 7.2*Funding Sources*

Funding Source	Description	Utilization	Amount
Robert Wood Johnson Foundation https://www.rwjf.org/en/grants/active-funding-opportunities.html	Funds research and initiatives focused on achieving health equity	Database that offers different funding opportunities. Can sign up for new funding and grant alerts on website	Various amounts
Helmsley Charitable Trust https://helmsleytrust.org/our-grants/	Partners with people and organizations to invest in new ideas or research across 6 areas including rural healthcare	Database that offers different funding opportunities	Various amounts
Boston University https://www.bu.edu/sargent/research/research-funding-administration/funding-opportunities-for-sargent-faculty-and-students/student-research-grant/	Available to Sargent College students and postdoctoral fellows working with Sargent-primary faculty		\$5,000
MEOTA https://www.maineot.org/AWARDSANDSCHOLARSHIPS	Offer various scholarships and can assist in finding rural funding		\$250 and up
Hillary Starbird (Director of Community Outreach Philanthropy Officer)	Has direct access to look for state and local funding and grants	Can assist with providing experts for sessions. Can also work with local civic groups to elicit funding (i.e., Kiwanis Club)	Various amounts

Conclusion

This chapter reviewed the funding plan for the proposed Maine Home Health United Project ECHO® program. Various in-kind local resources were highlighted, Year 1 and Year 2 budget projection tables were created, and potential funding sources were outlined. This program aims to create an online COP in order to support home health OTPs in the state of Maine. By engaging in this program, the overall confidence level of participants is projected to increase leading to an overall decrease in practitioner burnout and attrition rates.

CHAPTER EIGHT – Conclusion

Access to health services for rural populations of the USA and retention of health professionals in these areas is a growing topic of attention and concern (Rural Health Research Center, 2016). Health professionals have faced unprecedented circumstances with increased workload pressures, exacerbating pre-existing low staffing levels, and changing guideline (Lingum et al., 2021, p. 238). The increasing needs of rural communities are resulting in mental fatigue, burnout, and poor mental health in healthcare practitioners (Recto et al., 2023). Many rural health professionals have reported feeling isolated because of their lack of contact with other health professionals and having limited opportunity to discuss issues with colleagues (Manson et al., 2020, p. 31).

Home health services are medical services provided in the home by a skilled licensed provider (Rural Health Research Center, 2017). OTPs are critical members of the home health care team, providing direct patient care, education, and advocacy in the community through the provision of their OT services (Roots & Li, 2013). There is growing concern that health professionals in rural home health settings experience high levels of stress, isolation, and burnout.

A structured literature review was conducted to investigate further the factors that influence stress, isolation, and burnout in rural home health professionals. As highlighted in Chapter 2, articles reviewed suggest that rural health professionals feel a lack of support in their jobs, and there needs to be an investment in rural infrastructure, training,

and resources (Forbes & Edge, 2009; Leipert et al., 2007; Ohta et al., 2020; Toze et al., 2019). Solutions to offer this support through online technology platforms were further explored (Cassidy, 2011).

A second structured literature review was conducted to inform the successful program's design. This synthesis, detailed in Chapter 3, sought to investigate any existing systems and/or programs and evaluate their effectiveness. It was determined that rural home health professionals can be supported by using personal learning networks and/or online COPs. Project ECHO® bridges the gap between emerging best evidence and the application of the evidence (Lingum et al., 2021, p. 239). Analysis of articles suggests that a successful program could be developed by using a Project ECHO® model grounded on principles from connectivism theory. Suggestions for the layout and structure of this type of program could also be extracted and summarized.

Home health OT practice in Maine has proven to be challenging and ever-changing in the past few years. Several obstacles and disparities explained in Chapter 1 show that Maine home health OTPs often lack knowledge and confidence when providing care to their patients in the homecare settings. There are no formal support systems for Maine home health OTPs to gain needed knowledge and provide guidance for these issues. As a result, Maine home health OTPs often report increased episodes of professional burnout and poor job satisfaction.

The Maine Home Health United program aims to connect Maine home health OTPs through an online COP. As discussed in Chapter 4, Maine Home Health United

will consist of two components: 1) a Project ECHO[®] education series using Zoom, and 2) the establishment of a WhatsApp multimedia group. Maine Home Health United will have 12 weekly sessions that are 60 minutes in length, 30-minute teaching sessions by topic experts, and 30-minute participant discussion through case presentations and rounds format. Six of the 12 weekly topics will be pre-determined and include:

- 1) Sustaining compassion in home health care.
- 2) Stress management in home health care.
- 3) Supporting mental health in home health care.
- 4) Professional boundaries in home health care.
- 5) Professional communication skills.
- 6) Work-life rhythm in home health care.

