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Acute Care Occupational Therapy Practice: Application of the Canadian Occupational Performance Measure in A Palliative Care Program

Karen Enlow
Eastern Kentucky University, karen_enlow@mymail.eku.edu

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ACUTE CARE OCCUPATIONAL THERAPY PRACTICE: APPLICATION OF THE CANADIAN OCCUPATIONAL PERFORMANCE MEASURE IN A PALLIATIVE CARE PROGRAM

Presented in Partial Fulfillment of the
Requirements for the Degree of
Doctor of Occupational Therapy

Eastern Kentucky University
College of Health Sciences
Department of Occupational Science and Occupational Therapy

Karen Enlow
2019

EASTERN KENTUCKY UNIVERSITY
COLLEGE OF HEALTH SCIENCES
DEPARTMENT OF OCCUPATIONAL SCIENCE AND OCCUPATIONAL THERAPY

This project, written by Karen Enlow under direction of Dr. Anne Fleischer, Faculty Mentor, and approved by members of the project committee, has been presented and accepted in partial fulfillment of requirements for the degree of

DOCTOR OF OCCUPATIONAL THERAPY

CAPSTONE COMMITTEE

5-8-19
Date

Faculty Mentor

05/08/19
Date

Committee Member

EASTERN KENTUCKY UNIVERSITY
COLLEGE OF HEALTH SCIENCES
DEPARTMENT OF OCCUPATIONAL SCIENCE AND OCCUPATIONAL THERAPY

Certification

We hereby certify that this Capstone project, submitted by Karen Enlow, conforms to acceptable standards and is fully adequate in scope and quality to fulfill the project requirement for the Doctor of Occupational Therapy degree.

Approved:

Dana Howell — 5/17/19

Dana Howell, PhD, OTD, OTR/L, FAOTA — Date
Program Coordinator, Doctor of Occupational Therapy

Colleen Schneck — 5/17/19

Colleen Schneck, ScD, OTR/L, FAOTA — Date
Chair, Department of Occupational Science and Occupational Therapy

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Executive Summary

Background: Occupational therapists working in acute care must meet the many challenges of working with a diverse group of clients such as adult cancer survivors. Clients may be transitioned to acute palliative care due to disease progression. Clients in palliative care have many unmet needs affecting engagement in occupations, thus requiring occupational therapy services.

Purpose: The goal of this capstone project is to describe occupation-based problems and level of independence in completing basic activities of daily living among acute palliative care clients to illustrate the importance of using occupation-based approach with this population.

Theoretical Framework. The Canadian Model of Occupational Performance and Engagement (CMOP-E) was chosen to organize and guide this project.

Methods: The longitudinal prospective study utilized standardized evaluations to assess functional performance when admitted to acute palliative care: Canadian Occupational Performance Measure, Shah Modified Barthel Index, and Palliative Performance Scale.

Results. Ten clients identified more occupational performance problems at initial OT evaluation in self-care (75%), than productivity (12.5%), and leisure (12.5%). Relationships between the client's perception and satisfaction scores at initial OT evaluation and the Palliative Performance Scale scores as well as the Shah Modified Barthel Index scores were not statistically significant. The difference between the pre-post Canadian Occupational Performance Measure scores for performance and satisfaction suggested that 50% of the clients experienced an improvement in performance scores and 50% of the clients experienced improvement in satisfaction scores.

Conclusions: Clients admitted to an acute palliative care program identified self-care, productivity, and leisure occupations. The use of a client-centered, standardized assessment guided the occupational therapy process in providing occupation-based goals. Further research is indicated.

Acknowledgements

I would like to acknowledge my late husband, Craig, who always encouraged me to pursue my dreams with pride and determination. To my children and family, I want to thank you for your tireless support throughout this journey. To my co-workers, I want to thank you for your support and encouragement to examine current OT practice in acute care.

I would like to acknowledge the faculty at Eastern Kentucky University for their support, instruction, and guidance throughout the OTD program. I especially want to thank Dr. Fleischer and Dr. Hardman for lending their knowledge and expertise to this project.

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CERTIFICATION OF AUTHORSHIP

Submitted to (Faculty Mentor's Name): Anne Fleischer
Student's Name: Karen Enlow
Title of Submission: Acute Care Occupational Therapy: Application of the Canadian Occupational Performance Measure in a Palliative Care Program

Certification of Authorship: I hereby certify that I am the author of this document and that any assistance I received in its preparation is fully acknowledged and disclosed in the document. I have also cited all sources from which I obtained data, ideas, or words that are copied directly or paraphrased in the document. Sources are properly credited according to accepted standards for professional publications. I also certify that this paper was prepared by me for this purpose.

Student's Signature: Karen Enlow

Date of Submission: 5/8/19

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Section One: Nature of Problem and Problem Identification

Introduction

Occupational therapists working in acute care must meet many challenges of working with clients who have varying diagnoses and deficits as a result of chronic disease. One of the most common chronic diseases, cancer, also leaves millions of adult cancer survivors living longer with cancer and sequelae and/or side-effects of cancer. Consequently, many of these survivors are admitted to a palliative care program in acute care, during and following cancer treatments, requiring occupational therapy services. For this capstone project, individuals are defined as cancer survivors from the time of initial cancer diagnosis throughout life.

Many OTs in acute care today primarily use a traditional medical model of care—the biomechanical frame of reference—providing an impairment-driven approach to treatment. Adult cancer survivors transitioning to a palliative care program in acute care, however, may benefit from an occupation-based approach, which would address problems they may have in participating in meaningful occupations (Keesing & Rosenwax, 2011). Through the use of standardized, client-centered, occupation-based assessments, adult cancer survivors in palliative care can achieve maximum functional performance and satisfaction in daily living skills (Huri, Huri, Kayihan, & Altuntas, 2015). However, current acute care OT practice does not consistently include standardized assessments; particularly occupation-based assessments due to multiple challenges.

Current Occupational Therapy Practice in Acute Care

Occupational therapists in acute care often rely on clinical observations and non-standardized assessments to identify impairments and barriers limiting self-care skills to prepare the client for going home (Robertson & Blaga, 2013; Welch & Forster, 2003). When

standardized assessments are used, they primarily focus on measuring body structure impairments, instead of occupational performance (Alotaibi, Reed & Nadas, 2009). Reasons OTs are not using standardized tests in acute care include unfamiliarity with the assessments, length of administration time and scoring, and shorter lengths of stay (Alotaibi et al., 2009; Robertson & Blaga, 2013). Welch and Forster (2003) suggested that since OTs in acute care were not using standardized assessments, their ability to communicate with other healthcare team members was difficult resulting in other providers questioning the effectiveness of occupational therapy services, such as OT services within palliative care.

Difference between Palliative Care and Hospice

Palliative care, a specialized medical service for individuals living with a serious illness such as cancer, uses a holistic, person-centered approach for assessment and treatment of adult cancer survivors (Kanach, Brown, & Campbell, 2014). The focus is on managing chronic and acute symptoms, such as pain, and/or symptoms related to the person's cancer treatment (individuals in palliative care can continue to receive curative treatments, National Cancer Institute, 2017). Palliative care can improve quality of life, strengthen decision-making and communication between the individual and the physician, and assure continuity of care among hospital, home health, long-term care, and hospice (National Cancer Institute, 2018).

Hospice care focuses on an individual's final six months of life, when curative treatments are no longer an option, providing comprehensive comfort to the individual (National Institute on Aging, 2017). Hospice differs from palliative care in that hospice provides services to the terminally ill including symptom relief to ensure comfort in end-of-life and palliative care provides services from initial cancer diagnosis to the last 6 months of life.

Both occupational therapy and palliative care literature frequently use the terms palliative care and hospice interchangeably, causing confusion. For example, Russell and Bahle-Lampe (2016) suggested that the term palliative care refers to the care provided in a hospice setting, making palliative care part of the scope of hospice car. The term "palliation" therefore refers to the easing of symptoms of a disease as opposed to efforts to cure the disease. In order for occupational therapists to avoid confusion, it is vital to understand that palliative care's medical-based model reflects that the client is expected to either decline in function slowly or has the ability to improve function.

Occupation-Based Practice (OBP) in Occupational Therapy and Client-Centeredness in Palliative Care

Occupation-based practice. To implement OBP, OTs must adopt an occupation-centered perspective and become occupation-focused (Fisher, 2014). Fisher (2014) suggested that OBP supports the concept of occupation as the fundamental or "base" of practice. She emphasizes that occupational engagement is an essential component of the evaluation and intervention within the context where these occupations occur. OBP promotes use of occupation-based interventions, using occupational engagement as the therapeutic agent of change (Fisher, 2014). When coupled with client-centeredness, OBP is directed toward what is meaningful to the client.

Client-centeredness. The client-centered approach supports active collaboration among the therapist, client, and family/caregiver; promotes trust through open communication; and encourages the client to be their own expert by sharing in the decision-making and actively participating in self-management (Mroz, Pitonyak, Fogelberg, & Leland, 2015). According to Larson, Rasmussen, and Christensen (2018), a client-centered practice promotes non-judgmental

listening and communication, and supports clients ability to identify issues that they are facing. By allowing our clients to direct their treatment, the OT is upholding the ethical responsibility to support client rights (American Occupational Therapy Association [AOTA], 2015) and provide an element of hope and understanding to the client (Mroz et al., 2015).

Need for Standardized Occupation-Based Assessments in Palliative Care

Standardized assessments that record patient-reported occupation-based goals and function provide a mechanism to create occupation-based interventions and document functional progress. Weinstock-Zlotnick and Hinojosa (2004) stated that "the risk in using a bottom-up approach lies if and when the practitioner fails to connect the foundational factors to occupational performance" (p. 596). These authors suggested that the use of the top-down approach, which embodies client-centeredness and an occupation-based approach, would provide a bigger picture of the client's abilities to participate in meaningful occupations.

Studies that focus on which approach is better in palliative care were not found. Tomori et al. (2015), in a randomized controlled pilot trial, compared approaches using the impairment-driven model (bottom-up approach) to the occupation-based approach in stroke rehabilitation. Though limited by a small cohort, client satisfaction as measured by the Short Form-36 in the experimental group (n=16) who received the occupation-based approach, was slightly higher than that of the control group in the subscales of "general health" (d=0.42) and "role emotional" (d=0.43).

Challenges of Using Occupation-Based Practice in Palliative Care

Although academic literature describes the importance of occupation in palliative care, challenges exist in daily OT practice, such as clients' and caregivers' perceptions that occupational therapy's role in acute care is only to provide equipment and discharge plans

(Kessing & Rosenwax, 2011). Occupational therapy referrals are reactive to the crisis precipitating the acute care admission and written immediately before discharge. Occupational therapists frequently become frustrated by the "lateness" of the referral and limited understanding of the range of potential occupational therapy services which could be provided. As a result, occupation-based services to reduce late and chronic effects of cancer and its treatment impairments are not provided (Kessing & Rosenwax, 2011; Mills & Payne, 2015).

Problem Statement

Acute care is often required for individuals with cancer due to progression of disease and/or complications from treatment (Numico et al, 2015). Baxter, Newman, Longpré, and Polo (2017) suggested these chronic effects of cancer—fatigue, neuropathy, cognitive impairments, lymphedema, pain, and psychosocial issues—limit meaningful occupational performance. Although our understanding of cancer survivorship is growing, there is limited understanding of those whose disease continues to progress as they live longer because of effective treatments (Badger, MacLeod & Honey, 2016; LaCour, Nordell & Josephsson, 2008).

At a southeastern regional medical center, clients are referred to OT by a palliative care physician and/or mid-level healthcare provider such as a nurse practitioner. Occupational therapists at this site utilize an in-house, non-standardized assessment tool for all clients which complements the medical model of care using an impairment-driven or bottom-up approach. The assessment does not address the client's perception of their ability to participate in desired and valued occupations (Weinstock-Zlotnick & Hinojosa, 2004), and does not identify what is important to the client at the time of admission to a palliative care program.

This capstone project will address the problem of acute occupational therapy assessments of clients transitioning to a palliative care program not aligning with a client-centered occupation-based approach.

Purpose Statement

The goal of this capstone project is to describe occupation-based problems and level of independence in completing basic activities of daily living among acute palliative care clients to illustrate the importance of using client-centered approach with this population.

Program Objectives

The project objectives are to:

- Identify the most important client occupation(s) by category (self-care, productivity, and leisure) within the initial OT evaluation in a palliative acute care program.
- Determine if there is a relationship between the PPS score assigned by the physician/nurse practitioner during the initial consultation and the client's satisfaction and performance score for the five occupational performance problem areas identified by client within the initial COPM.
- Determine the level of change between the initial and discharge COPM perceived satisfaction and performance scores for the client's important occupational performance problem areas.
- Determine if there is a relationship between the Shah MBI scores and the number of important self-care occupations identified by the client within the initial COPM.

Theoretical Framework

The Canadian Model of Occupational Performance and Engagement (CMOP-E), developed by Polatajko, Townsend, and Craik in 2007, was an expansion of the Canadian Model

of Occupational Performance developed in 1991 by Law et al. (1990). The aim of the CMOP-E is to promote client-centered and occupation-based practice and uphold occupation as the core domain of the profession (Polatajko et al., 2007).

