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Improving Patients' Readiness for Discharge: The Development of An Occupation-Based Group Therapy Protocol in Inpatient Rehabilitation

Valerie Cheng

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IMPROVING PATIENTS' READINESS FOR DISCHARGE: THE DEVELOPMENT OF AN
OCCUPATION-BASED GROUP THERAPY PROTOCOL IN INPATIENT
REHABILITATION

By

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Bachelor of Science – Kinesiological Science
University of Nevada, Las Vegas
2019

A doctoral project submitted in partial fulfillment
of the requirements for the

Occupational Therapy Doctorate

Department of Brain Health
School of Integrated Health Sciences
The Graduate College

University of Nevada, Las Vegas
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Doctoral Project Approval

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Improving Patients' Readiness for Discharge: The Development of an Occupation-Based
Group Therapy Protocol in Inpatient Rehabilitation

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Abstract

The literature showed a lack of studies involving occupation-based group therapy in an inpatient rehabilitation setting, with notable barriers including lack of time, space, and equipment. The barriers lead occupational therapists (OT) to pursue an impairment-based approach, steering away from occupation-based approaches, which is what makes up the core of OT. Current literature is also limited to patients' perceptions of discharge readiness, with most research primarily concentrated on clinicians' perspectives. This 14-week capstone experience will include developing an occupation-based group therapy protocol for inpatient rehabilitation that will be implemented at Dignity Health Rehabilitation Hospital. Through conducting occupation-based group therapy in an inpatient rehabilitation setting for six weeks, surveys were provided to evaluate the program and to view patient's perceptions of readiness for discharge. The culminating experience provided Dignity Health Rehabilitation Hospital with additional resources for their OT department to conduct occupation-based group therapy. Patients' perceptions of readiness for discharge were evaluated through pre- and post-group surveys to view whether participating in occupation-based groups impacted readiness for discharge in conjunction with their inpatient rehabilitation stay.

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Introduction

Occupational therapy (OT) is the therapeutic use of everyday activities with persons, groups, or populations to promote and facilitate participation (American Occupational Therapy Association [AOTA], 2020). These everyday activities occupy an individual's time and bring a sense of meaning and purpose to their lives. The World Federation of Occupational Therapists describes occupations as things people need, want, and expect to do (World Federation of Occupational Therapists [WFOT], 2012). OT's primary method for engaging clients in an activity is to discover what they find meaningful and what they do every day to occupy time (AOTA, 2020). Identifying meaningful tasks leads OTs to design occupation-based intervention plans.

Occupation-based interventions allow therapists to use the patient's engagement in the chosen occupation as the basis of the treatment sessions (Fisher, 2013). Fisher (2013) also describes occupation-based interventions as engaging in an occupation as the therapeutic agent of change. Occupations are an essential aspect and component of making a practical OT treatment session. The *Occupational Therapy Practice Framework Fourth Edition* (OTPF-4) outlines a broad range of occupations, such as activities of daily living (ADL), instrumental activities of daily living (IADL), health management, rest and sleep, education, work, play, leisure, and social participation (AOTA, 2020). As occupation is the focus of OT, it is essential to make sessions more occupation-based, as occupations can impact the client's overall health and well-being, as outlined by AOTA (AOTA, 2020). Aligning with the American Occupational Therapy Foundation (AOTF), this capstone topic adds value to their research agenda of intervention, where their priorities are client-centered, theory-driven, and occupation-based (AOTF, 2019). In the setting of inpatient rehabilitation, a growing method for treatment sessions is group therapy. However, utilizing group interventions to treat those attempting to adjust to difficult health conditions is

one of the least utilized resources for healthcare support (Drum et al., 2011). Group therapy is typically included within rehabilitation programs, which is thought to have unique benefits over individual therapy sessions (Zanca et al., 2013).

In inpatient rehabilitation, each patient must tolerate three hours of therapy, divided among OT, physical therapy (PT), and, if needed, speech therapy (Forrest et al., 2019). An impairment-focused approach is typically emphasized, causing occupation-based practice to be seen as a challenge (Aas & Bonsaksen, 2022; Tomori et al., 2015). Wilding and Whiteford (2007) state that the medical model focuses on injury and illness, whereas OT should focus on engaging people in occupation. Additionally, current literature shows limited research on occupation-based interventions within a group therapy setting in inpatient rehabilitation. Much of the research is focused on outpatient and community-based settings. Therefore, this capstone aims to address the research gaps and maintain occupation-based treatment approaches in inpatient rehabilitation group therapy.

Statement of the Problem

Occupational therapists in an inpatient rehabilitation setting complete various interventions to support their patient's desired goals and target their meaningful occupations. Multiple methods are used to target these concerns, such as individual treatment and group treatment sessions. Inpatient settings support individuals recovering from injury or illness through occupation-based processes (Spalding et al., 2022b). Within OT inpatient rehabilitation, limited research is available on occupation-based groups' impact on occupational performance outcomes (Spalding et al., 2023a). There has also been limited research regarding patients' perception of readiness for discharge, with much of the literature heavily focused on the clinician's perspective (Gledhill et al., 2021). The use of occupation-based interventions in group settings has little research, with the majority of studies reporting patient outcomes from structured and scheduled impairment-based group therapy such as walking, strengthening, and exercise/physical fitness groups (Spalding et al., 2022a; Patterson et al., 2019). The approach of using occupation-based interventions in inpatient rehabilitation within a group setting still needs to be explored (Spalding et al., 2022b). Additionally, implementing occupation-based outcome measures into practice can be difficult for some OTs due to the limited availability of standard instruments, limited meaningful applications, and accessibility issues (Spalding et al., 2022b). Although more research is needed, occupation-based groups may be more resource-efficient (Spalding et al., 2022b).

Although therapists have positive attitudes toward occupation-based practice, their attitudes only appear to have minor impacts on actual practice (Aas & Bonsaksen, 2022). Referrals from professionals that concentrate on the patient's impairments may restrict OTs from using occupation as their primary focus. Aas and Bonsaksen (2022) state that

multidisciplinary teams' attitudes toward the significance of occupation were noted to be a barrier. Some OTs claim a lack of imagination, effort, and experience to engage patients in occupation, leading them to use techniques most accustomed to targeting body functions and a medical approach (Aas & Bonsaksen, 2022). Occupational therapists are also found to resist changing their habituated patterns in practice, preventing them from using occupation-based approaches (Stav & Herman, 2022).

Occupation-based groups within rehabilitation mainly consist of literature on group design, process outcomes, and participant experience, and not many studies on patient outcomes (Spalding et al., 2022a). Patient outcomes were typically focused on only studies relating to specific diagnoses, such as traumatic brain injury and stroke, decreasing the generalizability of reaching other diagnoses and patient groups. Occupation-based approaches were seen to be more challenging to implement in more medical-based facilities (Tomori et al., 2015). For a stroke population, there has been limited research on occupation-based effectiveness, causing the majority of therapists to use impairment-focused activities.

Research Question

The problem led to the question: Will developing an occupation-based protocol for a group therapy setting in inpatient rehabilitation improve a patient's perception of readiness for discharge? This research question guided the initial literature review, which established the framework and methodology for this capstone project.

Operational Definitions

Occupation-based: Engaging in relevant tasks as the primary agent of change to achieve goals.

Occupation-based practice: Treatment plan incorporating meaningful activities based on the client's interests and needs.

Occupation: Activities that individuals complete every day regularly and consistently that bring meaning and structure to their lives.

Group therapy: Delivery of interventions with two or more individuals.

Occupational therapy: Therapeutically using daily activities with persons, groups, or populations to promote independence.

Inpatient rehabilitation: Intensive therapy to assist patients in regaining functional abilities through individual and group therapy sessions for three hours a day for five days a week.

Readiness for discharge: Supporting patients' adaptation to new impairments or conditions by addressing safety and other functional and rehabilitation needs.

Significance of the Problem

This project aims to implement an occupation-based protocol for group therapy and assess whether a patient's perception of readiness for discharge will increase. Occupational therapists, when conducting evaluations and interventions, should prioritize activities focused on occupations that have purpose and meaning to an individual rather than mainly focusing on impairments (Tomori et al., 2015). A conflict between hospitals and rehabilitation units may exist between basing practice on a medical approach versus a holistic, occupation-based approach (Aas & Bonsaksen, 2022).

Group therapy has been a staple treatment method in OT and is frequently used in various clinical settings (Patterson et al., 2017). Rehabilitation groups can be used to maximize therapy intensity, educate, practice skills and strategies, and offer opportunities

for peer support (Bertisch et al., 2011). Practicing occupations in a controlled group environment could be an appropriate way to ensure positive outcomes (Spalding et al., 2023a). Occupation-based group therapy's success comes from an evidence-based structure, which enables real-world experiences through meaningful opportunities for task practice and fosters a sense of community among participants, facilitators, and peers. There may also be an indication of a shift toward care that is more client-centered, in which therapy focuses on daily activities other than self-care that are important to the patient and shifts toward activities that are more broad and relevant to the person (Spalding et al., 2022).

The anticipated outcome of this capstone is to develop an occupation-based group therapy protocol that will be used to conduct group therapy in inpatient rehabilitation. Using occupation-based groups will increase patients' perception of readiness for discharge, and Dignity Health Rehabilitation will have a readily available resource. The target population, inpatient rehabilitation patients, will not be specified by diagnosis; however, patients with severe cognitive deficits and those who require dependent or maximal assistance in function will be excluded. Feedback will be collected through surveys on the patient's perception of readiness for discharge before and after participating in occupation-based groups.

Needs Assessment

At Dignity Health Rehabilitation Hospital, they previously stated they had a group therapy protocol and recruitment form enforced; however, it was not consistent due to constraints with timing (K. Grant, personal communication, September 19, 2023). The facility has tried multiple methods of improving the group therapy format and the maintenance of occupation-

based treatments, but their protocol needed to be more sustainable. For this capstone experience, a needs assessment was conducted through physical communication with the facility staff, and a survey was provided to the OTs to identify the needs and barriers to implementing occupation-based group therapy (see Appendix A). The needs assessment survey will drive the topics and format for the occupation-based group therapy protocol. This capstone experience will contribute to knowledge in the profession by creating an updated protocol to bring the roots of OT to the forefront of maintaining occupation-based treatments for a group therapy setting. As group therapy is gaining more popularity within an inpatient rehabilitation setting, group therapy can allow for more effective use of time.

Literature Review

The following literature review will highlight four themes: benefits of occupation-based interventions in inpatient rehabilitation, barriers to implementing occupation-based interventions, group therapy benefits in inpatient rehabilitation, readiness for discharge, and a summary.