The remaining six weekly topics will be determined from an initial needs assessment email sent to Maine home health OTPs. All Zoom sessions will be recorded, and each weekly session, along with other course resources, will be uploaded to an online library that participants can refer to later.

Appropriate analysis of data from program evaluation of the Maine Home Health United program, as well as the dissemination of these findings, is crucial in order to determine the overall effects of the program on the participants and to see whether the program did what it was intended to do. Details regarding program evaluation and dissemination of findings from the Maine Home Health United program are explicitly

described in Chapters 5 and 6. Goals, target audiences, key messages, sources/messengers, dissemination activities and tools, overall budget and evaluation metrics were all identified.

The funding plan for Maine Home Health United was further detailed in Chapter 7. Important takeaways are that the use of the ECHO model, access to the resource library and collaborative community, training and virtual support, use of iECHO platform, and Zoom license are all free for signed Project ECHO® partners. Participants of the program will be able to access and attend sessions using a computer, iPad or smartphone. The use of Project ECHO® and the use of the OTPs' own technology devices allows for only minimal overhead costs to execute the program. The majority of these remaining expenses will be money needed to reimburse the program administrator's time, fees for session experts, permission to administer the Maslach Burnout Inventory online as part of the needs assessment, and other material costs, including incentives for completing needs assessment.

While overall costs to implement the Maine Home Health United Project ECHO® are relatively low, it is crucial to research potential funding sources. Project ECHO®'s website indicates that there is no dedicated federal funding. However, specific grants like the Robert Wood Johnson Foundation and Helmsley Charitable Trust offer potential funding sources on the national level. Project ECHO®'s website also suggests partnerships and collaborations with healthcare organizations and institutions to share

funding and resources.

By learning and sharing knowledge, the Maine Home Health United program has the potential to increase connectivity, social support, and feelings of belonging among Maine home health OTPs. This connection has the potential to improve overall confidence with service delivery and in turn, decrease rates of professional burnout and improve job satisfaction amongst Maine home health OTPs. As Maine Home Health United is currently only geared to home health OTPs in Maine, it is imperative to emphasize how the impacts of this program can be utilized by other health professionals, disciplines, and regions. Advocacy and evidence for further programs like this could be very beneficial to close the gap on the overall problem of health professionals feeling unsupported and unsatisfied in their jobs. This could lead to more evidence-based practice being implemented in the greater healthcare field.

APPENDIX A – Maine Home Health United Sample Sessions

Session 1 Topic: *Sustaining Compassion in Home Health Care*

Introductions/announcements: A brief check-in to welcome participants and share any important updates

Expert presentation: Provided by an expert on compassion fatigue. Participants will learn about compassion fatigue and how to cope with the cumulative effects of caring for others.

Case presentation: A participant will share their personal experience with compassion fatigue in the home health setting.

Clarifying Questions: Opportunities for participants to ask specific questions about the case or the presented information.

Discussion and collaborative problem-solving: Open discussion with the group including questions, feedback and recommendations from the expert on sustaining compassion and preventing compassion fatigue.

Final Thoughts: Summary of key points regarding compassion fatigue and discussion of future leaning objectives. Participants will then be provided with a link to a survey that includes qualitative and quantitative questions as suggested in Chapter 5 of this doctoral project.

Session will be recorded and uploaded to a virtual library for participants to review at a later date if needed.

Session 2 Topic: *Stress Management in Home Health Care*

Introductions/announcements: A brief check-in to welcome participants and share any important updates

Expert presentation: Provided by an expert on stress management. Participants will understand the impact of stress in the home health setting and how to implement new approaches to add to their toolbox.

Case presentation: A participant will share their personal struggle with stress and how they manage it in the home health setting.

Clarifying Questions: Opportunities for participants to ask specific questions about the case or the presented information.

Discussion and collaborative problem-solving: Open discussion with the group including questions, feedback and recommendations from the expert on stress management techniques.

Final Thoughts: Summary of key points regarding stress management and discussion of future leaning objectives. Participants will then be provided with a link to a survey that includes qualitative and quantitative questions as suggested in Chapter 5 of this doctoral project.

Session will be recorded and uploaded to a virtual library for participants to review at a later date if needed.