The CMOP-E includes three main components: person, environment, and occupation and focuses on the interdependent relationship of these three components. Within the model, persons are viewed as occupational beings who are themselves the expert of their needs and wants and therefore able to make their own choices (Law et al., 2014). The CMOP-E embraces the importance of spirituality at the core of the person in this model. Spirituality refers to the essence of self and is shaped and expressed through occupations. Meaning and determination come from spirituality which may include a religion aspect, but does not have to (Polatajko et al., 2007). The environment recognizes that the physical world, institutions, social factors, and culture influences a person's ability to complete occupations (Law et al., 2014). Occupation is considered a basic human need that provides satisfaction and balance to life (Law et al., 2014). Occupation is not static, but rather develops through the process of learning and changes over time throughout the life span (Law et.al, 2014). Occupation is the connection between the person and the environment and is the means by which a person participates within the environment. Occupational engagement occurs when performance of the occupation has meaning to the person. The addition of engagement into the model, "advanced its vision by providing potential to go beyond performance" and helped to "appreciate engagement as essential to understanding the experiences of occupation" (Larsson-Lund & Nyland, 2017, p.395). Figure 1 diagram depicts the interrelationship of the three components.

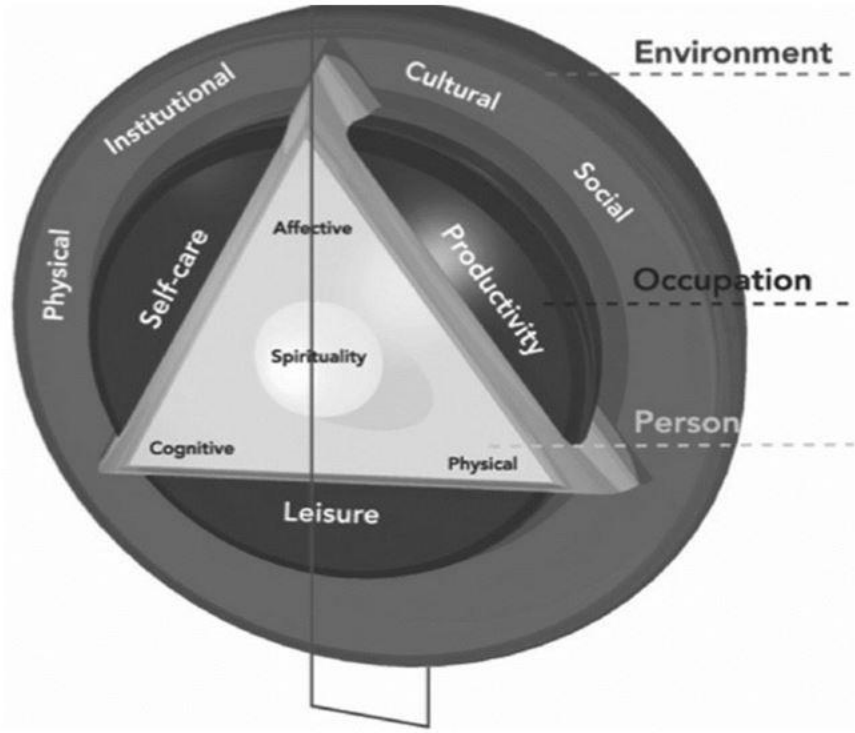

Figure 1. Schematic representation of the three major categories and sub-categories.

Theoretical concepts that guide practice. The CMOP-E as a conceptual model can be used as a framework to guide occupational therapy practice (Anderson & Reznick, 2016). Applied to practice, occupational performance of meaningful occupations become the focus of therapy.

Function-dysfunction continuum. One of the core components of this model is to enable occupation through identification of disparities between preferred and actual occupational participation (Wong & Fisher, 2015). Occupational performance problems in self-care, productivity and leisure occur when there is a change in one component, affecting another component. Client's limitations lead to performance problems and constrain occupational opportunities which lead to reduced occupational engagement. For example, the environment

may not support a client's occupational performance in bathing, thus modifications to the environment may needed. Using the example, a harmonious relationship among the environment and person components ensures optimal performance and engagement. Therapeutic approaches to bridge disparities may include remediation, restoration of skills and abilities, compensatory techniques, and teaching strategies to enhance performance. Environmental modifications and adaptations may be needed to support optimal occupational performance. To further illustrate this point, application to a practice example is as follows. Occupational therapy is ordered for a client with metastatic lung cancer. The client is receiving chemotherapy and has experienced a rapid decline in the ability to take a shower due to disease progression. The client and occupational therapist, working together, identify occupational performance problems in self-care, specifically showering, affecting the client's ability to go to work. The occupational therapist and client explore treatment interventions to meet the outcomes determined by the client. Treatment interventions might include environmental modifications, such as a transfer tub bench; learning energy conservation/work simplification techniques; and improving sleep patterns to increase restfulness at night. These interventions may enhance optimal occupational performance leading to client satisfaction, an integral component of this model.

Client-centeredness. The CMOP-E promotes the client-centered approach by promoting the fundamental belief that the client can identify which occupations are important based on personal preference, values, and needs and determine the level of performance satisfaction with choice occupations (Polatajko et al., 2007).

Canadian Occupational Performance Measure (COPM). The COPM is an occupation-based standardized assessment that measures the client's self-perception of performance in daily living over time (Law et al., 2014). The COPM assesses the client's occupations by the

categories in the CMOP-E: self-care, productivity, and leisure. Within the self-care domain, the COPM assesses functional mobility, personal care, and community management. Productivity evaluates occupations that focus on earning a living, caring for a home and family, providing a service to/for others, and/or developing one's own capacity. Leisure as defined by Law et al. (2014) is occupation that is "freed from the obligation of productivity" (p.4) and is measured within the COPM as quiet recreation, active recreation, and socialization. The interaction among the person, environment, and occupation results in the client's ability to perform and engage in the desired occupation. Occupational performance problems occur when a client can't do, doesn't do, or isn't satisfied with the way the client completes an occupation that the client needs to, wants to do or is expected to do (Law et al., 2014).

According to Law et al. (2014), COPM reflects four principles of the CMOP-E, Occupational performance: a) is based on the perception of the lived experience; b) is affected by roles, environment, and performance components; c) is natural for humans and not dependent on age, gender, or disability; and d) includes the performance itself and satisfaction with the performance.

Significance of the Capstone Project

This project will provide a model for illustrating that clients who are transitioning into palliative care due to progression of cancer, express their goals for therapy in occupation-based terms. By using a client-centered approach and documenting baseline and discharge occupation levels using standardized assessments such as the COPM, the occupational therapist is able to document occupational performance problems that prevents the client from completing occupations that the client wants to do, needs to do, or is expected to do. This approach encourages collaboration between the client and therapist and takes into consideration what the

client wants at this point in their life. Furthermore client-centered documentation is similar to person-centered documentation used within palliative care; therefore, improving communication among professionals and expanding occupational therapy services to meet the client's needs.

Summary

This capstone project will evaluate the result of client-centered occupation-based, standard assessment (COPM), activities of daily living assessment (MBI) and palliative care screen (PPS) of clients transitioning to a palliative care program. Currently acute care occupational therapists do not consistently use standardized assessments, particularly occupation-based assessments. In order to illustrate the importance of using a client-centered assessments and occupation-based approach interventions, this capstone project will describe client identified occupation based problems and level of independence in completing basic activities of daily living among a group of adult acute palliative care cancer survivors.

Section Two: Literature Review

An occupation-based approach to therapy may provide the key to a more meaningful life for adult cancer survivors living with the effects of late stage cancer who are transitioning into palliative care. This section begins with occupation related studies including: a) goals and meaningful occupations as recorded by people living with advanced cancer, b) occupational needs of those in palliative care, and c) role of occupational engagement in reducing pain. Next, the benefits of client-centered therapy are validated among several populations living with chronic disease and the OTs who are treating them. The literature review ends with a look at the client-centered Canadian Occupational Performance Measure and its importance in assessment and client self-empowerment.

Occupation and Occupational Engagement

The topics of occupation and occupational engagement have produced a myriad of articles, books, and other published works. The following research was selected as a sampling of the literature that supports the importance of occupation and occupational engagement specifically for the client population, as well as the various benefits they received.

Engagement in meaningful occupations affects quality of life. Palliative care clients, who lost the ability to participate in meaningful occupations, including the loss of life roles and relationships, experienced a poorer quality of life (Eriksson, Öster, & Lindberg, 2016). Conversely, Vrkljan and Miller-Polgar (2001) found that people with advanced cancer who used occupational engagement to regain a sense of control and normalcy regained satisfaction with their daily lives.

Furthermore, Eriksson et al. (2016) found that hospitalized palliative care clients wanted to handle their own needs, such as mobility and self-care, so they could gain control and engage

in occupations. Their desire to participate in meaningful occupations required creative solutions such as modifications to the hospital room environment and use of assistive devices to promote safety and independence.

Importance of occupational engagement to familiarity of routines. La Cour et al. (2008) found that a group of 45 individuals living with advanced cancer valued routine, and participated in occupations such as self-care, leisure, caring for others, household duties, transportation, food preparation, and work, because it promoted a sense of familiarity for them. Participants strove to make activities the same or "as usual" each day as a strategy for creating continuity and personal rhythm. Activities repeated over time provided some individuals with structure and a sense of commitment, similar to what they experienced at work. Disruptions to their daily routines were found to influence satisfaction in daily life. For example, one participant remarked that the physician recommended a new medication that was to be taken at a specific time of day. The participant found that her daily routine was interrupted, which she found frustrating and required reestablishing her routine. Further supporting these findings, Von Post and Wagman (2019) described how participating in at least some part of previous occupational patterns was found to be important to those receiving palliative care.

Importance of occupational engagement for competence, joy, and pleasure. How individuals in palliative care engage in everyday activities was the focus of a study by Svidén, Tham, and Borell (2010). Interviews of 47 individuals in a palliative care home care program, Svidén et al. (2010) found that despite progressive loss of function, participants, who continued to participate in daily occupations with lower expected performance levels, felt a sense of competency, joy, and pleasure. In addition to lowering their expectations for performance of daily activities, these individuals participated in new and interesting occupations.

Importance of engagement in valued occupations for pain management. Marcil (2006) looked at the relationship between active engagement in occupations and the multifactorial aspect of pain management in palliative care. She suggested that the loss of roles, and feelings of isolation and abandonment, led to feelings of helplessness, hopelessness, and the body experiencing pain. The author believed that when a person participates in activities which bring joy and pleasure, the body produces endorphins, a natural painkiller, and experiences less pain.

Client-Centered Care in Palliative Care

Kasven-Gonzalez, Souverain, and Miale (2010) highlighted the use of a client-centered approach to occupational therapy for a 21-year old client with osteosarcoma and malignant histiocytoma of the bone. In this case study, the client determined the important activities which supported her role as a daughter. She valued the ability to complete her basic grooming activities, get out of bed, walk, and eventually return home with her parents. Throughout the four weeks of rehabilitation, occupational therapy provided compensatory techniques to facilitate occupational performance in meaningful activities so she could return to her role as a daughter.

Ashworth (2014) presented three case studies of individuals in palliative care that illustrated the use of client-centered care to better understand meaningful occupational participation. Client 1, who was admitted to the program for symptoms management and functional decline, could not use her arm to participate in a community African drum group, which was her goal. Occupational therapy promoted functional use of the arm through self-care activities and modified drumming. Client 2, who was admitted with a functional decline, expressed a goal to return home to use his new model train set which had arrived prior to his admission. Using activity analysis to determine how to operate a model train in collaboration

with the participant and other model train enthusiasts, client 2 was given a “day leave” from the hospital to go home for the day. He was not able to independently operate the train but was able to spend 3 hours with friends and family being the train supervisor. He was thrilled to have met this goal. Client 3, who was admitted with a functional decline, identified her goal to attend her daughter’s wedding. With OT intervention focusing on sitting tolerance and caregiver training, the client was able to attend the wedding, as the mother of the bride. In each case study, client-centered goals were a focus followed by occupation-based interventions Ashworth (2014) suggested that goal-identifying and goal-setting elements of client-centered care should be routine practice in occupational therapy among clients in palliative care.

Badger et al. (2015) found however, that client-centeredness is not routine practice in occupational therapy. These authors found that seven out of the eight participants in their study did not discuss their personal goals with their OT and felt that their treatment was not always what they described as important to them.

Standardized, Client-Centered Assessments in Palliative Care

Huri, Huri, Kayihan, and Altuntas(2015) utilized the Canadian Occupational Performance Measure (COPM) to study the effects of occupational therapy on 34 men with metastatic prostate cancer. The COPM was used to identify the men’s perceived occupational performance difficulties before and after a 12-week occupational therapy intervention. This included a 30-minute client-centered individualized daily living activity training in the areas of self-care, productivity, and/or leisure; a 30-minute recreational activity group program; 40 minutes of didactic cognitive behavioral therapy; and 20 minutes of relaxation training. This group was compared to a control group who was given written home instructions on the effects of activity training, a self-directed recreational activity, and stress-management and relaxation techniques.

The control group did not receive any didactic education, but they were encouraged to practice the techniques independently. Perceived occupational function performance and satisfaction as measured by the COPM improved in the treatment group, while no difference was found for those in the control group.

Braveman, Hunter, Nicholson, Arbesman, and Lieberman (2017) detailed the benefits of occupational therapy for a 38-year-old male with non-Hodgkin's lymphoma following an allogenic stem cell transplant (SCT) within their examination of a clinical case**.** In this retrospective case study, the occupational therapist utilized the COPM before and after occupational therapy services. The participant identified valued occupations that would bolster his roles as a father, husband, and worker. Using evidence-based research, the occupational therapist provided a structured program that supported meaningful activities and strategies to meet his goals. At discharge, the participant's perceived performance and satisfaction scores improved from a 4-5 to a 7-8 and from 3-4 to a 6 respectively. The participant reported improved quality of life using the strategies learned and returned to valued roles with plans to go back to work.