Benefits of Occupation-Based Interventions in Inpatient Rehabilitation

In an inpatient rehabilitation setting, using meaningful occupations in a therapeutic process is part of occupation-based practice supporting individuals with post-injury or illness (Spalding et al., 2022b). To develop a realistic intervention plan, OTs should identify constraints or barriers impacting patients' occupational performance (Baum et al., 2015). Maintaining realistic interventions, such as real-world simulation of tasks, can give patients the chance to maintain a connection to their daily lives outside of the hospital by participating in tasks that replicate realistic situations (Patterson et al., 2019; Spalding et al., 2022b; Spalding et al., 2023a; Spalding et al., 2023b). Patients were able to transfer their skills, even in simulated environments, as they were able to make connections to real-life situations (Spalding et al., 2023b). Tomori et al. (2015) found that occupation-based interventions for stroke patients can lead to improvements in quality of life, recovery from physical function, and self-care. Patterson et al. (2019) conducted a study that followed a phenomenological approach, and one of the emerging themes was learning by doing, seeing, and sharing. The participants in this study were TBI patients and reported that participating in group therapy allowed them to practice skills and activities and participate in life roles. Activities completed during group therapy increased the patient's confidence and abilities for home and discharge (Patterson et al., 2019; Spalding et al., 2023a; Wall et al., 2023). In Spalding et al. (2023a), participants completed an occupation-based LifeSkills group; the participants felt that practicing tasks in a repetitive format, even if

minimal, increased their confidence in their abilities. Tasks practiced in the study by Spalding et al. (2023a) included IADLs such as meal preparation, laundry, shopping, dishes, making the bed, household cleaning, computer use, community access, and medication management.

Spalding et al. (2022a) conducted a longitudinal observational cohort study on 30 inpatient rehabilitation patients of varying diagnoses and conducted a LifeSkills group focusing on the repetitive practice of occupation-based activities. The study used the Canadian Occupational Performance Measure (COPM), Goal Attainment Scaling, Lawton instrumental activities of daily living (IADL) scale, and a self-efficacy scale during the pre-intervention, post-intervention, 30-day follow-up, and 90-day follow-up. The provided measured outcomes demonstrated positive and statistically significant results in goal achievement, occupational performance, satisfaction, and self-efficacy when patients were discharged (Spalding et al., 2022a). Improvements were maintained over time, indicating occupation-based group therapy can improve occupational performance and be applied to a general inpatient rehabilitation practice. Understanding the factors of the patient can allow OTs to tailor their sessions, and this study showed that varying diagnoses within an inpatient setting can equally benefit from occupation-based groups.

Wong et al. (2018) conducted a study on 18 OT practitioners through focus groups and identified three themes on integrating occupation-based interventions in rehabilitation for those with hip fractures, 1) conducting an occupational profile, 2) integrating occupation-based interventions in the facility, and 3) identifying goals for occupational engagement after discharge. Identifying a goal can assist with the discharge process by allowing the patients to look beyond their rehabilitation stay and focus on a goal of returning to a meaningful occupation while maintaining consistency with the principles of client-centeredness (Spalding et al., 2023b;

Patterson et al., 2019; Wong et al., 2018). Skubik-Peplaski et al. (2017) discuss that clients were more engaged in occupation-based interventions as they were more relevant to their daily lives and activities. In addition, focusing on client goals keeps occupation at the center of the treatments and can enhance performance in patients (Skubik-Peplaski et al., 2017). Goal setting can support occupational engagement after the patient is discharged, which is essential for a client's recovery process (Wong et al., 2018). Developing an occupation-based goal in preparation for their discharge gives them the education and resources they will need to participate in the community. Delivering occupation-based interventions guides best practices for OT practitioners, which adds value to the interdisciplinary team. A limitation of this study was that the client's perspective was not included, which requires further research to determine patient feedback (Wong et al., 2018).

Hoffmann et al. (2022) state that client-centered practice gives patients autonomy to make their own decisions about what occupational needs they desire, which aligns with the occupation-based practice of having patients choose goals. This study also states the importance of building a relationship between patient and therapist to enhance client-centered care. Doing so can lead to individualized care, which is essential for occupation-based practice. Having patients practice and relate tasks to their personal lives can lead to improvements, thus increasing readiness for discharge. Occupation-based interventions benefit the patients and add value to therapists as they can enhance activity analyses, critical thinking, documentation, and time management (Stav & Herman, 2022).

Barriers to Implementing Occupation-Based Interventions

Implementation of occupation-based practice is perceived as challenging to implement as typically, the medical model is shown as more dominant in hospitals and rehabilitation units (Aas

& Bonsaksen, 2022; Daud et al., 2016; Tomori et al., 2015; Wong et al., 2018). The medical approach follows an impairment-focused approach, focusing on bodily functions, and uses a bottom-up approach to consider the underlying factors. In OT, the main focus of interventions should be based on purposeful and meaningful occupations rather than only impairments (Tomori et al., 2015). Occupation-based practice places occupations at the center of the intervention and focuses on patients' engagement in those occupations to reach a desired outcome; however, barriers remain to this approach (Colaianne et al., 2019).

Primary barriers that are associated with occupation-based practice include the physical environment, equipment availability, time constraints, and insurance concerns (Aas & Bonsaksen, 2022; Colaianne et al., 2019; Daud et al., 2016; Wong et al., 2018). In a cross-sectional exploratory design study, 470 OTs were surveyed to explore the different aspects of occupation-based practice in hospitals and rehabilitation settings (Aas & Bonsaksen, 2022). This resulted in discovering common barriers to occupation-based practice, including lack of time, space, and equipment (Aas & Bonsaksen, 2022; Wong et al., 2018). Lack of time was associated with a high caseload and short length of stay, and lack of equipment was associated with many items being more for impairment-based treatments (Aas & Bonsaksen, 2022; Colaianne et al., 2019). Occupation-based assessments were also an identified barrier, as many assessments were focused on bodily functions rather than occupation-based. The lack of available assessment tools, knowledge, and familiarity has been associated with low use (Aas & Bonsaksen, 2022; Daud et al., 2016).

Similarly, Wong et al. (2018) stated that the barriers to implementing occupation-based interventions were the lack of resources to provide them. This includes a kitchen set-up or laundry machines that do not mimic a real-world environment. Lack of equipment was a

recurring theme, restricting the ability to conduct occupation-based interventions. Colaianni et al. (2019) conducted a qualitative survey design to examine how prepared clinics were to address patients' desired occupations. They found that clinics were most prepared for playing cards and walking and least prepared to address the occupation of driving. The study concluded that being unprepared to address different occupational interests can lead to health disparities, demonstrating a need to develop more space, equipment, and supplies to address occupational performance needs in individuals. From the client factor perspective, Daud et al. (2016) found that clients lack an understanding of the purpose of occupation-based interventions, which adds to the difficulty of implementing these interventions in a practice setting. Clients believed that strength and mobility were essential for recovery, leading them to stop all daily activities until they fully recovered (Daud et al., 2016). Occupation-based interventions also used equipment centered around the client's occupation, which they felt unimpressed as they were more motivated by advanced equipment.

Stav and Herman (2022) reported that therapists were anxious and resistant to occupation-based practice, as their professional training varied in the emphasis of occupation, leaving therapeutic exercises to consist of 75% of treatment sessions. Many therapists' personal views and beliefs increased the challenges of implementing occupation-based interventions. Another challenge perceived by the therapists in this study was that many clients had expectations of exercising, and many relied on family members to help with other tasks. Stav and Herman (2022) noted that implementing occupation-based interventions was stressful, time-consuming, and challenging.

Group Therapy Benefits in Inpatient Rehabilitation

Patterson et al. (2017) measured 35 TBI patients' perceptions and satisfaction with OT group therapy through self-report questionnaires. The comparisons were among two groups: a functional group (meal preparation and community access) and an impairment focus group (cognitive and upper limb). The study found that 90% of responses agreed and strongly agreed that a group setting was enjoyable, provided feedback, felt individualized, and was helpful. As group therapy can increase the challenge of making sessions more client-centered for each member, it can be possible to use an evidence-based intervention framework (Patterson et al., 2017; Spalding et al., 2023a). Likewise, Patterson et al. (2019) conducted a qualitative study investigating the lived experience of 15 individuals with TBI. The emerging themes included 1) feeling normal, comfortable, and connected; 2) learning by doing, seeing, and sharing; and 3) practicalities and recommendations for groups. The environment of a group therapy session allowed individuals to complete their everyday interactions and do normal things. This aligns with the client-centeredness of occupation-based groups, where individuals can still participate in everyday activities outside of the rehabilitation stay (Patterson et al., 2017; Patterson et al., 2019). This theme reflected individuals participating in activities that were relevant to their life pre-injury and becoming more engaged in other activities in the group session. Incorporating real-world experiences into group therapy participation can connect to who they were outside of the hospital and increase confidence and skills when discharged (Patterson et al., 2019; Spalding et al., 2023a).

A standard healthcare method used in rehabilitation is group therapy. Group therapy can allow patients to interact with others more than individual sessions can offer (Zanca et al., 2013). Group therapy can also lessen the amount of direct staff required, resulting in group therapy

having the advantage of being effective and efficient (Zanca et al., 2013). The format of group therapy can provide many benefits as the profession of OT uses groups as a core treatment modality (Patterson et al., 2019). During group sessions, members and the therapist may offer feedback and encouragement, which can boost motivation to engage in therapy (Zanca et al., 2013). Engaging with others who have similar experiences can allow for peer support and mentoring, improve learning, facilitate learning, provide support, boost motivation, and lessen feelings of social isolation and depression (Hammond et al., 2015; Spalding et al., 2023a; Zanca et al., 2013). Group activities also facilitate members to work together to produce an overall outcome based on joint effort (i.e., cooking activity or simulated grocery shopping) (Patterson et al., 2017). Feedback provided during group sessions by both the therapists and the group members boosts motivation to engage in therapy (Spalding et al., 2023b; Zanca et al., 2013). Whereas Patterson et al. (2017) stated that feedback provided by peers had the potential to be more impactful and readily accepted than feedback provided by therapists.