APPENDIX B – Executive Summary

Introduction

There is widespread acknowledgement that rural health care is a distinct entity with unique challenges. Rural and small towns are regions having a population of less than 10,000 (Roots & Li, 2013). Access to health services for rural populations of the US and retention of health professionals in these areas is a growing topic of attention and concern (Rural Health Research Center, 2016). The increasing needs of rural communities are resulting in mental fatigue, burnout, and poor mental health in health professionals (Recto et al., 2023). Health professionals have faced unprecedented circumstances with increased workload pressures, exacerbating pre-existing low staffing levels, and changing guidelines (Lingum et al., 2021, p. 238). Mounting evidence indicates that health professionals have suffered a deterioration in their mental health. High levels of depression, anxiety, burnout, insomnia, and stress have been reported. (Recto et al., 2023, p. 63). Many rural health professionals have reported feeling isolated because of their lack of contact with other health professionals and their limited opportunity to discuss issues with colleagues (Manson et al., 2020, p. 31).

Home health services are medical services provided in the home by a skilled licensed provider (Rural Health Research Center, 2017). Occupational therapy practitioners (OTPs) are critical members of the home health care team, providing direct patient care, education, and advocacy in the community through the provision of their occupational therapy services (Roots & Li, 2013). OTPs specialize in helping patients/clients improve their ability and independence with daily activities, provide

education on adaptive techniques, recommend assistive devices and home modifications, and collaborate with other healthcare professionals to ensure a holistic approach to care (Aveanna Healthcare, 2023).

There is growing concern that health professionals in rural home health settings experience high levels of stress, isolation, and burnout. Home health occupational therapy (OT) practice in Maine has proven to be challenging and ever-changing in the past few years. An overall aging workforce and patient population, coupled with the COVID-19 pandemic and recent vaccine mandates, have resulted in severe staffing shortages in all aspects of healthcare in Maine. Some unfortunate consequences of these factors have resulted in patients not being able to access the type of care they need and/or patients being sent home from hospitals and rehabilitation centers too soon. Patients are often then forced to remain in their homes with unmet needs. Maine home health agencies are often referred in to care for these patients in these difficult situations. Disparities are often noted between rural and metropolitan areas of coverage. Maine home health OTPs are often asked to fill in service gaps during care for these complex patient situations.

Home health OTPs often work in isolation in patients' homes and with limited resources, making caring for these patients even more challenging. Due to these new types of tasks and job challenges, Maine home health OTPs often lack knowledge and confidence when providing care to their patients in the homecare settings. There are no formal support systems for Maine home health OTPs to gain needed knowledge and provide guidance for these issues. As a result, Maine home health OTPs often report increased episodes of professional burnout and poor job satisfaction.

Key Findings

A structured literature review was conducted to investigate further the factors that influence stress, isolation, and burnout in rural home health professionals. Three key themes emerged: 1) the overall construct of job satisfaction was complex with a multitude of factors (Cosgrave et al., 2018; Jayasuriya et al., 2012; Stratton et al., 1995); 2) home health nurses and allied health professionals had lower job satisfaction as compared to other settings (Cosgrave et al., 2018; Dunkin et al., 1992; Hegney et al., 2015; Juhl et al., 1993; Macleod et al., 2017), and, 3) poor job satisfaction in rural health professionals directly related to people leaving their jobs (Cosgrave et al., 2018; Cosgrave et al., 2019; Cosgrave, 2020; Kaasalainen et al., 2017; Jayasuriya et al., 2012; Penz et al., 2008; Sacks et al., n.d.; Stratton et al., 1995). Articles reviewed suggest that rural health professionals feel a lack of support in their jobs, and there needs to be an investment in rural infrastructure, training, and resources (Forbes & Edge, 2009; Leipert et al., 2007; Ohta et al., 2020; Toze et al., 2019). Solutions to offer this support through online technology platforms were further explored (Cassidy, 2011; Eriksson et al., 2015; Gibson, 2021; Johnsson et al., 2017; Kaplan et al., 2020; Quiliam et al., 2021; Rohatinsky et al., 2020; Zournazis et al., 2018).

A second structured literature review was conducted to inform the successful program's design. This analysis sought to investigate any existing systems and/or programs and evaluate their effectiveness. It was determined that rural home health clinicians can be supported by using personal learning networks and/or online communities of practice (COPs). A community of practice is a group of people who share

a common concern, a set of problems or interest in a topic and come together to fulfil both individual and group goals (Holden et al., 2015). A community of practice (COP) may be an effective workforce development strategy.