Watterson, Lowrie, Vockins, Ewer-Smith, and Cooper (2004) used the COPM with 90 individuals in a cancer rehabilitation unit to evaluate perceived function. The purpose of this retrospective study was to identify the frequency of goals by category and their level of importance as measured by the COPM in self-care, productivity, and leisure during the initial evaluation. Data analysis indicated that 65 percent of the goals were related to self-care, 20 percent to leisure, and 15 percent to productivity. The level of importance for self-care (average scores) was 8.66, leisure 8.21, and productivity 8.81. Though participants did not rate their performance or satisfaction (only importance), self-care was identified significantly more often

than leisure and/or productivity. These authors also found that age did not appear to have a relationship in any of the three areas of occupational performance, meaning that each age group had more goals in self-care than leisure and/or productivity (except for those between 30-39 years of age who had more leisure and productivity goals than self-care).

Not unlike Watterson et al. (2004), Lindahl-Jacobsen, Hansen, Waehrens, la Cour, and Søndergaard (2015), explored how cancer survivors performed Activities of Daily Living (ADL) tasks and how they prioritized daily tasks. The COPM was administered to 118 hospitalized cancer clients in Denmark for this randomized controlled trial. Inclusion criteria were: functional performance scores between 10-70 on the Karnofsky Performance Status Scale (KPS), pathologically confirmed cancer diagnosis, no referral to occupational therapy, and older than 18 years of age. All participants were administered the Activities of Daily Living Questionnaire (ADL-Q), a 47-item questionnaire used to obtain linear measures of self-reported personal ADLs (P-ADL), and instrumental ADL (I-ADL) ability. Overall, participants identified I-ADL problems such as unable to clean (67%), wash clothes (50%), shop (42%), and cook (40%). In the area of P-ADL, 25 percent were unable to put on socks and shoes and 23 percent were unable to pick up clothes. Bathing was the task identified as being "at risk or needed help". The intervention group (n=55) was administered the COPM and received a consultation by an occupational therapist. Analysis indicated that 56 percent of the intervention group reported problems with self-care, 25 percent in leisure, and 19 percent in productivity. Self-care problems were reported as difficulty getting dressed (60%), transferring (40%), completing personal hygiene (20%), and toileting (10%). In the area of productivity, participants reported difficulty in cooking (30%), and shopping and cleaning (10%). Thirty percent experienced difficulties performing leisure activities and hobbies. These authors suggested that the COPM interview

process yielded a greater number of client-specific problems related to self-care, productivity, and leisure than did the patient reported ADL-Q questionnaire. The combination of the COPM and ADL-Q provided extensive information on problems experienced by adult cancer survivors to use in the goal-setting process.

Summary

The ability to engage in meaningful and valued occupations is important to people in palliative care living with chronic disease such as cancer. The loss of this ability for active engagement in occupations may lead to a loss of self-identify and worth. Occupational therapy using a client-centered approach yields meaningful information about valued occupations and their importance, and perceived satisfaction and performance of these occupations. Through the occupational therapy process, occupational performance difficulties that limit participation, as well as satisfaction in valued occupations can be identified and treated.

Section Three: Methods

Research Design

This prospective longitudinal study describes a group of palliative care clients': a) self-perception of their ability and satisfaction with completing impaired important occupations, b) functional performance, and c) ability to complete their activities of daily living (ADL's) at admission to and at discharge from acute care occupational therapy.

Setting

The study was conducted at a rural southeastern regional medical center. The acute care setting was chosen for this study because of the location of the Palliative Care Program.

Inclusion Criteria

- > 20 years of age
- Cancer diagnosis prior to the admission
- Admitted to acute care hospital between January 2019- March 2019
- Received a palliative care consultation
- Consented to an occupational therapy evaluation and treatment

Exclusion Criteria

- Cognitive impairments which impairs the client's ability to complete the COPM
- Did not have an occupation-based goal

Recruitment Procedures

Clients were referred to occupational therapy as part of their standard treatment within the acute care unit by either a palliative care physician/ or mid-level clinician; such as a nurse practitioner.

Project Methods

Data collection. Data was collected and recorded in the electronic medical record during the standard occupational therapy sessions, including the COPM and Shah MBI (Appendices A, D & F). Additionally, PPS score, social history and demographics were extracted from the electronic medical record at discharge (Appendix B). All data extracted from the medical record was de-identified by providing each client with a unique code. The name and the code were secured in a locked desk within the hospital. Upon completion of the study, the data was transferred onto a hard drive and uploaded onto a secured EKU account.

Research was initiated after approval from IRB on January 3, 2019 (Appendices A & B). Data was collected until March 31, 2019.

Procedure. Occupational therapy consultations are ordered by the palliative care physicians/ or mid-level clinicians, such as; a nurse practitioner. Occupational therapy orders were sent electronically to a printer in the Rehabilitation Department. Once a consultation order was received, a thorough chart review of the electronic medical record (EMR) was completed. Information obtained prior to evaluation includes; history of cancer, type(s) of cancer treatments, length of time since last cancer treatment, co-morbidities, demographics, and prior occupational therapy services at the hospital, outpatient, or home health, if available. Upon initial contact with the client, the occupational therapist requested consent to evaluate. If the client did not consent to the evaluation, the referring physician and/or nurse was verbally notified and the refusal and/or inability to participate was documented in the medical record**.** Following completion of the occupational therapy evaluation (Appendix C), including the COPM and Shah MBI, individualized occupation-based goals were established in collaboration with the client.

Occupation-based occupational therapy was provided to achieve the client's goals. During the final visit, the COPM and Shah MBI were re-administered.

The principal investigator (PI) extracted the following data for each client for final analysis from the EMR: age; gender; length of time since initial cancer diagnosis; time since last cancer treatment; type of cancer; Shah MBI score; social information such as living arrangements; community participation such as grocery shopping, appointments, church; PPS scores; important occupations in self-care as described during the initial OT evaluation (all self-care occupations that the client identified in the 5 problems on the COPM were considered important and therefore counted); and initial and discharge COPM scores. See Appendices D and E for data collection forms.

Data analysis. Descriptive statistics and graphing were used to report the results.

Outcomes Measures

Canadian Occupational Performance Measure (COPM). This individualized occupation-focused outcome measure is administered as a semi-structured interview. Clients describe what they do on a typical day in the areas of self-care, productivity and leisure and indicate how important it is for them to complete each occupation. From these occupations, the client indicates occupational performance problems. Client chooses 5 of their most important occupational performance problems and rates how satisfied the client is with the performance and ability to currently complete each of the occupations. Test-retest reliability testing was conducted with a variety diagnoses within seven different studies with scores ranging from 0.73-0.93 (Law et al., 2014). Sixteen articles cited in the COPM Manual (5th Ed.), demonstrated validity of the COPM with (Law et al., 2014). The COPM has been validated in various countries, such as Canada, Hong Kong, Tiawan, United States, Netherlands and Norway and

within various populations. The validity of the COPM as a measure of occupational performance has been demonstrated among those with orthopedic, mental health, neurologic, and musculoskeletal conditions, and within various settings; such as home health, outpatient, and rehabilitation. A validity of measures of validity were measured against the COPM from functional measures; such as the DASH and FIM to other measures of psychological and social functional. Lastly, the COPM consistently measures 50-80% of the problems identified in other assessments; however the COPM consistently identified a greater number of problems. Although the COPM has not been specifically validated within a population of individuals with cancer, the impairments experienced by those with a cancer diagnosis are similar to those populations that have been studied. Responsiveness of the COPM to measure perceived occupational performance over time was identified by eight studies (Law et al. 2014). A change of two points or more has been found to be clinically important (Carswell, McColl, Baptiste, Law, Polatajko, & Pollock, 2004). The usefulness, or sum of its reliability and validity was established through twenty-one studies indicating the benefits of the COPM when used in a variety of settings with different types of clients (Law et al., 2014).

Shah Modified Barthel Index (MBI). The Shah MBI modified by Shah, Vanclay, and Copper (1989; Appendix F) is designed to assess a client's ability to engage in basic activities of daily living (ADL) by measuring level of assistance needed to complete these activities. The assessment is completed by the occupational therapist either through direct observation and/or client self-report. The Shah MBI, modified from the original Barthel Index by Mahoney and Barthel (1965), consists of 10 domains: bowel control (preceding week), bladder control (preceding week), personal hygiene (preceding 24-48 hours), toilet use, feeding, transfers (from bed to chair and back), mobility, dressing, stairs, and bathing, each recorded by a score

indicating level of performance. The total score is a summation of the 10 scores with 100 as the highest score that can be achieved. Modification of the original Barthel Index was made to improve sensitivity to small changes by adding more categories used to record ADL functions and reliability in scoring in stroke rehabilitation (Shah et al.,1989). Shah and colleagues believed that the name change would lessen the confusion among other available Barthel Index scales, including the original, when used in literature. The Shah MBI was found to have an internal reliability coefficient of 0.90, compared to 0.87 for the original scoring.

In this project, clients were scored according to the Shah MBI to provide consistency for ADL performance scoring in the initial OT evaluation**.** Results were interpreted based on Shah et al. (1989), as follows: Total Dependency = 0-24, Severe Dependency = 25-49, Moderate Dependency = 50-74, Mild Dependency = 75-90, Minimal Dependency = 91-99, and Independent = 100. The Shah MBI has been used with adult cancer survivors in hospice to determine if there was a relationship with the Shah MBI score and survival rate (Bennett & Ryall, 2000).

Palliative Performance Scale (PPS). The PPS is a functional performance tool used in palliative care, developed by Victoria Hospice, British Columbia in 1996, and modified from the Karnofsky Performance Scale (Hernandez-Quiles et al, 2017; Anderson et al, 1996). The PPS is measured in 10% increments from fully able to perform (an activity) and healthy (100%) to death (0%). The PPS consists of the following parameters:

- Degree of ambulation
- Ability to do activities/extent of disease
- Ability to take care of one's self (self-care)
- Ability to eat/drink in relation to intake
- Level of consciousness

To score the PPS, one begins with ambulation, the "strongest" performance indicator. After finding the value (%) for ambulation, one proceeds across to each of the other parameters, ending with level of consciousness, the "softest" performance indicator. A total score (%) is selected that best fits the overall performance of the individual, based on the criteria of each parameter. The reliability and validity of the PPS has been studied in palliative care and found to be reliable (0.96) and valid (based on 15 experts' opinion) tool to measure performance (Ho, Lau, Downing, & Lesperance, 2008). Validity measures (content) as described by these authors also suggested that the PPS is a good tool for communicating among palliative care workers. Olajide et al. (2007) found that the PPS correlated well with length of survival and with select symptom distress scores such as dyspnea with adult cancer survivors in an acute tertiary care hospital.

Ethical Considerations

Potential risks. No potential risks were anticipated other than those associated with the normal standard of care for occupational therapy, which could be fatigue and/or mild muscular discomfort.

Steps taken to minimize risks. Part of the standard of care for a client within an acute care hospital is 24 hour medical supervision. Clients were instructed to inform a health care provider if they were experiencing fatigue and/or muscular discomfort that was disrupting their daily activities. If this occurs, occupational therapy will be discontinued.

Potential benefits. Clients benefit from receiving occupational therapy services ordered by their physician or midlevel practitioner and agreed upon by each client. The findings of the prospective longitudinal study did not change the clients' care.

Confidentiality. All data extracted from the medical record was de-identified by providing each client with a unique code. The name and the code were secured in a separate location from the data gathered within a password protected encrypted computer or stored in a locked desk. Upon completion of the study, this data was transferred to the faculty advisor who will either store the data within an encrypted password protected computer or within a locked location.

Section Four: Results and Discussion

This prospective longitudinal study describes clients' perception of performance and satisfaction with completing important occupations with performance problems before and after occupational therapy as measured by the COPM, and functional performance scores using the PPS and the Shah MBI.

Client characteristics

A total of 19 clients received a palliative care consultation and a referral to occupational therapy between January 3, 2019 and March 31, 2019, and 10 of these met the criteria for this study (Figure 2). The average age of clients was 73.8 years (Table 1). The clients were diagnosed with a variety of different types of cancer (Table 2). The average length of stay ranged from 3 to 16 days with an average of 7.6 days. Hypertension was the most common comorbidity (88.9%) and the most common home environment was living with family (70%) (Table 3). Two clients were diagnosed with acute cerebrovascular accidents (CVA) during their hospitalization and prior to the initial palliative consultation.