Readiness for Discharge

When discharged from an inpatient rehabilitation facility, many factors will need to be considered by the primary therapist before patients are confirmed safe and ready. If patients are discharged earlier than expected, they may return home, requiring more physical and emotional assistance, which can lead to caregiver burnout (Knier et al., 2015). Much of the existing literature is focused heavily on the clinician's perspective of readiness for discharge from a hospital setting, with not much literature focusing on the patient's perspective (Gledhill et al., 2021; Knier et al., 2015). Occupational therapists play a crucial role in the rehabilitation process. They provide client-centered care that uses meaningful activities to improve abilities and functions to decrease barriers and enhance skills, constituting a vital role in the discharge process

(García-Pérez et al., 2022). It often depends on the clinician's clinical reasoning and subjective assessments (Gledhill et al., 2021). In a systematic review by Gledhill et al. (2021), they found that using the Goal Attainment Scale (GAS), patients reported participating in client-centered care led to a more successful transition from hospital to home as it assisted with increasing patient's perception of readiness for discharge. Factors influencing discharge destination and length of stay included age, functional status at admission, and the duration from admission to injury. Spalding et al. (2023b) found that participating in group therapy allowed patients to know what their limits were with pain, which brought awareness to feelings of readiness for discharge. With that in mind, practitioners can be prepared with discharge planning and treatment planning to assist patients with readiness for discharge. Limitations of the studies centered around the discharge of those with physical and cognitive impairments, such as spinal cord injuries and stroke, leading to results not being generalizable to all populations for an inpatient rehabilitation setting.

Similarly to Gledhill et al. (2021), many studies revolving around readiness for discharge centered around the stroke population, including an article from García-Pérez et al. (2022), where a systematic review was conducted on the impact of OT interventions for discharge to home for the stroke population. The study concluded that there is a lack of OT-based studies regarding hospital discharge. However, it concluded that discharge planning and rehabilitation should begin early and that a transition from hospital to home can benefit from multidisciplinary services. A limitation of this study was that it solely focuses on stroke patients, and similarly to Gledhill et al. (2021), it cannot generalize toward the inpatient population.

Knier et al. (2015) stated that information regarding teaching about discharge readiness is typically rushed and also not individualized to the specific patient. It is difficult for patients to

predict their physical and emotional needs, leading to less engagement in their care plan when hospitalized. Eventually, it can lead to vulnerability to injury or deterioration (Knier et al., 2015).

Summary

The lack of research in the current literature shows that occupation-based group therapy in an inpatient rehabilitation setting requires more exploration (Spalding et al., 2023b). Many studies were focused on specific diagnoses such as stroke or TBI. However, more research is needed to explore the effectiveness of occupation-based group therapy for all conditions within inpatient rehabilitation (Spalding et al., 2023a). In hospital and rehabilitation settings, seeing more of a medical, impairment-focused approach is typical, leading OTs to stray away from occupation-based interventions (Aas & Bonsaksen, 2022; Wong et al., 2018). Additionally, the environment, equipment, timing, and insurance concerns were considered barriers to implementing occupation-based interventions (Aas & Bonsaksen, 2022; Colaianni et al., 2019; Wong et al., 2018). A patient's perspective on their readiness for discharge is also lacking in research, focusing more on the clinician's perspective (Gledhill et al., 2021; Knier et al., 2015). However, it has been found that occupation-based interventions can prepare patients to connect to who they were outside of being in the hospital through real-world simulation of tasks (Patterson et al., 2019; Spalding et al., 2022b; Spalding et al., 2023a; Spalding et al., 2023b). Connecting patients with tasks that are meaningful to their regular lives indicates client-centeredness, which is what drives occupation-based practice. Utilizing evidence-based frameworks, such as the Person-Environment-Occupation-Performance (PEOP) model, can allow therapists to identify what is affecting an individual's occupations rather than focusing on medical and deficit areas first. A patient's discharge and rehabilitation should be addressed early

on, as the patient's age, functional status upon admission, and the time they were admitted to the injury influences discharge destination and length of stay (Gledhill et al., 2021).

Statement of Purpose

Within rehabilitation settings, group therapy is often used to provide more scheduled therapy time, increase outcomes, and allow practitioners to increase their interventions' amount and potential intensity (Spalding et al., 2023a). Due to the lack of time, space, and equipment, occupation-based group therapy is not consistently conducted (Aas & Bonsaksen, 2022; Patterson et al., 2019; Spalding et al., 2020). Although home management and community living skills are addressed within the rehabilitation setting, the outcomes require further exploration of their impact on readiness for discharge. Within inpatient rehabilitation, the goal is to get the patient to discharge back to their prior level of function successfully. OT uses a client-centered approach to help patients reach their desired goals, and group therapy is another form of facilitating client-centeredness. At Dignity Health Rehabilitation Hospital, they maintain a holistic approach when deciding on intervention and treatment plans. The purpose of this capstone project was to address patients' perceptions of readiness for discharge through participating in occupation-based group therapy. A protocol was established to maintain the frequency and regularity of conducting occupation-based group therapy. This capstone focused on the following hypothesis: Occupation-based group therapy will improve a patient's perception of readiness for discharge. This capstone project was developed by identifying the needs of the OTs at Dignity Health Rehabilitation Hospital and determining which occupation-based interventions are essential in group therapy.

Objectives for Capstone Project

During the capstone experience, the objectives that were addressed and accomplished included:

1. Student will identify the occupation-based group needs at Dignity Health Rehabilitation Hospital to create occupation-based group therapy protocol by the end of week 3.
2. Student will create an occupation-based group therapy protocol by the end of week 3.
3. Student will independently implement occupation-based groups at Dignity Health Rehabilitation Hospital using protocol and to gather feedback from patients by the end of week 9.
4. Student will finalize protocol and disseminate data and present the protocol and results to Dignity Health Rehabilitation Hospital by week 14.

By accomplishing these objectives, the project's outcome was to increase patient's perception of readiness for discharge through participating in occupation-based group therapy.

Additionally, to have a readily available resource for the therapists to conduct occupation-based groups at Dignity Health Rehabilitation Hospital.

Theoretical Framework

This capstone will utilize the Person-Environment-Occupation-Performance (PEOP) model. This model considers the interaction between all the components consisting of the person (physiological, psychological, motor, sensory/perceptual, cognitive, or spiritual), the environment (cultural, social support, social determinants, social capital, physical and natural environments, health education) and the characteristics of the activity, task, or occupation (Baum et al., 2015). All three of these components will help drive an individual's occupational performance. Using these elements of the PEOP model assisted in developing occupation-based groups to be more client-centered and relevant to the patient. Within inpatient rehabilitation, patients at Dignity Health Rehabilitation perform occupations while interacting with the environment through individual or group sessions. With group therapy specifically, the component of the environment can influence the patient's occupational performance.

The incorporation of this model will serve as a foundation for developing the occupation-based group therapy protocol and implementing it during group therapy. The PEOP model focuses heavily on the client and considers how environmental factors affect a person's daily occupations (Baum et al., 2015). It can guide what intrinsic and extrinsic factors impact occupational performance by facilitating a more holistic approach. Patients participating in group therapy can use the group environment to support the extrinsic factor of social support.

The PEOP model also uses a biopsychosocial approach, which considers the physical, emotional, and social factors that can influence the patient's occupational performance (Baum et al., 2015). PEOP can be applied to an individual or a group where it can address multiple factors of the group setting rather than focus on one deficit area. PEOP is a top-down approach that focuses on the patient's current situation and assesses an individual's engagement in meaningful

occupations. PEOP steps away from the medical approach and focuses not only on medical barriers but also on understanding each individual's enablers and limitations. It demonstrates a more holistic approach and facilitates the framework that will drive occupation-based interventions.

Methodology

Agency Description

This capstone experience is located at Dignity Health Rehabilitation Hospital in Las Vegas, Nevada. This 60-bed inpatient rehabilitation hospital offers OT, PT, and speech therapy. Conditions commonly seen and treated include stroke, orthopedic, neurological, brain injuries, spinal cord injuries, cardiovascular conditions, and other medically complex patients. Patients at this hospital partake in individual and group sessions, with individual sessions lasting either 90 or 45 minutes and group sessions lasting 45 minutes. The hospital is equipped with an ADL room with a kitchen, bed, laundry machine, closet, grocery cart, bathroom, and other day rooms with open space and tables where groups and individual sessions can be conducted. Thus, the target population consisted of those admitted to Dignity Health Rehabilitation Hospital with various diagnoses and ages.

Project Design

The design of this capstone is a quality improvement project utilizing pre- and post-group surveys. Survey information provided details on how inpatient rehabilitation patients feel before and after participating in occupation-based group therapy and whether it affected their perceptions of readiness for discharge in conjunction with their rehabilitation stay. The survey included Likert-scale questions, readiness for discharge questions, program evaluation questions consisting of open and closed-ended questions, and quality improvement questions that evaluated improving the overall protocol outcome. This capstone project provided a resource for therapists to maintain occupation-based group therapy at Dignity Health Rehabilitation Hospital.

The disadvantages of the surveys included the lack of detail in responses, the lack of motivation to complete surveys, and the accessibility of the survey format (computer versus

paper). The advantages of the surveys included being a non-time-consuming way of collecting responses, not requiring multiple components, being administered based on the participants' schedule, and being cost-effective.

Participants

The focus of this project is on individuals who are receiving treatment in inpatient rehabilitation centers. At Dignity Health Rehabilitation Hospital, patients who require maximum assistance or dependent levels are not considered appropriate for group therapy, as well as those with severe cognitive impairments. This leads to the exclusion criteria being those requiring higher levels of assistance (maximum/dependent) and having severe cognitive impairments. All other patients admitted to the hospital were eligible for the inclusion of this capstone project. The participants' characteristics ranged from various diagnoses, conditions, and ages. External validity was enhanced as all patients of various conditions were included in the project, increasing generalizability in diagnoses seen in inpatient rehabilitation. All patients admitted to Dignity Health Rehabilitation Hospital sign a consent form to participate in therapy. Therefore, the student informally provided a verbal description of the capstone project prior to implementing group therapy.

Sixty-one patients participated in occupation-based group therapy for six weeks and were recruited through convenience sampling. Participants were acquired by the therapy coordinator who scheduled and placed patients into their respective groups. For this capstone project, no specific inclusion or exclusion criteria was set. Due to attrition, the final sample size was 41, as 20 patients were not provided with the post-group survey due to being in group therapy for only one day, had an unexpected discharge, or had cognitive impairments. Participants were assumed to stay in the same group for ten days (not including weekends). However, fluctuations occurred

due to different discharge dates, medical issues, scheduling, or refusals, leading to new participants being added unexpectedly and already participating individuals being removed from the group. Each group consisted of three to five members, with a list of participants organized on a spreadsheet by the student. The average length of days the same participants were in the group was five, with the highest number of days being eight, but only by three participants. Participants were notified at the beginning of the group of the project's intent and the inclusion of pre- and post-group surveys. Participants had the right to refuse the surveys. However, they were informed of the survey's purpose and that the results were used toward a capstone project for UNLV.