Online COPs have been shown to facilitate peer communication and knowledge sharing, reduce isolation, and increase intention to work in rural areas (Bikinesi et al., 2020, p. 2). Project ECHO[®] has been used worldwide to improve knowledge and confidence and reduce the isolation felt by rural health professionals in various fields (Manson et al., 2020). Developed in 2003 at the University of New Mexico School of Medicine, Project ECHO[®] COPs use a Hub and Spoke model of knowledge dissemination and collaborative learning. Knowledge is exchanged between interprofessional teams of specialists at an academic center (Hubs) and primary care providers (Spokes), particularly those in rural areas (Lingum et al., 2021, p. 239). Online COPs have been found to benefit health professionals' utility, competence, and confidence (Hodge et al., 2022, p. 52). Project ECHO[®] bridges the gap between emerging best evidence and the application of the evidence (Lingum et al., 2021, p. 239).

Connectivism is a conceptual framework that views learning as a “network phenomenon influenced by technology and socialization” (Goldie, 2016, p. 1064). Connectivism seeks to explain learning in a digital age (Bozkurt & Keefer, 2018). Nurturing and maintaining connections are needed to facilitate continual learning (Goldie, 2016, p. 1065).

Analysis of articles suggests that a successful program could be developed by using a Project ECHO[®] model grounded on principles from connectivism theory.

Suggestions for the layout and structure of this type of program could also be extracted and summarized. Sessions should include topics that are motivating to the participants. Programs should include both qualitative and quantitative outcomes using pre- and post-program assessments in clinical knowledge, self-efficacy, and professional satisfaction. By implementing these suggestions derived from this literature review, program developers have a better chance of developing a program that is both sustainable and effective in supporting rural health professionals.

Project Overview

Maine Home Health United is an online community of practice (COP) designed to support home health OTPs in Maine. This author, a licensed Maine occupational therapist with prior home health experience, will be the program administrator for the program's initial launch. Maine Home Health United will consist of two components: 1) a Project ECHO® education series using the Zoom platform, and 2) the establishment of a WhatsApp multimedia group. Maine Home Health United will have 12 weekly sessions that are 60 minutes in length, 30-minute teaching sessions by topic experts, and 30-minute participant discussion through case presentations and rounds format. Six of the 12 weekly topics will be pre-determined and include:

- 1) Sustaining compassion in home health care,
- 2) Stress management in home health care.
- 3) Supporting mental health in home health care.
- 4) Professional boundaries in home health care.
- 5) Professional communication skills

6) Work-life rhythm in home health care.

The remaining six weekly topics will be determined from an initial needs assessment email sent to Maine Home Health OTPs. All Zoom sessions will be recorded, and each weekly session, along with other course resources, will be uploaded to an online library that participants can refer to later. The ultimate goals of this program are to increase overall confidence and skills during service delivery of patients and to increase job satisfaction while decreasing the rate of professional burnout for home health OTPs in Maine.

Recommendations

When developing Maine Home Health United, it is essential to consider all materials and costs needed to deliver the program. Using the ECHO model, access to the resource library and collaborative community, training and virtual support, use of iECHO platform, and Zoom license are all free for signed Project ECHO® partners. Participants of the program will be able to access and attend sessions using a computer, iPad or smartphone. Typically, all home health OTPs, have one of these devices for their job, so additional technology materials are unnecessary to include in the funding plan. The use of Project ECHO® and the use of the OTPs' own technology devices allows for only minimal overhead costs to execute the program. The majority of these remaining expenses will be money needed to reimburse the program administrator's time, fees for session experts, permission to administer the Maslach Burnout Inventory online as part of the needs assessment, and other material costs, including incentives for completing needs assessment.

While overall costs to implement the Maine Home Health United Project ECHO[®] are relatively low, it is crucial to research potential funding sources. Project ECHO[®]'s website indicates that there is no dedicated federal funding. However, specific grants like the Robert Wood Johnson Foundation and Helmsley Charitable Trust offer potential funding sources on the national level. Project ECHO[®]'s website also suggests partnerships and collaborations with healthcare organizations and institutions to share funding and resources.

General Conclusions

The Maine Home Health United program aims to connect Maine home health OTPs through an online COP. Engaging in Maine Home Health United has the potential to increase connectivity, social support, and feelings of belonging among members by learning and sharing knowledge. This connection has the potential to improve overall confidence with service delivery and in turn, decrease rates of professional burnout and improve job satisfaction amongst Maine home health OTPs

As Maine Home Health United is currently only geared to home health OTPs in Maine, it is imperative to emphasize how the impacts of this program can be utilized by other health professionals, disciplines, and regions. Advocacy and evidence for further programs like this could be very beneficial to close the gap on the overall problem of healthcare practitioners feeling unsupported and unsatisfied in their jobs. This could lead to more evidence-based practice being implemented in the greater healthcare field.