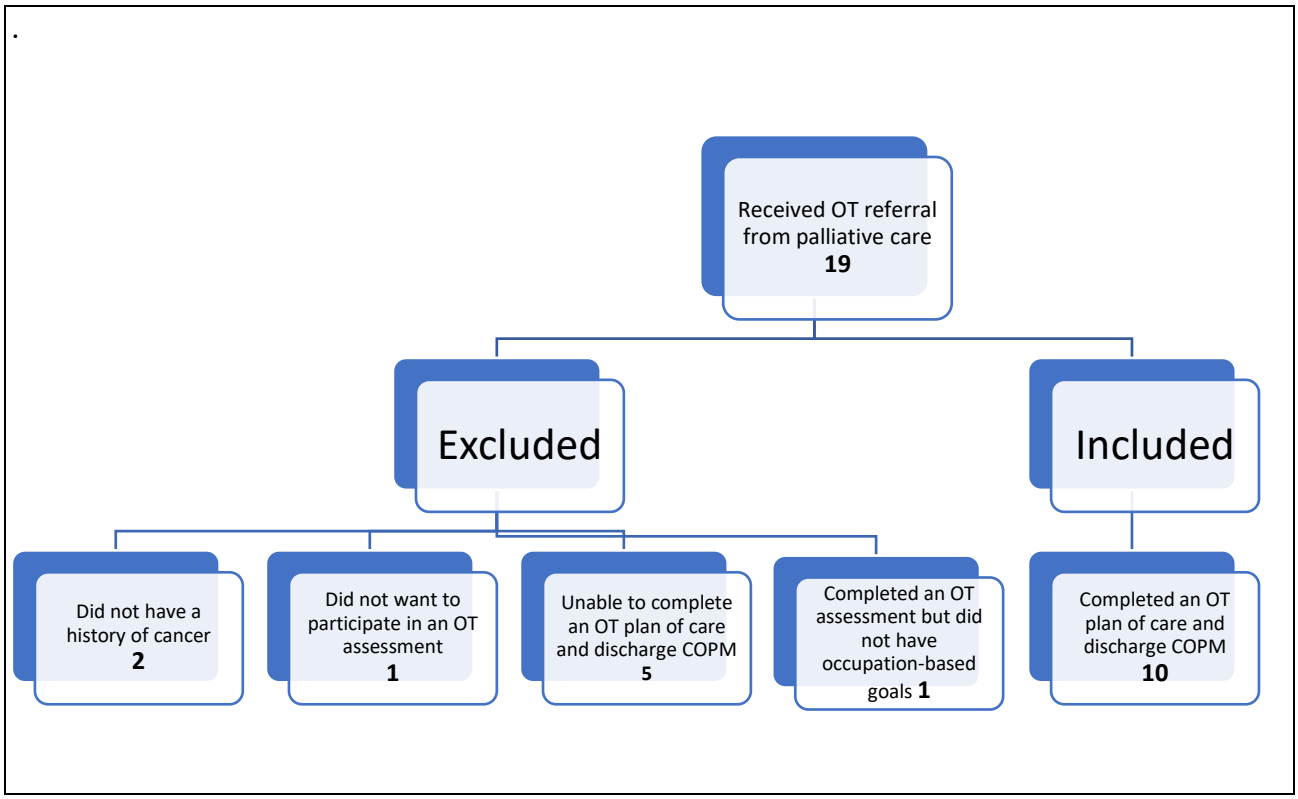

Figure 2. Client Inclusion/Exclusion Process

Table 1

Age and Gender of Clients

Age Group	Female	Male	Total
50-59 years	1	1	2
60-69 years	1	1	2
70-79 years	2	1	3
80-89 years	1	1	2
90-99 years	0	1	1
Total	**5**	**5**	**10**

Table 2

Primary Cancer Diagnoses of Clients

Primary Cancer Diagnosis	Number of Clients
Breast	2
Larynx	1
Pancreatic	2
Skin	1
Bladder	1
Lung	2
Lymphoma	1

Table 3

Comorbidities and Social History

	Number of Clients
Comorbidities	
Hypertension	8
Diabetes	2
Congestive Heart Failure	0
Chronic Obstructive Pulmonary Disease	2
Social History	
Lives alone	2
Lives with family	7
Lives in assisted living	1

Interventions provided. The 29 treatments were: a) family education/training (41%), b) ADL re-training (17%), therapeutic activities (48%), therapeutic exercise (31%), and edema mobilization (3.4%). (See Figure 3)

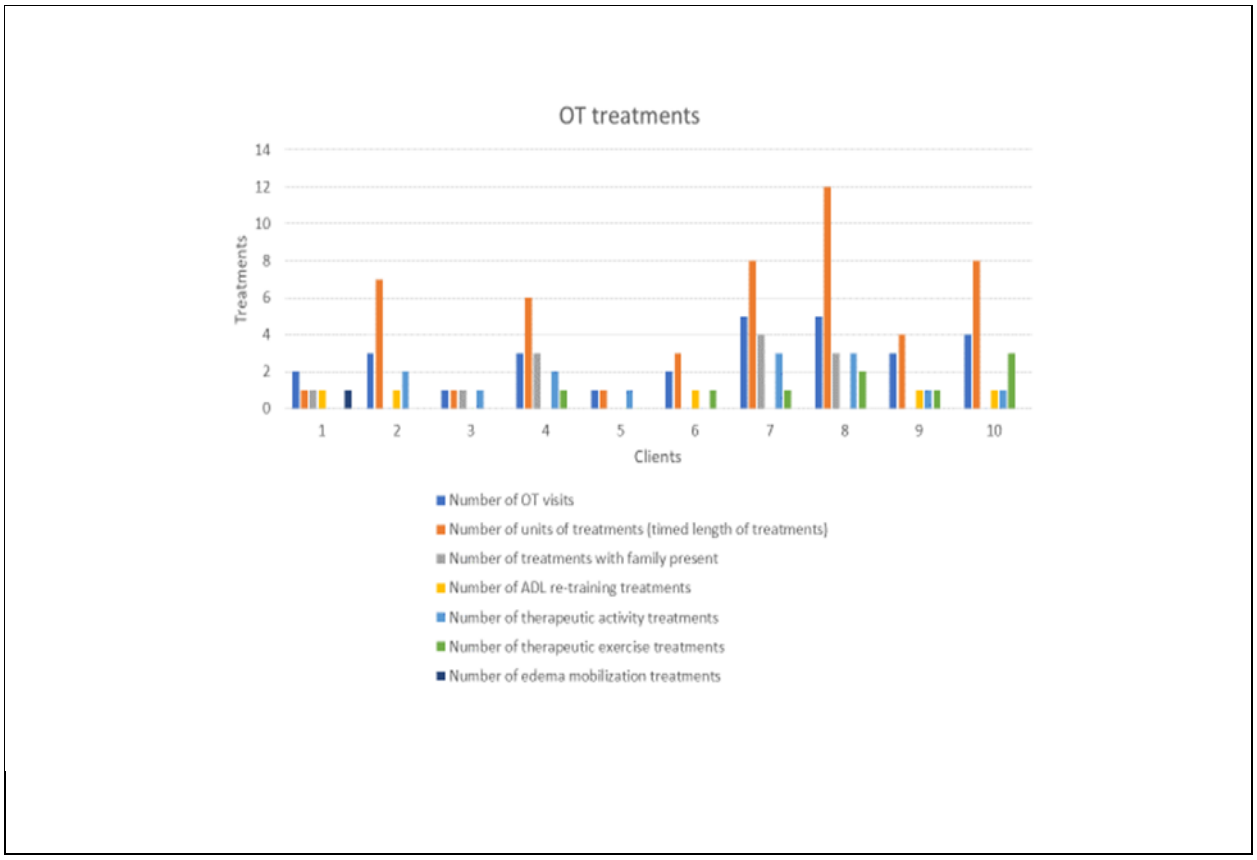

Figure 3. Summary of OT Treatments

Results

Objective #1. Identify the most important client occupation(s) by category: self-care, productivity, and leisure within the initial OT evaluation in an acute care PC program.

COPM. Clients identified 40 important occupations during the semi-structured COPM interviews (Appendix G). Seventy-five percent of these occupations were self-care, 12.5% were productivity and 12.5% were leisure. They identified the following self-care occupations: bathing, dressing, shaving, feeding, and managing medications. Clients described their functional mobility using different types of assistive devices to walk and transfer so they could go to doctor's appointments, grocery store, and church. Clients were interested in transferring in and

out of wheelchair, shower and car; as well as on and off the toilet. Clients expressed an interest in these productive occupations: taking care of their son, taking care of their animals, and completing light housework. Within their leisure time, clients identified that it was important to have the energy to spend time with family, make time to "heal" broken relationships with family members, volunteer at church, go to the park, and garden.

Objective #2. Determine if there is a relationship between the PPS score assigned by the physician/nurse practitioner during the initial consultation and the client's satisfaction and performance scores for the five occupational performance problem areas identified by the client during the initial COPM.

Relationship between functional rating and perception of function. PPS scores were either 40% or 50% (Table 4). Because there was not a monotonic relationship between the PPS and client's perceived satisfaction score, nor relationship between the PPS and the client's perceived performance score, a non-parametric correlational analysis would not be valid; therefore scatterplot diagrams were created to illustrate the relationships between these variables (Appendices H & I).

Table 4

Client's Initial Palliative Performance Scale Scores

Palliative Performance Score	Number of Clients
40%	9
50%	1
Total	**10**

Objective #3. Determine the level of change between the initial and discharge COPM perceived satisfaction and performance scores of the client's important occupational performance problem areas.

Change in COPM scores. The amount of perceived performance change ranged from 0.2 to 7, and perceived satisfaction change ranged from 0.4 to 5.6 among the 10 clients. According to Law, et al. (2014), a change of two or more points is considered clinically important. When applying this indicator to this population, 50% clinically improved performance scores and 40% improved satisfaction scores. (Appendices J & K).

Objective #4. Determine if a relationship exists between the Shah MBI score and the number of self-care occupations identified by the client within the initial COPM.

Relationship between the number of COPM self-care occupational performance problems, and Shah MBI score. The 7 clients who had Shah MBI scores below 50 (Table 5) also listed 23 important self-care occupational problems within the COPM. Illustrating the lack of relationship between COPM self-care occupational performance problems and Shah MBI, the number of identified important occupational performance problems were similar to the two highest Shah MBI scores and the two lowest. Clients with Shah MBI scores of 80 and 85 identified five important occupational problems as compared to the clients with the two lowest scores of 15 which identified six. Because there was not a monotonic relationship between the number of important self-care occupational performance problems listed within the COPM and the Shah MBI score, non-parametric correlational analysis would not be valid; therefore, a scatterplot was created to illustrate the relationship (Appendix L).

Table 5

Client Initial Scores for the Shah Modified Barthel Index

Category	Number of Clients
Independent (100)	0
Minimal Dependency (91-99)	0
Mild Dependency (75-90)	2
Moderate Dependency (50-74)	2

Severe Dependency (25-49)	4
Total Dependency (0-24)	2

Discussion

Survivors' Important Occupations

Forty occupations were identified by ten clients in this study and 75% were self-care occupations. Watterson et al. (2004) and Lindahl-Jacobsen et al. (2015) obtained similar findings within their research of hospitalized adult cancer survivors, who experienced more problems in self-care occupations than productivity and leisure. Watterson et al. (2004), found cancer patients express 65% of goals as self-care, 15% as productivity, and 20% leisure. Lindahl-Jacobsen et al. (2015) found that 56% of the identified problems were in the category of self-care, 19% in productivity, and 25% in leisure.

Relationship Between PPS Score and COPM Scores

According to the results, there does not appear to be a relationship between the PPS score and the client's COPM satisfaction and performance scores. No studies using these variables could be found to refute or support these findings. The PPS score is indicative of a single moment in time—at the initial palliative care consultation—when the client's medical status required an acute care admission; therefore, a lower PPS score was expected (Anderson et al.,1996, Haun et al., 2017). The use of the PPS in acute care may be more useful as a tool to predict survivorship and indicate symptom distress (Olajide et al., 2007) but not as an indicator for occupational therapy services.

Occupational Performance and Satisfaction

Studies that used the COPM (pre/post-test) with adult cancer survivors in an acute palliative care program could not be found. Huri et al. (2015) used the COPM (pre/post-test)

with 34 men diagnosed with metastatic prostate cancer to determine the effects of a 12-week cognitive behavioral therapy-based OT program compared to a control group. Similar to the capstone project results, these authors found 94.7% of the participants in the treatment group showed improvements in performance and satisfaction scores, while no significant improvements were found in the control group. Though the occupational therapy interventions varied significantly between this study and this capstone project, use of the COPM to measure client's perceived performance and satisfaction of occupational performance problems before and after OT interventions was used

Observations that impacted the results in this study: a) psychological impact of a cancer diagnosis, b) anxiety about current illness, c) short length of stay, d) presence of acute neurological event, e) discharge disposition to another facility, and f) transition from palliative to hospice care.

Psychological bearing of cancer diagnosis. Client 1 was admitted to the palliative care (PC) program following the initial diagnosis of Stage IV metastatic breast cancer. She participated in one OT treatment with family to receive equipment training. Client 1 reported being overwhelmed with the new diagnosis and wanted to go home immediately with hospice care. Therefore, short length of stay, psychological impact of cancer diagnosis, and speedy transition to hospice may have influenced the pre-post COPM scores.

Anxiety related to current illness. Three clients became overwhelmed as they were identifying occupational performance problems suggesting possible anxiety related to the cancer diagnosis (Walder & Molineux, 2017). The occupational therapist used "therapeutic use of self" and empathy while administering the COPM so the client felt emotionally supported (American Occupational Therapy Association [AOTA], 2014).

Therapeutic use of self. Interviewing clients in palliative care was challenging because clients became emotional as they reflected on occupations that they wanted to do, needed to do, but couldn't do and/or were not satisfied. Also, because many of the clients were physically and emotionally fragile,. Therapeutic use of self (AOTA, 2014) was used by the investigator to gain their trust in a short amount of time so the client would discuss and share sensitive information. Schulman-Green, McCorkle and Bradley (2009) discussed techniques that can be used when interviewing seriously ill individuals. They supported techniques which included fostering a sense of trust and safety, gaining an understanding of the individual, meeting the individual where he/she is, redirecting gently, and providing closure at the end of the interview.

Short length of stay. The average length of stay for clients in this capstone project was 7.6 days. Most clients that were returning home at discharge experienced longer lengths of stay than those discharged to another facility. The short time the clients were hospitalized proved to be a challenge in administering a pre/post-test such as the COPM. This observation is supported by the findings of Robertson and Blaga (2015).

Presence of an acute neurologic event. Client 10 was admitted to the PC program with a recent diagnosis of Stage IV lung cancer and had not begun treatment. While in the hospital, her occupational therapy and medical treatments were complicated by an acute stroke. She completed five occupational therapy sessions before being discharged to a long-term care facility for rehabilitation. Her discharge COPM performance and satisfaction scores did not demonstrate a significant improvement from her initial COPM scores.

Discharge to another facility. Client 9, who was admitted to PC program with a recent bladder cancer diagnosis, subsequently received cancer surgery. Due to decline in medical and functional condition, the client's family could not take care of the client at home; therefore, the

client was going to be discharged to a long-term care facility. Client 9 was very upset with his family for not taking him home and frustrated with his lack of functional improvement. Due to his emotional state, his perceived satisfaction and performance scores may have been lower than expected.