Procedures

The capstone project began with a needs assessment of the facility to identify the needs regarding occupation-based group therapy. Following the identification of the needs, the student began the development of the occupation-based group therapy protocol. Inpatient rehabilitation patients typically length of stay is around two weeks, therefore, are placed into group therapy for two weeks. This led to the protocol lasting ten days. Therefore, the protocol consisted of ten different occupation-based activities. The protocol included occupation-based activities consisting of ADL and IADL interventions (see Appendix B). Activities included wheelchair and walker safety, transfer training to various heights and surfaces, shower transfer training, adaptive equipment training, functional reaching, light housework activities (i.e., kitchen, laundry, closet), making the bed, health management, community re-entry, and discharge planning. The protocol included the location of the groups, activities, discussion points, grading of the activities, and any other supplies or handouts that were needed. Each group had one therapy aide to assist, and the groups/supplies were prepared by the therapy aide prior to starting the group or by the

student/therapist. The student created a therapy aide guide to ensure ease in gathering all supplies/handouts and the location of the groups (see Appendix C).

To ensure the sustainability of the group therapy protocol, two OTs at Dignity Health Rehabilitation Hospital monitored the student during each group session. They provided feedback on content and suggestions for improvements during the six weeks of implementation. After the students' six-week implementation, other OTs employed at Dignity Health Rehabilitation Hospital conducted occupation-based group therapy following the protocol format the student created. The student observed the groups and made adjustments as necessary for the final copy. An in-service presentation was provided to the facility on the results of the capstone experience and an explanation of the protocol to the entire staff. A meeting with the therapy coordination team was held to discuss hand-off plans, such as creating a schedule for the OTs to know when they are leading groups, explaining the therapy aide guide, and providing education on maintaining the same patients in the group for ten days. The finished protocol was then organized into a binder, including copies of all handouts, and left at the facility.

Instruments

The student created the surveys that were provided before and after group therapy. The pre-group survey (see Appendix D) consisted of five 5-point Likert scale questions with scores indicating 5 - *strongly agree*, 4 - *agree*, 3 - *neutral*, 2 - *disagree*, and 1 - *strongly disagree*. Demographic information such as age, diagnosis, whether they live alone, and whether they have received therapy before were also included in the survey. The post-group survey (see Appendix E) included the same five Likert scale questions and open and closed-ended questions regarding program evaluation for the quality improvement aspect of the project. The pre-group surveys were implemented on the participants' day one of the group. The post-group surveys were

implemented to the participant a few days before their anticipated discharge or for those who completed group therapy from day one to ten.

Data Collection

Before the start of groups, participants were verbally given a disclaimer about participating in occupation-based group therapy and the motives of the survey for a capstone project for UNLV. Participants were also informed that one survey would be completed before they began groups, and a second would be completed before discharge. As patients had different discharge dates, there was no specific day that the post-surveys were administered. Post-group surveys were completed in the patients' rooms, and the student assisted patients who had difficulty writing or reading the questions.

Groups ran for six weeks, and every two weeks, the protocol restarted from day one. Week one ran protocol days one through five, week two ran protocol days six through ten, then restarted from day one for week three, and so on. Two groups occurred each day, resulting in 48 total groups running. A pre-group survey was provided once a new patient was placed into the group. The surveys provided did not include patient identifiers, and participants were informed that the results were for educational purposes and would remain confidential and anonymous. Surveys were provided in paper format, and results were then transferred onto a Google Forms online survey format by the student and then onto an Excel spreadsheet for data analysis.

Data Analysis

Surveys were shared with participants through a physical printed copy, and results were maintained anonymously with no patient identifiers. Responses were transferred to a spreadsheet and kept through the student's password-protected laptop and Google Drive account to maintain data management of surveys. Responses were analyzed following all data collection on week 10

using descriptive and inferential statistics. Data was analyzed and obtained using Excel.

Descriptive statistics consisting of the standard deviation, mean, and median values were calculated via Excel. Inferential statistics was obtained using the Wilcoxon Signed Rank Test to analyze data collected from the pre- and post-group surveys. A p-value of $p < 0.05$ was considered statistically significant and determines whether the null hypothesis will be rejected.

Ethical and Legal Considerations

As this was a quality improvement project, this capstone aimed at discovering the needs within a clinic/population, and their needs were addressed by designing a protocol. Through the development of the protocol, inpatient rehabilitation patients were provided with a pre- and post-group survey to collect feedback to evaluate the overall program and the perception of discharge readiness after partaking in the group. Therefore, this capstone did not require approval from the institutional review board (IRB). The student received IRB exclusion through UNLV (IRB # UNLV-2023-531). Initially admitted into Dignity Health Rehabilitation Hospital, patients signed an informed consent to participate in individual and group therapy. Verbal instructions were given to the patients before the start of the sessions on the purpose of the surveys and protocol. No research was involved throughout this capstone project and experience, resulting in IRB not being required. The Health Insurance Portability and Accountability Act (HIPAA) regulations will be strictly followed to guarantee the security of all private information and the preservation of participant rights. All survey results were anonymous and confidential, and no identifiable patient information was provided. Any patient information during group therapy sessions was for program evaluation, and no sensitive information was recorded or used.

Results

Characteristics of the Sample

Sixty-one participants participated in occupation-based group therapy, with the final sample size consisting of 41 participants. All 61 participants completed the pre-group survey, and 41 completed both pre- and post-group surveys. The 20 participants who did not receive the post-group survey were due to only being in the group for one day, discharged earlier than expected, or had cognitive impairments impacting their ability to complete the survey. None of the participants received the entire ten days of groups. The results from the occupation-based group therapy protocol will show whether occupation-based groups, in addition to their inpatient rehabilitation stay, increased their perceptions of readiness for discharge. There were 41 pre- and post-group surveys collected, and participant's conditions and ages are shown in Table 1. The conditions in Table 1 of the participants were organized based on the Dignity Health Rehabilitation Hospital's organization system for different diagnoses and conditions.

Table 1*Characteristics of the Sample*

Item	Options	Frequency n (%)
Conditions of Participants	Orthopedic	13 (31.7%)
	Neurological	11 (26.8%)
	Cardiac	7 (17.1%)
	General Medical	6 (14.6%)
	Stroke	4 (9.8%)
Age	Under 40	0 (0%)
	40-50	4 (9.8%)
	60-70	20 (48.8%)
	80-90	17 (41.5%)
	99+	0 (0%)

Note. n=41 for sample size.

Readiness for Discharge Results

Table 2 compares the 41 participants in their pre- and post-group surveys. Descriptive statistics for the mean, standard deviation (SD), and median were based on five 5-point Likert scale questions and calculated in Excel. Inferential statistics was conducted using the Wilcoxon Signed Rank Test on Excel to calculate the statistical significance of p-value <0.05 . In the pre-group surveys, the median was a three in questions one and two, and the median was a four in questions three, four, and five. Compared to the post-group survey, the median increased from a three to a five for question one, increased from a three to a four for question two, increased from a four to a five for questions three and five, and remained a four for question four. All questions showed an increase in overall scores. The Wilcoxon Signed Rank Test indicated that occupation-based group therapy was statistically significant, resulting in the null hypothesis being rejected for questions one, four, and five as the p-value was <0.05 . However, the p-value was >0.05 for questions two and three, indicating the results did not show statistical significance despite improving scores. Thus, the null hypothesis is accepted for these two questions.

Table 2*Comparison of Readiness for Discharge Pre- and Post-Group Surveys (n = 41)*

Question	Pre-Group Survey Mean (SD)	Pre- Group Survey Median	Post-Group Survey Mean (SD)	Post- Group Survey Median	Statistical Significance (p)
I currently feel confident to discharge.	2.95 (1.52)	3	4.37 (1.04)	5	0.000
I feel I can complete my daily tasks every day on my own.	2.83 (1.36)	3	4.15 (1.06)	4	9.475
I feel confident in knowing how to safely get up and down from my seat or wheelchair.	3.63 (1.18)	4	4.46 (0.9)	5	2.258
I feel safe being alone at home, if needed.	3.39 (1.30)	4	4.12 (0.9)	4	0.006
I know exercises and fall prevention techniques I can do once I discharge.	3.54 (1.32)	4	4.46 (0.64)	5	0.013

Note. Scores are based on Likert scale, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree; n = sample size; SD = standard deviation; p = p-value (<0.05).

Quality Improvement Results

Feedback questions in the post-group survey were asked of the participants, and the results and questions are shown in Table 3. These questions consisted of “yes” and “no” answers and were asked to evaluate the program. Overall, the majority answered positively about group therapy. Regarding whether the activities in the group increased their readiness for discharge, 97.6% stated yes, and only 2.4% stated no. The results also show that most participants did not think the activities were too difficult or too easy. Regarding the content increased their safety awareness, 95.1% stated an increase, 92.7% thought enough education was provided during the group, and 95.1% thought the content was easy to understand and will continue to use this information after discharge.

Table 3*Quality Improvement Results from the Post-Group Survey*

Question	Yes n (%)	No n (%)
The topics and activities in group increased my readiness for discharge.	40 (97.6%)	1 (2.4%)
The activities in group were too difficult.	2 (4.9%)	39 (95.1%)
The activities in group were too easy.	5 (12.2%)	36 (87.8%)
The content in the group increased my safety awareness for discharge.	39 (95.1%)	2 (4.9%)
There was enough education provided during the group session.	38 (92.7%)	3 (7.3%)
The content was understandable and easy to follow.	39 (95.1%)	2 (4.9%)
Will you use what you learned in group when you discharge?	39 (95.1%)	2 (4.9%)

Note. Sample size is n=41.

Discussion

This quality improvement capstone project aimed to create an occupation-based protocol for group therapy and determine whether it improves a patient's perception of readiness for discharge. There were 41 inpatient rehabilitation patients who participated in occupation-based groups and completed the pre- and post-group surveys. The sample population represented conditions varying from strokes, orthopedic cases, general medical conditions, and neurological and cardiac conditions, demonstrating commonly seen patients generally in rehabilitation and are part of AOTF's priority populations (AOTF, 2019). A diverse range of conditions was represented, indicating occupation-based group therapy could work on various diagnoses and potentially in other inpatient rehabilitation hospitals. The sample of this project was representative of the population and consistent with the typical age range seen in inpatient rehabilitation.

When considering a patient's readiness for discharge, it's important to consider many factors, such as living arrangements and whether they have received rehabilitation therapy before. These factors could influence a patient's perception as they may receive help from family or live alone and must be independent. If the patient has received therapy before, they may be familiar with recommendations, equipment, or exercises; therefore, it could increase their perception of readiness. As part of the pre-group survey, participants were asked if they lived alone, and 63.4% (n=26) stated they lived alone, and 36.6% (n=15) stated they did not. On whether they received rehabilitation before, 70.7% (n=29) stated yes, and 29.3% (n=12) stated no. Although this capstone project did not assess whether these two factors influenced their readiness for discharge, it provides valuable information for future studies to compare the results as it could be an additional factor impacting readiness. One may feel more ready if they know

they have family members at home, whereas if someone lives alone, they may perceive readiness as lower.