APPENDIX C – Fact Sheet



Maine Home Health United: An Online Community of Practice to Support Maine Home Health Occupational Therapy Practitioners

Sarah B. Harvey, OTR/L

OTD candidate



AOTA. (2025)

- Home health services are medical services provided in the home by a skilled licensed provider. (Rural Health Research Center, 2017).
- Occupational therapy practitioners (OTPs) are critical members of the home health care team, providing direct patient care, education, and advocacy in the community through the provision of their occupational therapy services (Roots and Li, 2013).
- OTPs specialize in helping patients/clients improve their ability and independence with daily activities, provide education on adaptive techniques, recommend assistive devices and home modifications, and collaborate with other healthcare professionals to ensure a holistic approach to care. (Aveanna Healthcare, 2023).

- In recent years, home health practitioners have faced unprecedented circumstances with increased workload pressures, exacerbating pre-existing low staffing levels, and changing guidelines. (Lingum et al., 2021, p. 238).
- Evidence shows that clinicians in rural home health settings experience high levels of stress, isolation, and burnout (Manson et al., 2020).



Wikipedia. (2025)



Wikipedia. (2025)

- An overall aging workforce and patient population, coupled with the COVID-19 pandemic have resulted in severe staffing shortages in all aspects of healthcare in Maine.
- As a result, home health OT practice in Maine has proven to be challenging.
- Disparities are often noted between rural and metropolitan areas of coverage.
- Maine home health OTPs are often asked to fill in service gaps during care for complex patient situations.
- Home health OTPs often work in isolation in patients' homes and with limited resources, making caring for these patients even more difficult.
- Due to these new types of tasks and job challenges, Maine home health OTPs often lack knowledge and confidence when providing care to their patients in the homecare setting.
- As a result, Maine home health OTPs often report increased episodes of professional burnout and poor job satisfaction.



Project ECHO. (2025)



Project ECHO. (2025)

- Online communities of practice have been shown to facilitate peer communication and knowledge sharing, reduce isolation, and increase intention to work in rural areas. (Bikinesi et al., 2020, p. 2).
- Project ECHO® has been used worldwide to improve knowledge and confidence and reduce the isolation felt by rural healthcare workers in various fields. (Manson et al., 2020).
- Knowledge is exchanged between interprofessional teams of specialists at an academic center (Hubs) and primary care providers (Spokes), particularly those in rural areas. (Lingum et al., 2021).
- Using the ECHO model, access to the resource library and collaborative community, training and virtual support, use of iECHO platform, and Zoom license are all free for signed Project ECHO® partners.
- Participants of the program will be able to access and attend sessions using a computer, iPad or smartphone.

- There are no formal support systems for Maine home health OTPs.
- **Maine Home Health United** is an online community of practice designed to support home health OTPs in Maine.
- **Maine Home Health United** will consist of two components: 1) a Project ECHO® education series using the Zoom platform, and 2) the establishment of a WhatsApp multimedia group.
- **Maine Home Health United** will have 12 weekly sessions that are 60 minutes in length, 30-minute teaching sessions by topic experts, and 30-minute participant discussion through case presentations and rounds format.
- Six of the 12 weekly topics will be pre-determined and include: 1) *Sustaining Compassion in Home Health Care*, 2) *Stress Management in Home Health Care*, 3) *Supporting Mental Health in Home Health Care*, 4) *Professional Boundaries in Home Health Care*, 5) *Professional Communication Skills*, and 6) *Work-Life Rhythm in Home Health Care*. The remaining six weekly topics will be determined from an initial needs assessment email sent to Maine home health OTPs.
- All Zoom sessions will be recorded, and each weekly session, along with other course resources, will be uploaded to an online library that participants can refer to later.



U.S. Custom Stickers. (2025)



Osher Center for Integrative Medicine. (2025)



- **Maine Home Health United** aims to connect Maine home health OTPs through a online community of practice.
- Engaging in **Maine Home Health United** has the potential to increase connectivity, social support, and feelings of belonging among members by learning and sharing knowledge.
- This connection has the potential to improve overall confidence with service delivery and in turn, decrease rates of professional burnout and job satisfaction amongst Maine home health OTPs

Please scan QR Code for Image and Article References

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CURRICULUM VITAE