Transitioning from palliative care to hospice. When transitioning from palliative care to hospice home care, Client 5 prioritized her occupation of healing a broken relationship with her brother as more important than self-care occupations. This finding is comparable to the findings of Pearson et al. (2007) suggesting that individuals in late stage disease progression will shift their focus from daily activities to those activities that are spiritual in nature or have a social purpose, such as relationships.

Exception. Client 7, who had a history of Multiple Sclerosis prior to recent diagnosis of lymphoma, proved to be an exception. He perceived significant improvement in performance (7) and satisfaction (5.6) scores prior to discharge home even though he experienced almost total dependence in self-care (lowest Shah BMI scores of 15) at initial evaluation**.**

Other Pertinent Findings: Time Factor

OT in acute care must be aware of client factors such as pain, fatigue, rest/sleep cycle, and a constant barrage of diagnostic tests and medical treatments that limits the client's ability and stamina to participate in an OT evaluation. The timing of an OT evaluation in the client's day may influence standardized scores. For example, one client, who expressed fatigue and irritability, relinquished all input to his spouse, who by proxy, completed most of the COPM. As a result, importance of occupations was based on the spouses' perception of importance, not the client. No study could be found to refute or support this finding; however, standardized assessments in acute care must be time efficient (Robertson & Blaga, 2013) and meaningful to

the client in palliative care (Schleinich, Warren, Nekolaichuk, Kaasa, & Watanabe, 2008). The time required for the client to complete the COPM pre/post interventions, was found to be acceptable to most the clients.

Relationship between Shah MBI and Important Occupational Performance Problems

The assumption for this objective was that a client with a low Shah MBI score would identify more self-care occupational performance problems as important during the initial evaluation and, conversely, a high Shah MBI score would indicate that the client would identify fewer self-care occupational performance problems as important. This relationship was not shown at this time; instead there was a great deal of variability in the Shah MBI scores. If this study was duplicated with a larger number of palliative care clients, a pattern may emerge. No studies were found to refute or confirm the results of this study.

Shah Modified Barthel Index. Heaton and Bamford (2001) completed a scoping review of approaches to assessing the outcome measures of equipment and adaptations provided by OTs, including the original Barthel Index (BI), developed by Mahoney and Barthel in 1965. These authors suggested that the BI provided a limited view of the client by only including basic ADLs measurements. To offset this challenge, this study included the COPM in addition to the Shah MBI to provide a more holistic perspective of each client.

Strengths and Limitations

Strengths

The use of standardized assessments, such as, the COPM and Shah MBI added validity to the results of this study. The use of a standardized test permits the study to be replicated in different areas of practice, over different time frames and with different population of clients. All referrals to OT following the palliative care consultation were provided by the same

provider, which resulted in the PPS being administered by the same provider. Other strengths included: a) similar number of males and females, b) variety of cancer diagnoses, c) single OT evaluator and provider of services, d) various ages of the clients, and e) availability of assessments.

Weaknesses

The sample size was small and heterogeneous; therefore, generalizability of the results is limited. Medical challenges occur in acute care that are often unforeseen and unexpected; and the unfamiliar environment is constantly changing, which can result in diverse "exposures" among the clients within this study. The setting itself could be viewed as a threat to external validity and therefore results cannot be inferred to other practice sites such as home health (Creswell, 2014). The time factor of this project in the lives of the clients could also be viewed as an external threat to the validity (Creswell, 2014). For example, some clients (at the time of this project) were recently diagnosed with cancer, while others had been diagnosed many years prior to transitioning into the palliative care program. Though the OT attempted to minimize disruptions during the OT evaluation, many distractions and interruptions occurred that caused some clients to become anxious and fatigued while completing the semi-structured interview process required for the COPM. Timing of the OT evaluation in the client's day could have an impact on validity. A clients' choice of "important" occupations as well as self-perception of "performance" and "satisfaction" to engage in occupations could change based on context, meaningfulness, and opportunity. Therefore, the identified important occupational performance problems within this study cannot be generalized to the population of adult cancer survivors in other acute care palliative settings

Implications for Practice

This project supports OT practice within palliative acute care setting; including the use of client-centered standardized evaluations and OT approaches, theories or models.

Client-centeredness. The client-centered approach significantly enhanced my understanding of important client occupational performance problems and guided collaboration between myself and the client during goal setting. The client-centered approach improved communication with other team members, such as the PC provider, as to what was important to the clients. Clients appeared to appreciate OT just listening to them explain what was important to them as they transitioned to palliative care. Though not a tenant of palliative care, many clients were forgoing any further cancer treatments, facing a new stage in their life.

Standardized OT assessments. The use of a standardized assessment was a challenge to administer due to short length of stays and large case-loads, consistent with Robertson & Blaga, (2013). The challenge of administering a pre-post assessment in PC was consistent with findings by Pearson et al. (2007). Even though these challenges were experienced, I believe the COPM was meaningful to clients in palliative care as it gave them the opportunity to identify occupational performance problems and decide what was most important. Use of the COPM revealed valuable information to OT as well. The COPM's focus on the client's perceived satisfaction is an under-valued and under-utilized component of holistic care in hospital. Though occupational performance is vital, client's perception of how satisfied they are with their current performance is reflected in their decision about returning home or going somewhere for more care. For example, a client may demonstrate the ability to dress, bathe and toilet independently, but still feel that going home would be too difficult, unsatisfied with their abilities. Many times,

a difference occurs between client performance and client readiness to return home which may be bridged through understanding client satisfaction.

The PPS. The scores suggests that the PPS did not discriminate based on function but on medical needs of the clients. Severity of illness upon transitioning into a palliative care program seemed to be reflected by the consistency of low scores. The use of the PPS does not appear to be a good screening tool for OT services based on these findings.

The Shah MBI. A strength of the Shah MBI was that it provided an objective measure of basic ADLS for each client, allowing use of scores to explain the severity of impairment in self-care. A limitation of this measure is that it reflects only basic ADLS. Instrumental ADLS as well as productivity and leisure are not included and therefore does not present a holistic view of clients in palliative care.

Future Research

Future research to understand indicators for occupational therapy services within acute palliative care is much needed, such as, understanding the occupation-based goals, within larger cohorts with specific conditions beyond cancer. Furthermore, this study focused on clients in acute care, which indicates a "crisis" situation. There is also a need to understand clients' occupational needs within other palliative care settings; such as home health. Moreover, understanding the importance and utility of standardized assessments used by occupational therapists within palliative care would provide a broader understanding of why outcome measures are or are not used within palliative care settings by occupational therapists. Beyond understanding why standardized assessments were not used in acute care, identifying standardized assessments appropriate for this population is necessary so evidence-based interventions can be accurately assessed.

Summary

This capstone project supports the use of client-centered occupation-based assessment when evaluating adult palliative care clients within an acute care setting. The identification of occupational performance problems that the clients wanted to improve provided a clear understanding of client's goals for occupational therapy. Additionally, adding an objective outcome measure provided support for the efficacy of occupational therapy services.

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Appendix A: IRB Institutional Approval

Ephraim McDowell Health

January 3, 2019

Karen Enlow, MS, OTR/L
Principal Investigator

Research Proposal:
Occupational Therapy application of the Canadian Occupational Performance Measure in a Palliative Care Program

The Ephraim McDowell Health IRB expedited review group of reviewers has agreed that your research proposal is appropriate for the "exempt" category of research. The IRB grants approval for the research to be conducted at Ephraim McDowell Regional Medical Center as specified in the submitted proposal for a period up to 1 year, expiring January 2, 2020.

In implementing the research activities, you are responsible for complying with IRB decisions, conditions, and requirements. Any changes to this research proposal must be approved through the IRB prior to implementation. The IRB requests that you provide a summation of your research findings to the committee at the completion of your research project.

Graciously,

Michelle DeLuca Fraley, PharmD BCPS
Secretary of the EMH IRB

Appendix B: IRB Joint Approval

Institutional Review Board (IRB) Authorization Agreement

Name of Institution or Organization Providing IRB Review (Institution/Organization A):
Ephraim McDowell Health

IRB Registration #: IRB00004199 Federalwide Assurance (FWA) #, if any: FWA00007131

Name of Institution Relying on the Designated IRB (Institution B):
Eastern Kentucky University

IRB Registration #: IRB00002836 Federalwide Assurance (FWA) #, if any: FWA00003332

The Officials signing below agree that Eastern Kentucky University may rely on the designated IRB for review and continuing oversight of its human subjects' research described below: (*check one*)

(___) This agreement applies to all human subjects' research covered by Institution B's FWA.

(x) This agreement is limited to the following specific protocol(s):

Name of Research Project: Occupational Therapy Application of the Canadian Occupational Performance Measure in a Palliative Care Program
Name of Principal Investigator: Karen Enlow

(___) Other (*describe*):_____

The review performed by the designated IRB will meet the human subject protection requirements of Institution B's OHRP-approved FWA. The IRB at Institution/Organization A will follow written procedures for reporting its findings and actions to appropriate officials at Institution B. Relevant minutes of IRB meetings will be made available to Institution B upon request. Institution B remains responsible for ensuring compliance with the IRB's determinations and with the Terms of its OHRP-approved FWA. This document must be kept on file by both parties and provided to OHRP upon request.

Signature of Signatory Official (Institution/Organization A):

Burt Piper Date: 2/1/2019

Print Full Name: Burt Piper Institutional Title: EVP/COO

Signature of Signatory Official (Institution B):

Date: 2/4/19

Print Full Name: *Dr. Gerald J. Pogatshnik* Institutional Title: *Associate Vice President for Research*

Appendix C: Initial Occupational Therapy Evaluation

Admission Date	
Admission Diagnosis	
Treatment Diagnosis	
Patient Identifiers Verified	☐ Arm band ☐ Patient verified ☐ Family member verified ☐ Pt unable to provide
Pertinent Medical and Social History Reviewed	○ Yes ○ No
Patient Position Upon Arrival:	☐ Supine in Bed ☐ On bedside commode ☐ Sitting in Chair ☐ Sitting on edge of bed ☐ In bathroom ☐ Standing ☐ Ambulating in room ☐ Ambulating in hall
Others present during eval:	☐ Spouse ☐ Sibling ☐ Friend ☐ Sitter ☐ Child/Children ☐ Interpreter ☐ Significant Other
Co-Evaluation with: (if applicable)	☐ Physical Therapy ☐ Speech Therapy
Subjective	○ Pt agreeable to eval ○ Requires encouragement ○ Other
Prior level of function information provided by:	☐ Patient ☐ Significant other ☐ Spouse ☐ Friend ☐ Family member ☐ EMR ☐ Phone call ☐ RN/PCT ☐ NH/Assisted living staff ☐ Ex-spouse
Past Medical History	
Patient Lives:	☐ Alone ☐ With Spouse ☐ With Family ☐ With Significant Other ☐ With Friend ☐ With Ex-spouse ☐ Nursing Home Resident ☐ Assisted Living Resident ☐ Personal Care Home ☐ With 24 Hour Caregivers ☐ Daytime Caregivers ☐ Nighttime Caregivers
Patient Owned Equipment	☐ None ☐ Hospital Bed ☐ Standard Walker ☐ Manual Wheelchair ☐ Rolling Walker ☐ Motorized WC/Scooter ☐ Rollator Walker ☐ Sliding Board ☐ Hemi Walker ☐ Lift Chair ☐ Straight Cane ☐ Gait Belt ☐ Quad Cane ☐ Crutches ☐ Bed Side Commode ☐ Platform Wx Attachment ☐ Shower Chair ☐ Oxygen ☐ Tub Bench ☐ Prosthesis ☐ Sock Aid ☐ Long Handled Reacher ☐ Handicapped height toilet
	☐ House ☐ Apartment ☐ Mobile Home

Number of steps to enter home	
Handrails present	☐ None ☐ 1 handrail ☐ 2 handrails
HH Rehab prior to admission	○ Yes ○ No
Ambulation ability at baseline	○ Independent ○ Supervision ○ Assist x1 ○ Bedbound/Non- Ambulatory ○ Assist x2 ○ W/C bound/Non- Ambulatory
Assistive Devices used for Ambulation at Baseline	☐ None ☐ Standard Walker ☐ Quad Cane ☐ Hemi Walker ☐ Rolling Walker ☐ Platform Wx Attachment ☐ Rollator Walker ☐ Prosthesis ☐ Straight Cane
Pre-Admission Bathing Ability	☐ Independent ☐ Home Health Bath Aide ☐ Assist x 1 ☐ Dependent ☐ Supervision/Set-up
Pre-Admission Dressing Ability	☐ Independent ☐ Assist x 1 ☐ Dependent ☐ Supervision/Set-up
Pre-Admission Hygiene Ability	☐ Independent ☐ Assist x 1 ☐ Dependent ☐ Pull-up ☐ Continent ☐ Adult Diaper ☐ Incontinent ☐ Adult Pads ☐ Supervision/Set-up
Pre-Admission Feeding Ability	☐ Independent ☐ Assist x 1 ☐ Dependent ☐ Supervision/Set-up
Pre-Admission Meal Prep Ability	☐ Independent ☐ Dependent ☐ Family provides meals ☐ Uses microwave ☐ Meals on Wheels
Pre-Admission Cleaning Ability	☐ Independent ☐ Assisted ☐ Dependent ☐ Home Health Aide
Does Patient Drive at Baseline?	○ Yes ○ No Comment
Patient Preference for Sleep Position/Location	☐ Regular Bed ☐ Recliner ☐ Hospital Bed ☐ Lift Chair ☐ Couch/Sofa
Is Patient Employed?	☐ Full-Time ☐ Disabled ☐ Part-Time ☐ Homemaker ☐ Unemployed ☐ Retired
Patient Orientation	☐ No Orientation ☐ Person ☐ Place ☐ Time ☐ Situation
Preception Impaired	○ Yes ○ No
	☐ Apraxia ☐ Visual Motor