In addition, the occupation-based activities in the group setting targeted aspects of patient's lives that could impact their readiness for discharge (i.e., ADLs, IADLs). Previously, the facility had a group therapy protocol for treatment ideas. However, that system was not sustained. The literature had similar obstacles of lack of time, space, equipment, therapists personal values and beliefs, and client expectations of exercise (Aas & Bonsaksen, 2022; Colaianni et al., 2019; Daud et al., 2016; Stav & Herman, 2022; Wong et al., 2018). This project was completed to assist with reducing obstacles to occupation-based implementation in a group setting and determining whether it improves a patient's perception of readiness for discharge. Some noted barriers the therapist has identified at Dignity Health Rehabilitation were inconsistencies with patient levels, keeping the same patients in the groups, timing, and insufficient planning from the OT—the developed protocol assisted in combating those barriers.

Pre- and post-group surveys was provided to view whether occupation-based groups would affect a patient's perception of their readiness for discharge. As no set amount of days a patient is required to be in group therapy, it was difficult to compare whether being in the group for 10 days differed from being in the group for two days. Hence, the results showed that the average length of a patient's stay in a group was five days. However, this project did not analyze whether that patient was in a PT group. Patients started groups on different days and did not experience all prepared activities. It is difficult to infer which activities impacted patients more or less. Additionally, all patients perceive readiness for discharge differently; some may find specific topics more helpful, whereas others may not find a topic relevant to their lives. However,

utilizing more practical activities in groups could show more promising results than activity-based groups for readiness for discharge.

There were 41 inpatient rehabilitation patients who filled in pre- and post-group surveys for this capstone project. The findings showed that occupation-based group therapy did improve patient's perceptions of readiness for discharge, as all five questions showed an increase in mean scores. Individuals who picked a lower score in their post-group survey had external factors that impacted their decision, such as not being in the group for that long, medical factors, decreased health, or cognitive impairments.

The results showed that the average score for whether patients felt ready for discharge was 2.95 in the pre-group survey and increased to 4.37 in the post-group survey. These findings suggest that their initial start in the group until their discharge date showed improvements in their perceptions of readiness. The results showed that if patients felt that they could complete their ADLs, the average score increased from 2.83 to 4.15. In inpatient rehabilitation, OTs address all aspects of ADLs and the occupation-based group activities that target ADLs are for additional practice, such as shower transfers or adaptive equipment training. For the question addressing whether patients felt confident in knowing how to get up and down from their seats safely, the mean score increased from 3.63 to 4.46. When patients are discharged, some may go home with family, while others may live alone. The average score on whether patients felt safe being alone at home increased from 3.39 to 4.12. Some patients are expected to return home and be able to complete their regular ADL/IADL tasks. It is hopeful that the group activities will target areas of concern and provide additional information, resources, and practice. For exercises and fall prevention techniques, the average increased from 3.54 to 4.46. Although two out of the five questions were deemed not statistically significant despite showing improvements in scores,

the results indicated that occupation-based groups had promising results for increasing patient's perceptions of readiness for discharge. Compared to the facility's previous treatments for groups, incorporating occupation-based activities in a group setting can allow for the use of that time for more practice, more education, and increased confidence in abilities at home. Previously, activities such as exercises and games (i.e., cornhole, bowling) were completed in group sessions. However, patients may not associate those activities with things they need to do at home and may not find them as applicable. As the literature stated, real-world tasks that replicated a patient's situation allowed them to form a connection to what they were outside of the hospital, therefore leading to transferring of skills (Patterson et al., 2019; Spalding et al., 2022b; Spalding et al., 2023a; Spalding et al., 2023b).

Incorporating PEOP into the building of the protocol showed that client-centered practice can drive confidence and curiosity into group therapy and also aligns with AOTF's theory-driven and client-centered research agenda (AOTF, 2019). To ensure that each individual is addressed in a group setting, asking individuals about their home set-up, allowing them to share personal experiences, and asking questions are essential. They can learn from others, learn from therapists, and use group therapy as additional time to practice. Incorporating discussion and sharing personal stories can show that a portion of the group is dedicated to that individual and can invoke honesty and demonstrate client-centeredness.

Patients provided feedback on overall program evaluation and quality improvement. The majority answered positively toward the questions, with those who answered the opposite of the majority being those with cognitive deficits or were higher-level patients (i.e., more independent). Additional open-ended questions were asked, such as, what did you like about group therapy? What was difficult about group therapy? What do you still need to work on?

What are some suggestions or comments? Some common responses that the participants liked about group therapy were group interactions and the ability to meet with other people. They enjoyed learning from others as they had the “if they can do it, I can do it” mindset. The topics and activities were helpful to them as they learned valuable information and could practice practical activities. Some participants mentioned they were taught things they had not considered before and enjoyed the hands-on instruction. Participants provided feedback on what they disliked about group therapy, including waiting for others to complete tasks, medical issues, and pain impacting their performance, and some preferred individual therapy over a group setting. In responses on what participants thought they still needed to work on, most stated strength and walking. The question resulted in answers that geared more toward PT. In the future, adjusting the question to receive a more OT-based answer can help identify other occupation-based activities or increase focus on a specific topic. For additional suggestions and comments, participants stated they would enjoy a group on medical alert/life alert or support groups, preferred smaller group size, preferred more lecture material than physical activity, offered more educational handouts, and would want more time to apply what they learned.

Limitations

The capstone project used surveys created by the student to collect data before and after the patients participated in group therapy. As the surveys were not standardized, this impacted the validity and reliability of the results. Additionally, the student provided each patient with a survey during group for the pre-group survey and in their rooms for the post-group survey. This increased the Hawthorne effect as patients may change how they answered the questions as the student was in the room. This could lead to inconsistencies in their answers, which could ultimately impact the results. Potential inaccuracies occurred with surveys as some patients required assistance from the student to fill in their survey answers due to fine motor deficits, visual deficits, or mild cognitive deficits. For future projects, recapping to the patients their answers can increase accuracy.

Responses from the surveys showed agreement bias. Many patients tended to choose an answer without true reflection because they wanted to finish the survey quicker, found it easier to answer, or had a friendliness bias towards the student. Agreement bias was also the case for the pre- and post-group questions and the quality improvement portion of the surveys. Giving patients more time to answer the survey could alleviate this limitation.

The initial plan for the occupation-based groups was for groups to last ten days or at least the average length of five days. However, 29.3% of participants were in groups for three days or less, potentially skewing the data. Patients in groups also had varying discharge dates, with many starting groups closer to their discharge date, which their answers may have reflected. Furthermore, participants completed only part of the ten days of the group, which impacts whether completing all ten days was more effective. Placing patients in groups earlier once admitted may aid with consistency with patients' length of stay in the group.

Conclusion

Occupational therapists in inpatient rehabilitation work with patients to ensure they are ready to discharge home by working on functional and other rehabilitation needs. Group therapy is a viable resource for patients to gain more practice and education and gain more insight and knowledge from other group members. It is essential to utilize occupation-based practice for group therapy, especially in a rehabilitation setting. That time can be used to gain additional practice, educate on practical tasks, and recommend valuable information to improve patient's readiness for discharge. As the results showed that occupation-based group therapy showed promising results in increasing a patient's perception of readiness for discharge, it is recommended to maintain the group therapy protocol. The sustainability of the protocol was assessed during the 14-week capstone experience through multiple employed therapists trialing the protocol, an in-service presentation was provided, and a resource binder was created. It would also be a helpful resource for incoming students, new hires, or new graduates to utilize the protocol, especially if they are unfamiliar with running group therapy sessions. The protocol should provide flexibility as it targets and resolves any barriers identified early on through the needs assessment and the literature review. Moving toward more occupation-based activities in a group setting did show positive results through this capstone project.

As the literature suggested, there is limited research for occupation-based group therapy in a rehabilitation setting, and an implication for future research is to continue implementing occupation-based groups to increase generalizability to all populations within inpatient rehabilitation. Through the literature search, many articles encountered when catered toward spinal cord injuries or stroke, which is why generalizing it to other conditions and diagnoses is essential for research.

Similarly, implications for practice can show that occupation-based interventions for a group setting can be utilized with any diagnosis and condition. Implementing more occupation-based interventions can also guide OTs to maintain the core of OT around occupation rather than limiting themselves to repeating the same activities, such as exercises or games. Promoting more occupation-based tasks can benefit both OTs and patients as it can prevent patients from readmitting to the hospital and maintain client-centered practice. Occupation-based interventions can lead patients to associate the activity with a relevant and real-life task simulated through rehabilitation. Utilizing treatments such as exercise and games may not carry over well with the patients, as it may not be applicable to their lives. It could provide further support for occupation-based interventions by incorporating occupation-based assessments to pinpoint more specific occupations that patients need and incorporate that into a group setting.

Maintenance and further studies regarding occupation-based group therapy should be ongoing and continued in research. This can strengthen the OT profession by maintaining client-centered practice and maximizing patient's health, well-being, and quality of life (AOTA, 2022). Conducting more occupation-based, real-life situations with patients in rehabilitation can prevent further readmissions and increase patients' perceptions of readiness for discharge. In addition, more studies, research, and practice align with AOTA's Centennial Vision to be evidence-based and client-centered (AOTA, 2007). In addition, having a guide or protocol for OTs unfamiliar with group therapy and occupation-based practice can strengthen the overall profession and provide more access and flexibility.

Appendix A

Needs Assessment Survey

Hello, my name is Valerie Cheng and I am a third year UNLV OTD student currently completing my capstone project here at Dignity Health!

My capstone is about developing an occupation-based group therapy protocol and implementing the protocol with the patients to see if it will increase their perceptions of readiness for discharge.

As part of my needs assessment, I would like to know, as an OT at Dignity Health, what occupation-based topics do you feel are most needed in a group therapy setting as well as what are the barriers? These choices will help drive the topics for the protocols that I will be creating for my capstone project.