Preception Impaired by	☐ Apraxia ☐ Visual Motor ☐ Position in Space ☐ Visual Perception ☐ Body Scheme ☐ Neglect Unilateral ☐ Figure Ground ☐ R/L Discrimination
Cognition Impaired	○ Yes ○ No
Cognition Impaired by	☐ Initiation ☐ Processing Speed ☐ Planning ☐ Attention Span ☐ Visual/ Motor ☐ Concentration ☐ Problem Solving ☐ Unable - 1 Step Command ☐ Sequencing ☐ Unable - 1 Step Command ☐ Judgement ☐ Impulsiveness
Memory Description	☐ Short Term Intact ☐ Short Term Impaired ☐ Long Term Intact ☐ Long Term Impaired ☐ Visual Memory Intact ☐ Visual Memory Impaired ☐ Auditory Memory Intact ☐ Auditory Memory Impaired
Gross Range of Motion Assessment	
Location	○ Left ○ Right ○ Bilateral ○ N/A
Extremity	○ Upper ○ Lower
Findings	○ Functional ○ Within Normal Limits ○ Impaired
ROM Exam (Other)	
Comment on ROM Findings	
Gross Muscle Strength Assessment - Occurrence #1	
→ Location	Bilateral
→ Extremity	Upper
Findings	☐ Functional ☐ Within Normal Limits ☐ Impaired ☐ Generalized Weakness
Muscle Strength Exam (Other)	
Comment on Strength Findings	
Hand Dominance	
Hand Dominance	○ Right ○ Left
Coordination - Occurrence #1	
→ Location	Bilateral
EXTREMITY	○ Upper
Gross Motor Coordination	○ WFL ○ Fair ○ Poor

Coordination	○ Poor ○ Absent
Fine Motor Coordination	○ WFL ○ Fair ○ Poor ○ Absent
Coordination Comment	
Tone Assessment	
Findings	☐ Within Normal Limits ☐ Low ☐ Spasticity ☐ High ☐ Flaccid ☐ Tremors ☐ Rigidity
Sitting Balance Assessment	
Sitting Static	○ Good ○ Fair ○ Poor ○ Not Assessed
Sitting Dynamic	○ Good ○ Fair ○ Poor ○ Not Assessed
Standing Balance Assessmet	
Static Standing	☐ Good ☐ Without Assistive Device ☐ Fair ☐ Hand Held Assist X 1 ☐ Poor ☐ Hand Held Assist X 2 ☐ With Assistive Device ☐ Not Assessed
Dynamic Standing Ambility	☐ Good ☐ Without Assistive Device ☐ Fair ☐ Hand Held Assist X 1 ☐ Poor ☐ Hand Held Assist X 2 ☐ With Assistive Device ☐ Not Assessed
Edge of Bed Sitting Tolerance	(min)
Comments	
Balance Assessment	
Pain Level	
Pain Scale	☐ 0=No Pain ☐ 1=Very Little Pain ☐ 7=Moderate-Distressing ☐ 8=Distressing ☐ 2=Slight Pain ☐ 9=Distressing-Unbearable ☐ 3=Slight-Mild Pain ☐ 10=Unbearable ☐ 4=Mild Pain ☐ Unable to Rate Pain ☐ 5=Mild-Moderate ☐ Facial Grimacing ☐ 6=Moderate Pain ☐ Vocalizations
Pain Location	
Sensation Exam	
Sensation Exam	○ Yes ○ No ○ N/A due to imp. cognition

Sensation Exam	
Sensation Exam Needed	○ Yes ○ No ○ N/A due to imp. cognition
Sensation - Occurrence #1	
Sensation Location Modifier	☐ Left ☐ Right
Sensation Location	☐ Elbow ☐ Face ☐ Forearm ☐ Neck ☐ Shoulder ☐ Hand ☐ Ulnar Nerve Area ☐ Wrist ☐ Radial Nerve Area ☐ Thumb ☐ Median Nerve Area
Sensation Intact	☐ Light Touch ☐ Proprioception ☐ Sharp/Dull ☐ Stereognosis ☐ Hypersensitivity ☐ Kinesthesia
Sensation Impaired	☐ Light Touch ☐ Proprioception ☐ Sharp/Dull ☐ Stereognosis ☐ Hypersensitivity ☐ Kinesthesia
Sensation Absent	☐ Light Touch ☐ Proprioception ☐ Sharp/Dull ☐ Stereognosis ☐ Hypersensitivity ☐ Kinesthesia
Edema Exam	
Edema Exam Needed?	○ Yes ○ No Comment
Edema - Occurrence #1	
Edema Location Body Site Modifier	○ Left ○ Right ○ Bilateral
➔ Edema site	☐ Foot ☐ Ankle ☐ Leg ☐ Hand ☐ Arm ☐ Scrotal ☐ Abdomen ☐ Facial ☐ Generalized
Edema Assesment	☐ None ☐ Mild (1-1+) ☐ Moderate (2-2+) ☐ Severe (3-3+) ☐ Pitting ☐ Non - Pitting
Transfer Ability	
Supine to Sit	☐ Independent ☐ Unable to Tolerate ☐ SBA ☐ Refused Care ☐ CGA ☐ Not Assessed ☐ Min Assist x1 ☐ With Trapeze ☐ Min Assist x2 ☐ Logroll Technique ☐ Mod Assist x1 ☐ With TAPS Pad ☐ Mod Assist x2 ☐ With Bedrail ☐ Max Assist x1 ☐ With HOB Flat

	☐ Dependent >1 ☐ Extra Staff for Safety
Sit to Stand	☐ Independent ☐ Dependent >1 ☐ SBA ☐ Unable to Tolerate ☐ CGA ☐ Refused Care ☐ Min Assist x1 ☐ Not Assessed ☐ Min Assist x2 ☐ With Device ☐ Mod Assist x1 ☐ Without Device ☐ Mod Assist x2 ☐ Cues for Hand Placement ☐ Max Assist x1 ☐ Extra Staff for Safety ☐ Max Assist x2 ☐ Bed Height Elevated ☐ Dependent x1
Sit to Supine	☐ Independent ☐ Unable to Tolerate ☐ SBA ☐ Refused Care ☐ CGA ☐ Not Assessed ☐ Min Assist x1 ☐ With Trapeze ☐ Min Assist x2 ☐ Logroll Technique ☐ Mod Assist x1 ☐ With TAPS Pad ☐ Mod Assist x2 ☐ With Bedrail ☐ Max Assist x1 ☐ With HOB Flat ☐ Max Assist x2 ☐ With HOB Elevated ☐ Dependent x1 ☐ Dependent >1 ☐ Extra Staff for Safety
Toilet Transfers	☐ Independent ☐ Max Assist x2 ☐ SBA ☐ Dependent x1 ☐ CGA ☐ Dependent >1 ☐ Min Assist x1 ☐ Unable to Tolerate ☐ Min Assist x2 ☐ Refused Care ☐ Mod Assist x1 ☐ Not Assessed ☐ Mod Assist x2 ☐ Extra Staff for Safety ☐ Max Assist x1
Toilet Transfer Devices	☐ Cane ☐ Grab Bars ☐ Walker ☐ Commode ☐ Rolling Walker ☐ Drop-Arm BSC ☐ Rollator Walker ☐ Sliding Board ☐ Hemi Walker ☐ BSC at Bedside ☐ Gait Belt ☐ BSC over Commode ☐ Urinal
Sliding Board Transfers	☐ Independent ☐ Dependent x1 ☐ SBA ☐ Dependent >1 ☐ CGA ☐ Unable to Tolerate ☐ Min Assist x1 ☐ Refused Care ☐ Min Assist x2 ☐ Not Assessed ☐ Mod Assist x1 ☐ Extra Staff for Safety ☐ Mod Assist x2 ☐ Cues for Board Placement ☐ Max Assist x1 ☐ Assist w/Board Placement ☐ Max Assist x2
Transfer Comment	

Weight Bearing Assessment	
Weight Bearing Location	○ Right Lower Extremity ○ Left Lower Extremity ○ Right Upper Extremity ○ Left Upper Extremity
Weight Bearing Status	○ Non-Weight Bearing ○ Touch Down Weight Bearing ○ Partial Weight Bearing ○ Weight Bear as Tolerated ○ Full Weight Bearing
Allowed Weight Bearing Amount	_____ (lbs)
Ambulation Assessment	
Ambulation Assistive Devices	☐ None ☐ Standard Walker ☐ Rolling Walker ☐ Rollator Walker ☐ Hemi Walker ☐ Platform Wx Attachment ☐ Quad Cane ☐ Straight Cane ☐ Crutches ☐ Oxygen ☐ Sling ☐ Gait Belt ☐ LSO ☐ Miami J Collar ☐ Knee Immobilizer ☐ AFO ☐ Shoes ☐ Orthotic Shoes ☐ Prosthesis ☐ Sara + Lift/Walker ☐ Parallel Bars
Ability to Maintain Weight Bearing Status	☐ Yes ☐ No ☐ With Cues ☐ With Therapist monitoring ☐ Inconsistent
Ambulation Ability	☐ Independent ☐ Dependent x1 ☐ SBA ☐ Dependent >1 ☐ CGA ☐ Refused Care ☐ Min Assist x1 ☐ Not Assessed ☐ Min Assist x2 ☐ Unable to Tolerate ☐ Mod Assist x1 ☐ To be Assessed ☐ Mod Assist x2 ☐ Non Amb at baseline ☐ Max Assist x1 ☐ Extra Staff for Safety ☐ Max Assist x2
Other Exam Notes	
Overall Endurance	○ Good ○ Fair ○ Poor
Other Comments	
Basic ADL Assessment	
Bathing Assistive Devices	☐ Chair ☐ Transfer Tub Bench ☐ Shower Chair ☐ Grab Bars ☐ Tub Rail ☐ Long Handled Brush ☐ Wash Mitt ☐ Hand Held Shower ☐ Bed Side Commode ☐ None
	○ Independent ○ Maximum Assist ○ Standby Assist ○ Maximum Assist x2

Bathing Ability	○ Standby Assist ○ Maximum Assist x2 ○ Contact Guard Assist ○ Dependent ○ Minimum Assist ○ Dependent >1 ○ Minimum Assist x2 ○ Assisted By Family ○ Moderate Assist ○ Assisted By Caregiver ○ Moderate Assist x2 ○ Refused Care ○ Not Assessed
CHG Bath Completed	○ Yes
Eating/Feeding Assistive Devices	☐ None ☐ Adapted Utensil ☐ Adapted Plate/Bowl ☐ Plate Guard ☐ Adapted Cup ☐ Nonslip Pad ☐ ADL Orthotic ☐ Universal Cuff ☐ Mobile Arm Support ☐ Weighted Utensils ☐ Large Handled Utensils
Eating (Feeding) Ability	○ NPO ○ Minimum ○ Independent ○ Moderate ○ Dependent ○ Maximum ○ Not Assessed ○ Supervision
Grooming Ability	○ Independent ○ Maximum Assist ○ Standby Assist ○ Maximum Assist x2 ○ Contact Guard Assist ○ Dependent ○ Minimum Assist ○ Dependent >1 ○ Minimum Assist x2 ○ Assisted By Family ○ Moderate Assist ○ Assisted By Caregiver ○ Moderate Assist x2 ○ Refused Care ○ Not Assessed
Oral Care Assistive Devices	☐ Adapted Toothbrush ☐ Adapted Dispensers ☐ Denture Brush ☐ Dentures ☐ None
Oral Care Ability	○ Independent ○ Maximum Assist ○ Standby Assist ○ Maximum Assist x2 ○ Contact Guard Assist ○ Dependent ○ Minimum Assist ○ Dependent >1 ○ Minimum Assist x2 ○ Refused Care ○ Moderate Assist ○ Not Assessed ○ Moderate Assist x2
Lower Body Dressing Assistive Devices	☐ None ☐ Dressing Stick ☐ Sock Aid ☐ Long Handled Shoe Horn ☐ Adapted Shoe Fasteners ☐ Reacher
Lower Body Dressing Ability	○ Independent ○ Maximum Assist ○ Standby Assist ○ Maximum Assist x2 ○ Contact Guard Assist ○ Dependent ○ Minimum Assist ○ Dependent >1 ○ Minimum Assist x2 ○ Assisted By Family ○ Moderate Assist ○ Assisted By Caregiver ○ Moderate Assist x2 ○ Refused Care ○ Not Assessed
Upper Body Dressing Assistive Devices	☐ None ☐ Zipper Pull ☐ Adapted Closures ☐ Dressing Stick ☐ Reacher ☐ Button Hook