1. Please select **three** occupation-based interventions you feel are most needed for a group setting:
 - ☐ Home safety
 - ☐ Meal preparation
 - ☐ Laundry
 - ☐ Household management
 - ☐ Home modifications
 - ☐ Medication management
 - ☐ Grocery shopping
 - ☐ Pet care
 - ☐ Health management
 - ☐ Stress management
 - ☐ Arts & crafts
 - ☐ Gardening
 - ☐ ADLs
 - ☐ Adaptive equipment training
 - ☐ Activity-based interventions
 - ☐ Other: _____

2. What do you think are your top barriers in not implementing occupation-based group therapy? Check **all** that apply.
 - ☐ Supplies
 - ☐ Timing
 - ☐ Scheduling
 - ☐ Different patient levels
 - ☐ Not enough assistant (aides)
 - ☐ Space limitations

- High caseload
 - Too many group members
 - Not enough group members
 - Other: _____
3. If you were to implement occupation-based group therapy, how many days do you think is appropriate to see/make significant changes (e.g., 2 days, 5 days, 10 days, etc.)?
4. Suggestions for improving group therapy?

Please return the survey to me as soon as possible. Thank you for your input!

Appendix B
Occupation-Based Group Therapy Protocol

Table of Contents

Day 1: Basic Wheelchair and Walker Safety

Day 2: Transfer Training (Various Heights)

Day 3: Transfer Training - Shower Transfer

Day 4: AE Training

Day 5: Functional Reach, Body Positioning, FWW Positioning

Day 6: Light Housework

Day 7: Bed Mobility, Making the Bed, Changing Sheets

Day 8: Health Management

Day 9: Community Re-entry

Day 10: Discharge Planning

Day 1

Basic Wheelchair & Walker Safety

Location: Any room

Purpose:

- Educate patient on safety when getting up and down from seat
- Increase safety awareness for w/c and walker mechanics

Activity:

1. Wheelchair safety
 - a. Educate on wheelchair brakes, leg rests, cushions, weight-shifting, etc.
 - b. Demonstrate how to remove leg rests
 - c. Educate on properly standing up from wheelchair (STS)
2. Walker safety (and/or other devices)
 - a. Educate on keeping walker close by, not to pull on walker when standing
 - b. Demonstrate how to measure, adjust, fold/unfold FWW
 - c. Talk about FWW basket usage to hold items
3. Walker safety scenarios: Therapist will demonstrate (below), have patients provide feedback:
 - a. Stand up/sit down holding onto walker
 - b. Wheelchair not locked and standing
 - c. Popping down in seat
 - d. Scooting vs. not scooting up in seat when standing
 - e. Walking with walker far out in front of you
 - f. Lifting up walker when walking
 - g. Etc.
4. Mobility/transfer training (depending on time)
 - a. If time permits, each patient demonstrates 5-10 proper sit-to-stands
 - b. If time permits, each patient will walk from w/c and transfer to chair/sofa and back to their w/c (if appropriate; can self-propel w/c if unable to ambulate)

Summary points:

- Hand placement during STS
- Wheelchair safety – making sure brakes are locked before standing (direct family members)

Grade up: no cues provided, more STS, add obstacles during functional mobility

Grade down: provide cues, more assist with STS, rest breaks during STS, less STS, move w/c closer to chair/sofa for transfer

Supplies: Patient's walkers or assistive devices

Handouts: Using your walker safely handout, adjusting FWW handout

Day 2

Transfer Training – Chair, Couch, Recliner, Mat Table (various heights)

Location: Any room

Purpose:

- Increase safety awareness when getting up and down from various surfaces
- Problem-solve with patients regarding furniture at home to suggest home modifications

Activity:

1. STS training
 - a. Recap proper body positioning
2. Transfer training (if furniture is available in room) (transfer to 1-2 or all surfaces depending on time)
 - a. W/c ⇄ chair with armrests
 - b. W/c ⇄ seat without armrests
 - c. W/c ⇄ couch
 - d. W/c ⇄ recliner chair
 - e. W/c ⇄ mat table
3. Discussion points:
 - a. What kind of furniture do you have at home?
 - i. Sitting next to armrests
 - ii. Purchasing an armrest for couch
 - b. Do you have difficulty getting up from the lower surface?
 - i. Do your chairs/couches have arm rests?
 - ii. Are you sinking into your couches? Are they firm?
 - c. Talk about how the wheelchair height is higher than a toilet or couch, etc.
 - i. Regular w/c: ~21-23 inches, toilet: ~16-18 inches
 - d. Talk about bed height
 - i. Too low: bed raisers
 - ii. Too high: remove box spring
 - e. When going out in the community, pay attention to the seating (restaurants, doctors' offices, family/friends' houses, etc.)

Summary points:

- Lower surfaces are harder to get up from
- Recap ways to help with getting up from seats with different heights/textures
 - Placing a blanket underneath, placing a cushion
 - Getting a rail

Grade up: less assistance with transfers/STS, complete fall recovery training

Grade down: more assistance with transfers/STS, cueing, rest breaks, propel wheelchair to couch/mat table, complete STS from w/c

Supplies: chair with armrest, couch, recliner chair, mat table

Handout: N/A

Day 3

Transfer Training – Shower Transfer (tub vs. walk-in)

Location: Any room

Purpose:

- Increase safety awareness for shower/tub transfer
- Identify bathroom hazards
- Educate patients on shower DME, FWW/body positioning when transferring
- Increase safety awareness when going over a threshold

Activity:

1. Threshold training
 - a. Discussion points:
 - i. Do you have a tub or walk-in shower?
 - ii. Do you have grab bars?
 - iii. Sliding glass door vs. curtain?
 - iv. Do you have the DME you need for your bathroom?
 - v. How high is your threshold in your shower
 - vi. Do you have throw rugs/bath mats?
 - b. Prep activity: therapist demonstrates how to go over a threshold for walk-in and how to do a tub transfer
 - i. If time permits:
 1. Walk-in shower
 - a. Place PVC pipe in front of pt
 - b. Have pt stand and lift one leg over PVC pipe to simulate the motion of going over a threshold
 2. Tub
 - a. Place PVC pipe vertically in front of pt
 - b. Have pt seated and lift leg over PVC pipe
2. Transfer training
 - a. Set-up shower chair/bench/commode
 - b. Using a piece of tape, a line on the floor, or PVC pipe to simulate the threshold
 - c. Have each patient transfer onto bench or chair, position depending on walk-in vs tub
 - i. Therapist demonstrates the different methods on transferring into shower with FWW or other AD/no AD
 - ii. Educate patients on FWW positioning and safety
 - iii. Educate patients on where to place FWW once in the shower
 - d. Discuss different DME options
 - i. Shower chair, shower stool, tub bench
 - ii. With/without armrests

- iii. With/without back
3. Education on adjusting DME
 - a. Shower chair/bench
 - b. Have patients demonstrate adjusting (if appropriate)
4. Discussion on bathroom/home modifications and strategies to decrease fatigue when showering
 - a. Shower in the day time
 - b. Don't shower alone, if possible
 - c. Prep all your items before going into the shower
 - d. Take your time, ask for help if you need it
 - e. Have family help you properly set up DME and/or adjust DME
 - f. Discuss more with home health on bathroom set-up/DME

Summary points:

- Safety when going over a threshold
- Safety during transfers – hand placement, making sure DME is properly placed in shower and adjusting to the correct height and position

Grade up: less assistance, verbalize 2 or more home safety techniques, higher threshold, have patient walk to simulated shower

Grade down: more assistance, cueing, remove threshold, pivot transfer to bench, propel w/c to simulated shower

Supplies: tub transfer bench, shower chair, commode, PVC pipe

Handouts: Adjusting DME handout

Day 4

AE Training

Location: Any room

Purpose:

- Increase safety awareness with AE
- Educate on different types of AE
- Educate on safe techniques and strategies with reacher for item retrieval to decrease risk for falls

Activity:

1. AE education
 - a. Therapist explains and demonstrates using reacher
 - i. Can pick items up off the ground or for LB dressing
 - b. Therapist explains and demonstrates using sock aid
 - c. Therapist explains and demonstrates using dressing stick
 - i. Socks, pants, zippers
 - d. Therapist explains and demonstrates the use of long-handled sponge
 - i. Can be used in the shower and can also be used for lotion
 - e. Therapist explains and demonstrates the use of a leg lifter
 - i. Lifting legs onto bed, wheelchair leg rests, etc.
 - f. Therapist explains and demonstrates the use of a shoe horn
 - g. Therapist explains and demonstrates the use of FWW basket (or tray, bag, etc.)
2. Demonstration
 - a. Therapist will demonstrate various placements for reacher and patients can decide what option they want to do for activity
 - i. Place reacher on top of FWW
 - ii. Place reacher on top of FWW basket
 - iii. Hang reacher on side of FWW
 - iv. Explain they can use velcro to hold reacher on side of FWW
3. Using reacher
 - a. Have patients walk, propel w/c, or stay seated, using reacher to pick up cones/other household items and place in FWW basket, or hand them to therapist
 - i. Place cones on the floor or cabinets or table
 - ii. Discussion points:
 1. If something falls and you don't have a reacher, sit in a stable seat and bend down to pick it up
 2. If standing and don't have a reacher, can use your foot to maneuver the item to a chair so that you can sit down to pick it up
 3. Dropped something heavy – how to pick something up?
4. If time permits:

- a. Practice the other AE for those patients who need to use them

Summary points:

- Discuss how to safely pick something up from the ground
- Recap how adaptive equipment can be used (sponge for lotion, reacher to grab things, reacher for LB dressing)

Grade up: using reacher to grab cone overhead, picking up more items, picking up smaller or heavier items (i.e., ADL items)

Grade down: seated using reacher, patients self-propel in w/c

Supplies: FWW basket, reacher, dressing stick, sock aid, long-handled sponge, leg lifter, shoe horn, cones, socks, pants

Day 5

Functional Reach, Body Positioning, and FWW Positioning

Location: Any room

Purpose:

- Educate on proper body mechanics when reaching into high/low spaces
- Educate on proper body positioning when reaching into household areas

Activity:

1. Demonstrate on body mechanics and walker positioning when reaching into high/low spaces
 - a. Discuss hand positioning for opening cabinets and other household appliances (high/low cabinets, drawers, fridge, dishwasher, microwave, etc.)
 - i. Simulate reaching into household spaces
 - ii. Upper vs. lower cabinet spaces
 - b. Have patient put on a FWW basket (or tray) themselves
2. Patients will complete functional reach activity into cabinets for items (cones or other ADL items) place into basket or on tray
 - a. Have patient stand in front of counter and place 1-2 items into high cabinet space
 - b. Have patient place 1 item into drawer
 - c. Have patient place 1 item into lower cabinet space
 - d. Discussion points:
 - i. Stand close to counter when reaching for items
 - ii. Can lean up against counter or table for balance
 - iii. If items at home are in higher spaces, move things to a more easily accessible area
 - e. Have patient reach for a heavier item on the ground seated and/or standing if appropriate
 - i. Discussion points:
 1. Do you get delivery services for groceries? Where do they place the items?
 - a. Can place a table outside door to prevent lifting from ground
 2. If nearby a chair, sit down and then pick up item that dropped
 3. If something dropped and it's too heavy, leave it to prevent injury/falling
 4. Use your reacher for lighter-weight items
 5. Ask for help
3. Discuss joint protection techniques when reaching for heavy items or carrying heavy items (can provide handout)
 - a. Using stronger, larger muscles and joints (use a grip, slide objects, etc.)

- b. Use palm of your hand rather than fingers when holding objects
- c. Avoid using a tight grip

Summary points:

- Positioning your FWW/assistive device when reaching for something
- Making sure you have a hand on something stable before letting go of FWW
- Remember to use good body mechanics and joint protection strategies

Grade up: standing reaching, reach for a heavier item

Grade down: seated reaching, using reacher to grab item, lighter item

Supplies: cones, other ADL items amongst the cabinets, FWW basket or tray

Handout: joint protection handout

Day 6

Light Housework

Location: ADL room

Purpose:

- Increase safety awareness when completing light housework activities at home

Activity: *(can have patient choose which housework activity they do at home if it applies; or choose for them if none applies)*

1. Microwave
 - a. Discuss and problem-solve with patients on how to transfer things from microwave with two hands to the dinner table
 - b. Have patient walk to microwave and place an item in it and take it out as if its hot
 - i. Explain they can place a tray in the microwave so they can easily remove something hot
 - ii. Wait for item to cool before grabbing
 - iii. Use FWW basket or tray
 - iv. Have nearby counter space
2. Laundry
 - a. Discuss and problem-solve with patients on how to transfer clothes from hamper to laundry room
 - b. Discuss what if they have a top-loader or front-loading washing machine?
 - i. Top: Use a reacher
 - ii. Front: Sit down to place laundry into machine
 - c. Discuss other laundry techniques and strategies
 - i. Don't keep detergent on the floor – harder to reach
 - ii. Place hamper near laundry machine – take multiple smaller trips
 - iii. Have a chair nearby to rest when transfer laundry from washer to dryer
 - iv. Transfer heavy detergent liquid into a smaller bottle
 - v. Do smaller loads of laundry to decrease weight/amount of clothes
 - d. Have patient retrieve item from hamper and place into washer
 - e. Have patient retrieve item from washer and place into dryer
 - f. Have patient fold 2-3 clothing items
3. Fridge/dishwasher/cabinet
 - a. Discuss how to safely open fridge/dishwasher/cabinet
 - i. Placing one hand on a stable surface before opening door
 - ii. Park FWW/AD next to appliance and not in front to avoid losing balance when door is swinging open
 - iii. Using a theraband to place onto fridge handle to help with opening fridge
 - b. Have patients open fridge, dishwasher or cabinet
 - c. Have patient place or remove an item from fridge, dishwasher, or cabinet

4. Closet

- a. Discussion points
 - i. Stand as close as you can to avoid overreaching
 - ii. Putting things you need in easily accessible spots
 - iii. Fold clothes while seated
 - iv. Discuss how to carry folded clothes up to closet
 - v. Purchasing a hanging closet rack
- b. Have patient hang an item of clothing and place into closet
- c. Have patient reach into closet to take a hanger down and put hanger back

Summary points:

- Stay seated for tasks you feel will be strenuous
- Place every day commonly used items in reachable areas
- Hand placement when opening household appliances
- Take multiple smaller trips when doing laundry

Grade up: standing, complete all light housework activities, no cueing

Grade down: seated, use a reacher, more cueing

Supplies: plate, mug, reacher, clothes, hangers, FWW basket

Handouts: Managing kitchen tasks from a walker handout

Day 7

Bed Mobility, Making the Bed, Changing the Sheets

Location: ADL room

Purpose:

- Increase safety with bed mobility and making the bed (if applicable)
- Introduce AE for bed mobility if needed (leg lifter, bed ladder, arm rail)

Activity:

1. Bed mobility
 - a. Discuss and demonstrate to patients log roll, scooting in, or other strategies to get in/out of bed
 - b. Introduce AE, if they were to need them
 - i. Leg lifter
 - ii. Bed ladder
 - iii. Arm rail
 - c. Discuss with patients which side of the bed do they get up from
 - d. Set up bed according to patient's bed (left vs right side)
 - e. Have patients each demonstrate bed mobility on ADL room bed
 - f. Discuss safety with bed mobility
 - i. Get up slowly to prevent dizziness
 - ii. Discuss with patient if they have precautions
2. Making the bed/changing sheets
 - a. Discuss with patients if they have to change the bed sheets
 - i. Demonstrate proper body mechanics when changing the sheets
 - ii. Have patient tuck in flat sheet (if appropriate)
 - iii. Have patient remove previous patients sheet and place new sheet for themselves
 - b. Discuss with patients on body mechanics when making the bed
 - i. Have patients demonstrate making the bed with the flat sheet
 - ii. Have patient flatten out flat sheet to simulate blanket
3. Discussion on energy conservation, sleep hygiene
 - a. Prioritize, plan, pace, position (4 P's)
 - b. Discuss methods on getting adequate sleep (taking naps earlier in the day, melatonin, exercise, getting sunlight, white noise, etc.)
4. Therapist will demonstrate improper bed mobility technique and have patients identify as a group what was wrong
 - a. Getting up from seat holding onto walker
 - b. Plopping down to sit on bed
 - c. Sitting near foot of bed instead of closer to the head of the bed
 - d. Lifting leg up with leg lift rather than keeping leg straight

Summary points:

- Find comfortable and safe way of getting in/out of bed or using AE if needed
- Energy conservation during tasks at home (4 P's)

Grade up: tuck in flat sheet, take sheet and place into hamper, not using the bed rail, walk to bed, fold sheet, have patient change sheet for next patient, stand and fold sheet at kitchen table

Grade down: use bed rail, using AE, stand pivot transfer to bed

Supplies: 5 flat sheets or bed sheets, leg lifter, bed ladder

Handouts: energy conservation handout

Day 8

Health Management

Location: Any room

Purpose:

- Increase safety awareness with managing health when discharge
- Educate patients on importance of blood pressure management
- Educate patients on staying physically active after discharge

Activity:

1. Exercise classes
 - a. Discuss and provide handout for free community exercise classes
 - i. If unable to leave home for classes, recommend finding exercise videos on YouTube
 - b. Discuss importance of staying physically active
 - i. Discussion points:
 1. Can improve cardiovascular function such as BP
 2. Improves balance to prevent falls
 3. If you don't use your muscles frequently, you can become weaker
 4. Stay hydrated, be aware of fatigue levels when exercising, start slowly
 - c. Discuss HEP that their primary therapists have given them
 - i. Advise to use weights or theraband when completing exercises, refer back to primary therapist for correct weight or theraband to use
 - ii. Can use other household items to simulate weights
 1. Water bottles, canned goods, books, etc.
 - iii. Exercise/being active can be other things that aren't weights/gym
 1. Walking, household chores, etc.
2. Blood pressure
 - a. Demonstration
 - i. Putting on BP cuff – 2 fingers above elbow crease, make sure the tube is centered, not too tight/loose
 - ii. Seating – arm relaxed, don't cross legs, try not to talk, try not to move as it can affect the reading
 - iii. Recommend to place on left arm
 1. Don't place it on weaker arm (i.e., stroke)
 - b. Discuss importance of managing BP
 - i. Recommend purchasing a portable BP machine for home (Costco, Amazon, Walmart, etc.)
 - ii. Using BP log or a notebook to track readings

- iii. Having a log can allow you to show your doctors the consistency/inconsistency
- c. Discuss what the BP readings mean (systolic vs diastolic, what's considered high vs low and what's considered a "normal" reading)
 - i. Discuss high BP vs low BP
 - ii. BP readings can be different sitting, standing, laying down
 - iii. Discuss strategies on what to do if you have high/low BP
 - 1. High
 - a. Exercise
 - b. Medications
 - 2. Low
 - a. Ab binder
 - b. Compression stockings
 - c. Water
 - d. Lay flat with feet elevated (using a pillow or blanket)
 - e. Ankle pumps
- d. Activity
 - i. Have each patient put on BP cuff, take BP reading, and write down BP on log
- 3. Healthy eating
 - a. Discuss with group on ways to eat healthy
 - i. Eat more fruits and vegetables (smoothies, soups, etc.)
 - ii. Home cooked meals
 - iii. Drinking more water
 - iv. Avoid sugary and high sodium foods
 - b. Have patients share what they eat that are healthy to incorporate discussion and engagement
 - c. Are they on a diet? (cardiac, diabetic, renal, etc.)

Summary points:

- Exercise, eat healthy after discharge
- Monitor BP
- Consult with primary doctor on health concerns and check-ups

Grade up: apply cuff on therapist, apply cuff on self, take BP reading laying down, take BP reading standing, verbalize techniques that were taught during session, teach-back blood pressure readings

Grade down: provide more verbal instruction for BP cuff, apply cuff for patient

Supplies: portable blood pressure machine

Handouts: Community exercise classes handout, BP log handout, BP readings handout

Day 9

Community Re-Entry

Location: Any room

Purpose:

- Increase safety awareness when entering into the community with AD
- Educate on managing AD through entrances and into the car
- Increase independence for community-dwelling older adults

Activity:

1. Entering/exiting the home
 - a. Discuss with patients how they access their home (front door, garage, etc.)
 - i. Ramp? Small threshold? Steps? Handrails?
 - ii. Simulate patient's home entrance and have patient demonstrate going over threshold
 1. Use 4-inch step, therapist will demonstrate technique and have patients each practice
 - a. Step as close as possible to curb, lift up walker onto step, step up with stronger leg
 - b. Step as close as possible to curb, lift walker down onto floor, step down with weaker leg
 - b. Discuss with patients safety aspects
 - i. Adding colored tape on the doorway to prevent falls
 - ii. Clearing the walkway
 - iii. Adding handrail
2. Entering/exiting doors
 - a. Therapist will demonstrate proper way of opening door while managing walker
 - i. Stand beside door and not in front of door
 - b. Have patients practice opening a door while seated in w/c or standing with AD
 - c. Spring loaded door vs non-spring loaded door
 - d. Educate on different door levers (knob, handle, using keys, etc.)
 - e. Discuss calling ahead to locations to let them know you are on the way and need assistance with doors
3. Education on loading/unloading AD or wheelchair in car
 - a. Therapist will demonstrate folding a wheelchair and "loading" it into car (can use mat table or couch)
 - i. Discuss the possibility of purchasing a transport w/c for outings
 - b. Therapist will demonstrate folding AD and "loading" it into a car (can use mat table or couch)
4. Discussion on post-discharge outings

- a. When going to doctors, family's houses, restaurants, etc., how will they navigate with their w/c and/or AD
- b. Where are you going to sit?
 - i. Does the seat have armrests?
- c. Did you bring your medications?
- d. Time of day going to restaurants, etc. (energy levels, driving, etc.)
- e. Will you be driving?
- f. Ask for help!