Upper Body Dressing Assistive Devices	☐ None ☐ Zipper Pull ☐ Adapted Closures ☐ Dressing Stick ☐ Reacher ☐ Button Hook
Upper Body Dressing Ability	○ Independent ○ Maximum Assist ○ Standby Assist ○ Maximum Assist x2 ○ Contact Guard Assist ○ Dependent ○ Minimum Assist ○ Dependent >1 ○ Minimum Assist x2 ○ Assisted By Family ○ Moderate Assist ○ Assisted By Caregiver ○ Moderate Assist x2 ○ Refused Care ○ Not Assessed
Toilet Transfers	○ Independent ○ Maximum Assist ○ Standby Assist ○ Maximum Assist x2 ○ Contact Guard Assist ○ Dependent ○ Minimum Assist ○ Dependent >1 ○ Minimum Assist x2 ○ Refused Care ○ Moderate Assist ○ Not Assessed ○ Moderate Assist x2
Toileting Assistive Devices	☐ Bedpan ☐ Urinal ☐ BSC ☐ Commode ☐ Sliding Board ☐ Hoyer Lift ☐ Walker ☐ Rolling Walker ☐ St. Cane ☐ Quad Cane ☐ Crutches ☐ Wheelchair ☐ Hemi Walker ☐ Catheter
Toileting Hygiene	○ Independent ○ Maximum Assist ○ Standby Assist ○ Maximum Assist x2 ○ Contact Guard Assist ○ Dependent ○ Minimum Assist ○ Dependent >1 ○ Minimum Assist x2 ○ Supervision-Set Up ○ Moderate Assist ○ Continent ○ Moderate Assist x2 ○ Incontient ○ Refused Care ○ Adult Depends ○ Not Assessed
Home Management	☐ Independent ☐ Maximum Assist ☐ Stand-by-Assist ☐ Dependent ☐ Contact Guard Assist ☐ Has Family/Agency Assist ☐ Minimal Assist ☐ Not Assesed/NA ☐ Moderate Assist
Limiting ADL Factors	☐ None ☐ Impaired Balance ☐ Ataxia ☐ Apraxia ☐ Decreased Endurance ☐ Limited ROM ☐ Pain ☐ Incoordination ☐ Abnormal Tonal Reflexes ☐ Decreased Strength ☐ Poor Safety Awareness ☐ Impaired Sensory Process ☐ Impaired Cognition ☐ On Ventilator Support ☐ Impaired Perception ☐ Impaired Mobility ☐ Low Vision ☐ Need for Adaptive Equip. ☐ Weight Bearing Status ☐ Useof One Side of Body

ADL Factors Other	
Precautions in Place	☐ THR ☐ WBAT ☐ Fall Risk ☐ TDWB ☐ Low Vision ☐ NWB
Follows Precautions	○ Yes ○ No Comment
AM-PAC	
AM-PAC Completed	○ Yes ○ No
How much help needed by another person	
Putting on/taking off reg lower body clothing	○ Total ○ A Lot ○ A Little ○ None Putting on and taking off regular lower body clothing
Bathing	○ Total ○ A Lot ○ A Little ○ None Bathing (including washing, rinsing, drying)?
Toileting	○ Total ○ A Lot ○ A Little ○ None Toileting, which includes using toilet, bedpan or urinal?
Putting on/taking off reg upper body clothing	○ Total ○ A Lot ○ A Little ○ None Putting on and taking off regular upper body clothing
Taking care of personal grooming	○ Total ○ A Lot ○ A Little ○ None Taking care of personal grooming such as brushing teeth
Eating meals	○ Total ○ A Lot ○ A Little ○ None
Raw Score	
%	

G8987 - Self Care Current Status	○ G8987CI ○ G8987CJ ○ G8987CK ○ G8987CL ○ G8987CM ○ G8987CN Self Care
G8988 - Self Care Goal Status	○ G8988CH ○ G8988CI ○ G8988CJ ○ G8988CK ○ G8988CL ○ G8988CM ○ G8988CN Self Care
G8989 - Self Care DC Status	○ G8989CH ○ G8989CI ○ G8989CJ ○ G8989CK ○ G8989CL ○ G8989CM ○ G8989CN Self Care
VITAL SIGNS	
Blood Pressure Systolic	(100 - 140 mm Hg)
Blood Pressure Diastolic	(60 - 100 mm Hg)
Pulse Rate (adult)	(60 - 90 bpm)
O2 Saturation	(95 - 100 %)
Oxygen Delivery	☐ Nasal Cannula ☐ CPAP/BiPap Inline ☐ Oxymizer Cannula ☐ Non-Rebreather Mask ☐ Room Air ☐ Trach Collar ☐ Ventilator ☐ Venturi Mask ☐ Aquinox
02 Liters (if applicable)	(liters)
Teaching Assessment	
Learning Preferences	☐ One-on-One Instruction ☐ Audio ☐ Written ☐ Group Instruction ☐ Visual ☐ Demonstration ☐ Discussion
Barriers to Learning	☐ None ☐ Auditory ☐ Reading skills ☐ Cognitive/Verbal ☐ Cognitive/Written ☐ Motivation ☐ Physical ☐ Age related ☐ Language ☐ Emotional ☐ Cultural ☐ Religious ☐ Financial ☐ Visual ☐ Speech ☐ No Intrepreter ☐ Cognitive Impulsiveness ☐ Dementia

	☐ Disorientation/Confusion
Readiness To Learn	○ Good ○ Fair ○ Poor ○ Unable to Tolerate ○ Patient Refused
Plan of Care	
Summary of Findings	
Rehab Potential	○ Guarded ○ Poor ○ Fair ○ Good ○ N/A
Problems Identified	☐ Impaired Endurance ☐ Pain ☐ Impaired Cognition ☐ Impaired Sensation ☐ Impaired Perception ☐ Use of One Side of Body ☐ Impaired Coordination ☐ Decreased U/B Strength ☐ Decreased Functional Mob. ☐ Decreased U/B ROM ☐ Decreased Balance ☐ Increased Edema ☐ Abnormal Muscle Tone ☐ Poor/Imp Safety Awareness ☐ Low Vision ☐ Poor Head /Trunk Coord. ☐ Impaired ADL'S ☐ Respiratory Status ☐ Obesity ☐ Home Environment
Other Problems Identified	
Treatment Plan	☐ ADL Retraining ☐ Staff/Family Education ☐ EC/WS ☐ Edema Control ☐ PRE ☐ Homemaking/Kitchen Safety ☐ HEP ☐ Home Evaluation ☐ TE ☐ AE Training ☐ TA ☐ Cognitive Train/Retrain ☐ Perceptive Train/Retain ☐ Neuromuscular Reeducation ☐ Living Skill/Community
Treatment Plan - Other	
Treatment Frequency	☐ One time visit ☐ 1-2X Week ☐ 2-3X Week ☐ 1-2X Daily 3-5X Week ☐ 1-2X Daily 4-6X Week ☐ 1-2X Daily 5-7X Week ☐ Monitor

Treatment Frequency - Other	
Short Term Goals	
Long Term Goals	
Treatment Duration - Short Term Goals	○ One Time Visit ○ 1-2 Days ○ 2-3 Days ○ 3-5 Days ○ One Week ○ Two Weeks ○ Three Weeks ○ Four Weeks
Treatment Duration - Long Term Goals	○ One Time Visit ○ One Week ○ Two Weeks ○ Three Weeks ○ Four Weeks
Treatment Duration - Other	
Plan of Care Review	
Barriers to Plan	☐ Physical Status ☐ Cognitive Status ☐ Environment ☐ Motivation ☐ None Identified
Discussed with Patient and/or Caregiver	○ Yes ○ No Comment
Discharge Recommendations	☐ Home Independent ☐ Home with Family Support ☐ Home with HH OT ☐ Home with Outpatient OT ☐ Home with Sitters ☐ NHP ☐ Possible TCU Admit ☐ Rehab Hospital ☐ TBD pending pt. progress

Treatment Duration - Other	
Plan of Care Review	
Barriers to Plan	☐ Physical Status ☐ Cognitive Status ☐ Environment ☐ Motivation ☐ None Identified
Discussed with Patient and/or Caregiver	○ Yes ○ No Comment
Discharge Recommendations	☐ Home Independent ☐ NHP ☐ Home with Family Support ☐ Possible TCU Admit ☐ Home with HH OT ☐ Rehab Hospital ☐ Home with Outpatient OT ☐ TBD pending pt. progress ☐ Home with Sitters
Discharge Plans -Other	
Recommended DC Equipment	☐ TBD ☐ Hospital Bed ☐ Bed Side Commode ☐ Sliding Board ☐ AE ☐ Walker/Basket/Bag ☐ Lapboard ☐ Wheelchair ☐ Transfer Tub Bench ☐ Shower Chair ☐ Oxygen ☐ Straight Cane ☐ Hoyer Lift ☐ Hemi Walker ☐ Rolling Walker ☐ Bariatric BSC ☐ None ☐ Standard Walker
Discharge Needs - Other	
Evaluation Status	
Evaluation Status	○ Evaluation in Progress ○ Evaluation Revision
OT Eval Low:	○ Yes
OT Eval Mod:	○ Yes
OT Eval High:	○ Yes
OT Re-Eval:	○ Yes

Appendix D: Data Collection:
Demographics and PPS scores

Clients	Age	Gender	Length of time since initial cancer diagnosis	Date of last cancer treatment	Type of cancer	Cormorbities: Hypertension=a Diabetes=b CHF=c COPD=d	Barthel: Bladder score	Barthel: Toilet use score	Barthel: Feeding score	Barthel: Transfer score	Barthel: Mobility score	Barthel: Dressing score	Barthel: Ability to go up and down the stairs score	Barthel: Bathing score	Total score: Barthel	Social History: Lives alone=a With family=b	Social History: Drives- yes=a no=b	Social History: Community activities- Goes to grocery=a goes to appts=b Goes to church=c	Social History: Current has Home Health: OT=a PT=b Nurse=c	Palliative Performance Scale score
1	68	F	1 day	0	Breast	N/A	10	5	5	5	0	5	0	0	45	b	a	0	0	40
2	55	F	4 months	5 weeks	Larynx	a	10	10	10	10	10	5	5	5	85	a	a	b	0	40
3	78	M	3 months	10 days	Lung	a	5	5	10	5	10	5	5	0	50	b	a	b	0	40
4	60	M	5 years	3 weeks	Pancreatic	a,b	5	5	10	10	10	5	5	0	55	b	a	b	0	40
5	78	F	9 years	9 years	Breast	a, d	10	10	10	10	10	5	5	0	80	b	a	a,b,c	0	40
6	95	M	6 months	6 months	Skin	a, d	5	5	5	5	5	5	0	0	30	a	b	0	0	40
7	56	M	3 months	N/A	Lymphoma	a (MS)	5	0	5	5	0	0	0	0	15	b	b	b	0	50
8	74	F	4 months	3 months	Pancreatic	b (stroke)	0	5	5	5	0	0	0	0	15	b	b	b	0	40
9	88	M	7 days	10 days	Bladder	a (PD)	5	5	5	10	10	5	5	0	45	b	a	b	0	40
10	86	F	1 month	N/A	Lung	a	5	5	10	5	0	0	0	0	30	a	b	a,b,c	0	40

Appendix E: Data Collection: COPM

Evaluator **Karen Enlow**		
Participant ID: 1		
Initial Assessment:		
Re-assessment:		
Category --------- Occupational Performance Problem---------Importance	Performance T1	Satisfaction T1
Total performance or satisfaction scores		
Average scores performance/satisfaction T1		
	Performance T2	Satisfaction T2
Total performance or satisfaction scores T2		
Average scores performance/satisfaction T2		

Appendix F: Shah Modified Barthel Index

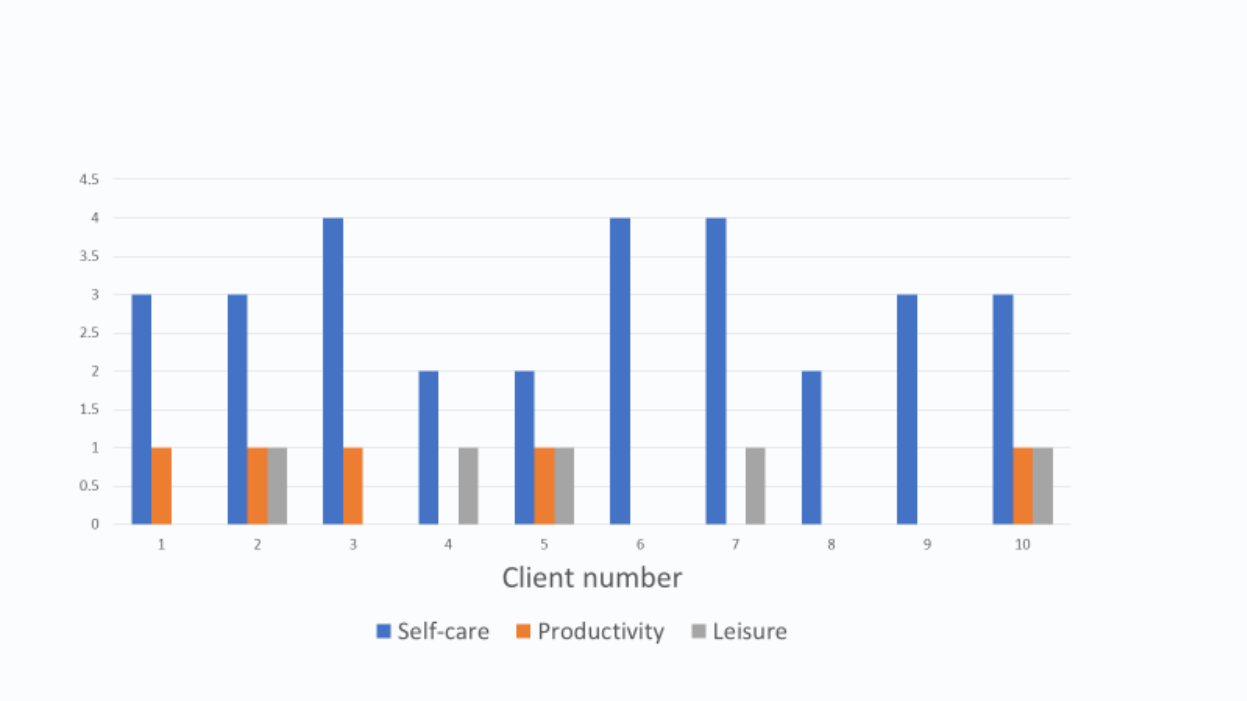
SHAH MODIFIED BARTHEL INDEX (RECOMMENDED ASSESSMENT TOOL)		
Name:	**NRIC :**	
	Date :	
▫ Full-Time Healthy Caregiver ▫ Part-Time Caregiver (i.e. working) ▫ Full-Time Frail Caregiver ▫ No Caregiver		
Functional Assessment Index	**Score**	**Remarks/Actions**
BOWEL CONTROL (Preceding week)		
Continent	10	
Occasional accident (once a week)	5	
Incontinent (or need to be given enemas)	0	
BLADDER CONTROL (Preceding week)		
Continent	10	
Occasional accident (once per 24 hours)	5	
Incontinent or catheterized and unable to manage	0	
PERSONAL HYGIENE (Preceding 24 – 48 hours)		
Independent	5	
Need help	0	
TOILET USE		
Independent	10	
Needs some help	5	
Dependent	0	
FEEDING		
Independent	10	
Need help	5	
Unable	0	
TRANSFER (from bed to chair and back)		
Independent	15	
Minor help (verbal or physical)	10	
Major help (one or two persons physical) can sit	5	
Unable, no sitting balance; need two people to life	0	
MOBILITY		

Independent but may make use of a walking aid	15	
Walks with the help of one person (verbal or physical)	10	
Wheelchair independent	5	
Immobile	0	
DRESSING		
Independent (Including buttons zips laces etc)	10	
Needs help but can do about half unaided	5	
Dependent	0	
STAIR		
Independent up and down; must carry any walking aid used to be independent.	10	
Needs help (Verbal physical carrying aid)	5	
Unable	0	
BATHING		
Independent; must get in and out unsupervised and wash self	5	
Dependent	0	
Comments:		
Name & Designation of Staff:	**Signature:**	

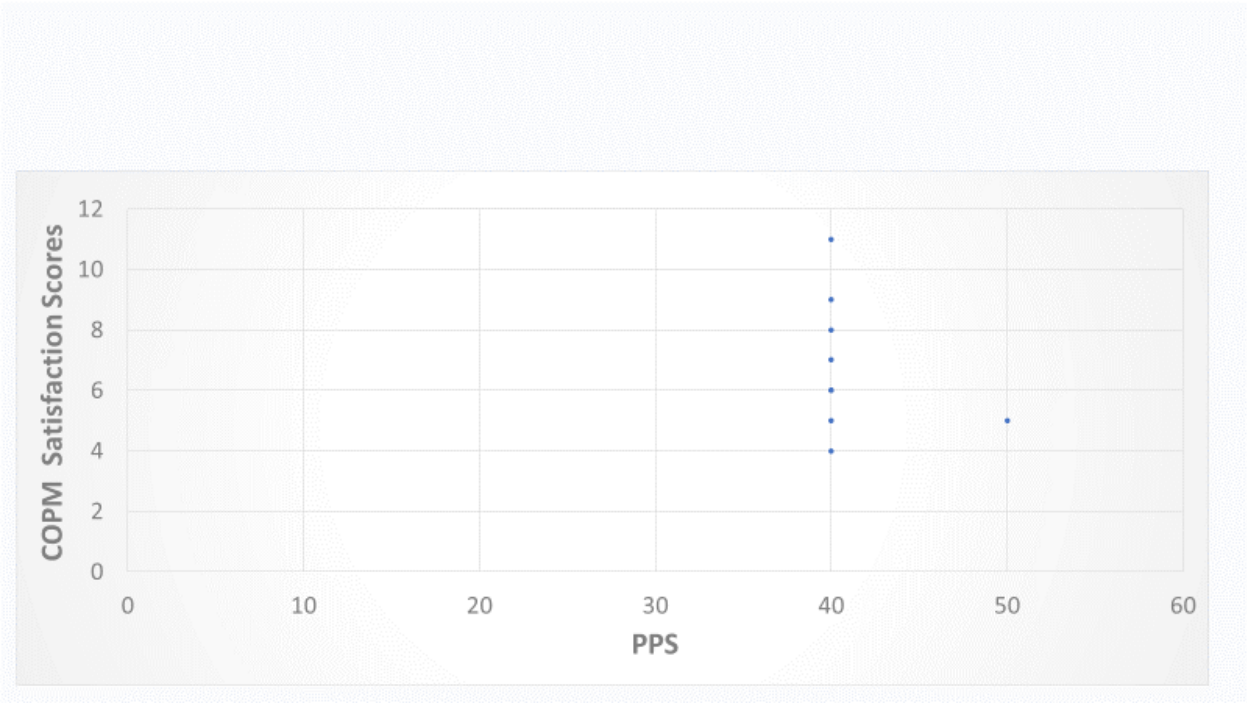
- **This should record what the client does rather than what they could be.**
- **The need to supervision indicates that client is not independent.**
- **Answers should be based on the best available evidence but direct observation is not required.**
- **Client who is unconscious is scored "0" throughout even if not yet incontinent.**
- **Use of aid to be independent is allowed.**
- **Maximum score is 100; low scores on individual items highlight areas of need.**

Total Dependency = 0-24	Severe Dependency = 25-49	Moderate Dependency = 50-74
Mild Dependency =75-90	Minimal Dependency = 91-99	Independent = 100

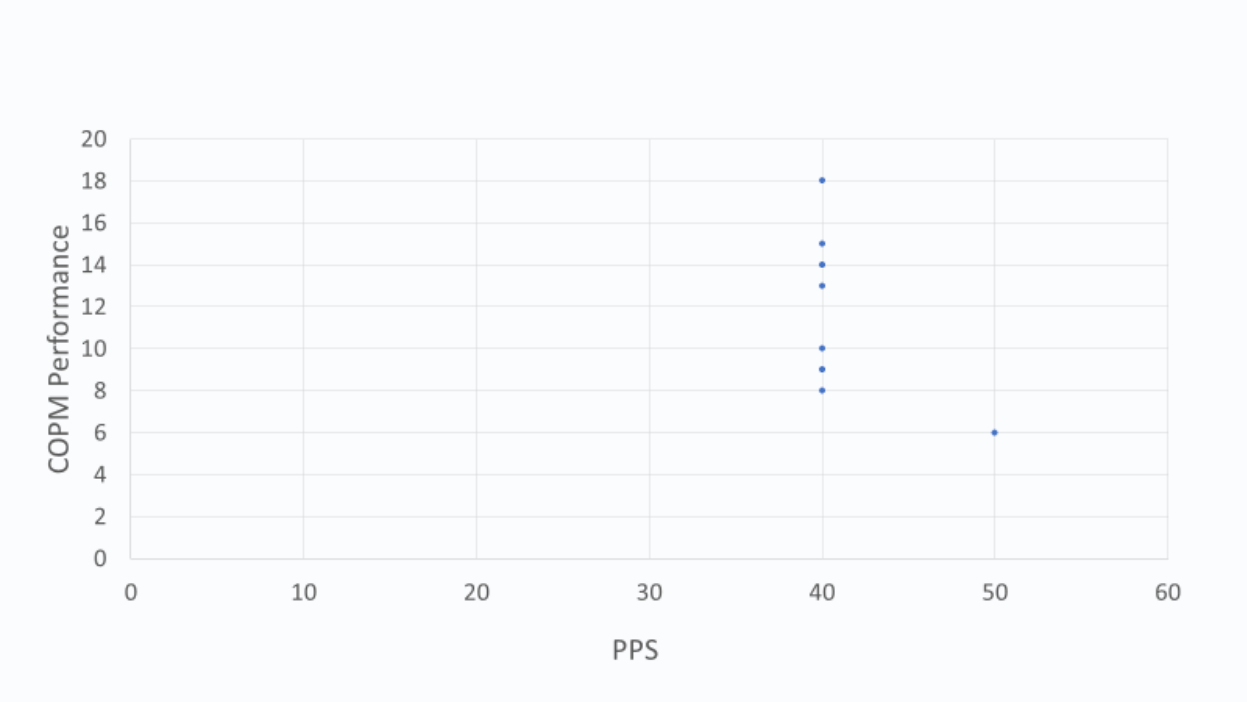
Appendix G: Number of Occupations by Category



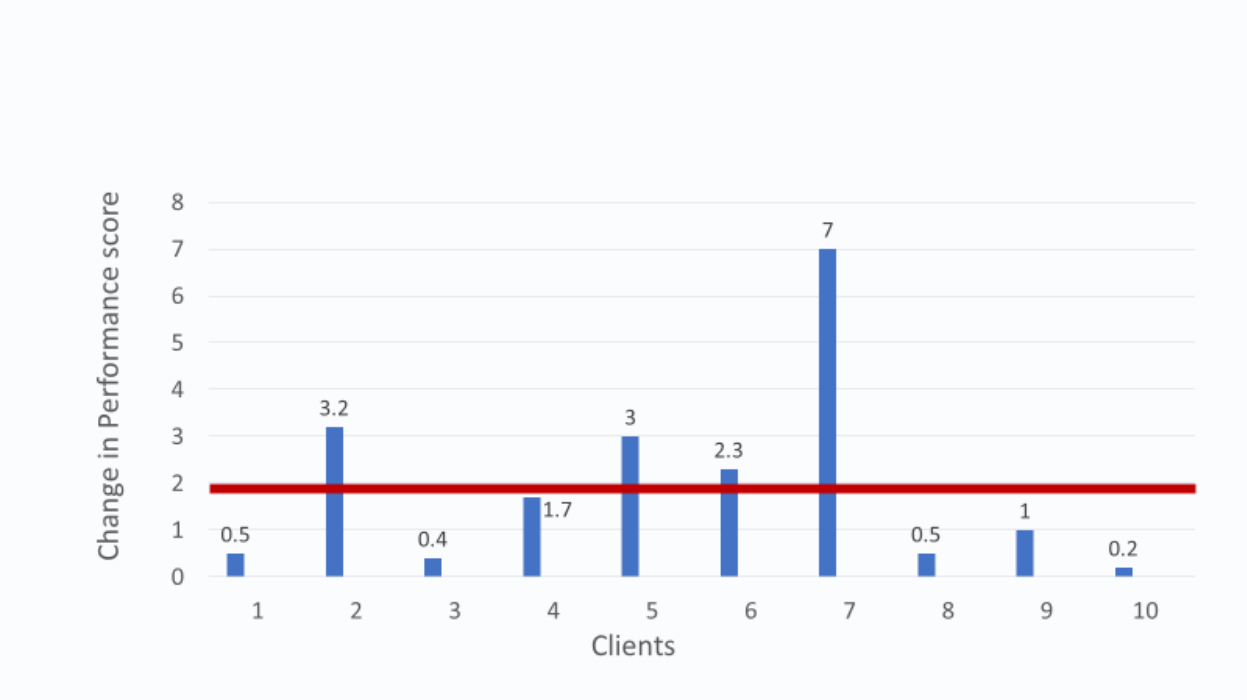
Appendix H: Scatterplot Diagram of the Correlation among PPS and COPM Satisfaction Scores



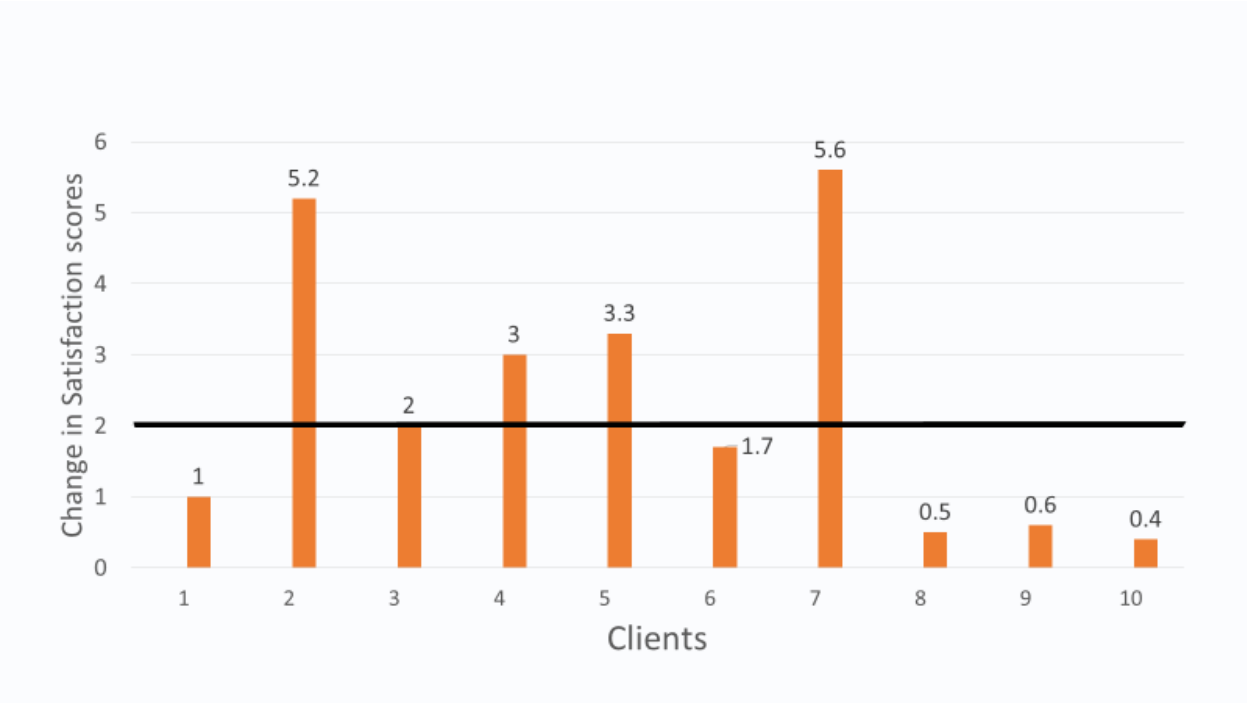
Appendix I: Scatterplot diagram of the Relationship Among PPS and COPM Performance Scores



Appendix J: Change in Performance Scores on the COPM (Pre/Post)



Appendix K: Change in Satisfaction Scores on the COPM (Pre/Post)



Appendix L: Scatterplot Diagram of Correlation of Shah Modified Barthel Index Scores and Self-Care Occupations