Summary points:

- Consider a transport wheelchair if you need to use a w/c for community outings
- Pay attention to doors, are they spring loaded, is it automatic, are they heavy?
- Be mindful of the environment and time of day you do community outings (energy conservation, driving, is it crowded, accessible, etc.)

Grade up: standing to open door, going over a higher threshold, have patient fold w/c, going up on step

Grade down: seated to open door, seated and lift legs over a threshold, toe-tap step

Supplies: Transport chair, 4-inch step

Handouts: Loading/unloading w/c from car handout

Day 10

Discharge Planning

Location: Any room

Purpose:

- Increase readiness for discharge through reviewing proper STS, transfers and home safety

Activity:

1. Review proper STS
 - a. Demonstrate proper and improper transfer techniques and have patients identify how to correct it
 - b. Complete 10 STS
2. Review transfers
 - a. Have patients choose to transfer to the surface of their choice (couch, mat table, chair, etc.)
 - b. Have other members provide feedback
3. Review home set up
 - a. Discuss home modifications and home safety checklist
 - i. Remove throw rugs
 - ii. Getting grab bars and/or arm rails
 - iii. Discuss the DME they may need (shower chairs, walkers, commodes, etc.)
 - iv. Keeping commonly used household items in more easily accessible areas
 - b. Fall prevention techniques/exercises
 - i. Fall prevention exercises (marches, ankle pumps, leg lifts, etc.)
 - ii. Wearing appropriate footwear
 - iii. Having a phone with you at all times (or Life Alert, apple watch, etc.)
 - iv. Exercise regularly to increase LB strength
 - v. Take your time with tasks and movements
 - vi. Minimize clutter
 - vii. Use DME at all times
 1. Furniture walking could cause falls
4. Review plans after discharge
 - a. Discuss outpatient, SNF, home health, getting a caregiver, etc.
 - b. Is family at home or PCA services?
 - c. Cell phone, Life Alert, fall recovery
 - d. Have group provide step by step of fall recovery (if time permits)

Summary points:

- Talk to your family to ensure home is set up and ready
- Talk to therapists, doctors, and nurses to ensure you have the right DME, medications, and post-discharge plans (outpatient, home health, etc)

Grade up: verbalize at least 2 things needed for safe discharge, more STS, no cues provided for safety with STS/transfer

Grade down: verbalize 1 thing needed for safe discharge, provide more cueing, less STS, more assistance with STS, rest breaks,

Handout: Home safety checklist

Appendix C

Therapy Aide Guide

THERAPY AIDE GUIDE – OT GROUPS

****BRING PATIENTS ASSISTIVE DEVICES AND GAIT BELTS TO ALL SESSIONS****

Topic	Room	Supplies	Handouts
Day 1 (Monday) Wheelchair & Walker Safety	Any room	N/A	Using your walker safely handout, Adjust FWW handout (OPTIONAL)
Day 2 (Tuesday) Transfer Training	Any room	Seats with different heights/surfaces (e.g., mat table, couch, chair, sofa)	N/A
Day 3 (Wednesday) Shower Transfer	Any room	Shower chair, tub transfer bench, commode, PVC hurdle	Adjusting DME handout (OPTIONAL)
Day 4 (Thursday) Adaptive Equipment Training	Any room	FWW basket, reacher, sock aid, dressing stick, shoe horn, long-handled sponge, leg lifter, cones, socks, pants	N/A
Day 5 (Friday) Functional Reach	Any room	FWW basket, cones, ADL items (lotion, tissue box, etc.)	Joint protection handout (OPTIONAL)
Day 6 (Monday) Light Housework	ADL room*	FWW basket, reacher, cones, plates, mugs, clothes, hangers	Managing kitchen tasks from a walker handout (OPTIONAL)
Day 7 (Tuesday) Bed Mobility	ADL room*	5 flat sheets or bed sheets, leg lifter, bed ladder	Energy conservation handout (OPTIONAL)

Day 8 (Wednesday) Health Management	Any room	Portable BP machine	Community exercise handout, BP log, BP readings handout
Day 9 (Thursday) Community Re-Entry	Any room	Curb step, transport wheelchair, portable ramp	Loading/unloading w/c from trunk (OPTIONAL)
Day 10 (Friday) Discharge Planning	Any room	N/A	Home safety checklist

Appendix D

Pre-Group Survey

Pre-Group Therapy Survey

Participant: _____ Date: _____

Anticipated Discharge Date: _____

1. What is your age?

2. Reason for hospitalization?

3. Do you live alone?

Yes

No

4. I have received therapy rehab before (OT and PT)

Yes

No

Directions: Check the most appropriate answer.

1. I currently feel confident to discharge.

- **1 = Strongly Disagree**
- **2 = Disagree**
- **3 = Neutral**
- **4 = Agree**
- **5 = Strongly Agree**

2. I feel I can complete my daily tasks every day on my own (ex. getting dressed, using the bathroom, etc.).

- **1 = Strongly Disagree**
- **2 = Disagree**
- **3 = Neutral**
- **4 = Agree**
- **5 = Strongly Agree**

3. I feel confident in knowing how to safely get up and down from my seat and/or wheelchair.

- **1 = Strongly Disagree**
- **2 = Disagree**
- **3 = Neutral**
- **4 = Agree**
- **5 = Strongly Agree**

4. I feel safe being alone at home, if needed.

- **1 = Strongly Disagree**
- **2 = Disagree**
- **3 = Neutral**
- **4 = Agree**
- **5 = Strongly Agree**

5. I know exercises and fall prevention techniques that I can do once I discharge.

- **1 = Strongly Disagree**
- **2 = Disagree**
- **3 = Neutral**
- **4 = Agree**
- **5 = Strongly Agree**

Appendix E

Post-Group Survey

Post-Group Therapy Survey

Participant: _____ Date: _____

Anticipated Discharge Date: _____

Directions: Check the most appropriate answer.

1. I currently feel confident to discharge.
 - ☐ **1 = Strongly Disagree**
 - ☐ **2 = Disagree**
 - ☐ **3 = Neutral**
 - ☐ **4 = Agree**
 - ☐ **5 = Strongly Agree**

2. I feel I can complete my daily tasks every day on my own (ex. getting dressed, using the bathroom, etc.).
 - ☐ **1 = Strongly Disagree**
 - ☐ **2 = Disagree**
 - ☐ **3 = Neutral**
 - ☐ **4 = Agree**
 - ☐ **5 = Strongly Agree**

3. I feel confident in knowing how to safely get up and down from my seat and/or wheelchair.
 - ☐ **1 = Strongly Disagree**
 - ☐ **2 = Disagree**
 - ☐ **3 = Neutral**
 - ☐ **4 = Agree**
 - ☐ **5 = Strongly Agree**

4. I feel safe being alone at home, if needed.

- ☐ **1 = Strongly Disagree**
- ☐ **2 = Disagree**
- ☐ **3 = Neutral**
- ☐ **4 = Agree**
- ☐ **5 = Strongly Agree**

5. I know exercises and fall prevention techniques that I can do once I discharge.

- ☐ **1 = Strongly Disagree**
- ☐ **2 = Disagree**
- ☐ **3 = Neutral**
- ☐ **4 = Agree**
- ☐ **5 = Strongly Agree**

6. The topics and activities in group increased my readiness for discharge.

- ☐ Yes
- ☐ No

7. The activities provided in group were too difficult.

- ☐ Yes
- ☐ No

8. The activities provided in group were too easy.

- ☐ Yes
- ☐ No

9. The content in the group increased my safety awareness for discharge.

- ☐ Yes
- ☐ No

10. There was enough education provided during the group session.

- ☐ Yes
- ☐ No

11. The content was understandable and easy to follow.

- ☐ Yes
- ☐ No

12. Will you use what you learned in group when you discharge?

- ☐ Yes
- ☐ No

13. What did you like about what you did in group?

14. What part of group therapy was difficult?

15. What do you think you still need to work on?

16. Do you have any other suggestions or comments you would like to add?

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Curriculum Vitae

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EDUCATION

University of Nevada, Las Vegas
Occupational Therapy Doctorate

May 2024

Capstone Title: Improving Patients' Readiness for Discharge: The Development of an Occupation-Based Group Therapy Protocol in Inpatient Rehabilitation
Advisor: Christina Bustanoby, OTD, OTR/L

University of Nevada, Las Vegas
Bachelor of Science in Kinesiology

December 2019

CLINICAL EXPERIENCE – FIELDWORK STUDENT

LEVEL II

Dignity Health Rehabilitation Hospital
Inpatient Rehabilitation

May 2023 – August 2023

- Provided direct patient care for individual sessions and group sessions with distant supervision and independently
- Interdisciplinary collaboration on patient treatment planning
- Created educational handouts and a resource drawer for handouts as an in-service project

Mountain View Hospital
Inpatient Rehabilitation

May 2022 – August 2022

- Provided direct patient care with distant supervision and independently
- Evaluated, treated, consulted, monitored, assessed, and discharged planning for patients
- Documented all treatment sessions

LEVEL I

Nevada Blind Children's Foundation
Cornerstone Christian Academy
Tick Talk Therapy
Hanger Clinic
Nevada Senior Services

September 2023 – October 2023

October 2022, April 2023

March 2023

March 2022

November 2021 – December 2021

TEACHING EXPERIENCE

University of Nevada, Las Vegas

- BIOL 197: Principles of Modern Biology II
Undergraduate Teaching Assistant

2018

VOLUNTEERING

Silverado Memory Care

2022 – Present

PROFESSIONAL AFFILIATIONS

Student Occupational Therapy Association (SOTA)

2021 – Present

American Occupational Therapy Association (AOTA)

2021 – Present

SCHOLARSHIPS

General UNLV OTD Program Scholarship

2024

General UNLV OTD Program Scholarship

2023

General UNLV OTD Fieldwork Assistance Scholarship

2023

General UNLV OTD Fieldwork Assistance Scholarship

2022

CERTIFICATIONS

CPR, BLS – American Heart Association

September 2023

SCHOLARLY ACTIVITIES

Manuscripts

- Cheng, V., Bustanoby, C. Improving Patients' Readiness for Discharge: The Development of an Occupation-Based Group Therapy Protocol in Inpatient Rehabilitation.