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# Take Charge for Therapy Discharge: Outcomes of a Patient Education Program Applying the CO-OP Approach

Kathryn Westley

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TAKE CHARGE FOR THERAPY DISCHARGE: OUTCOMES OF A PATIENT  
EDUCATION PROGRAM APPLYING THE CO-OP APPROACH

A Capstone Project

Submitted to the Rangos School of Health Sciences

Duquesne University

In partial fulfillment of the requirements for  
the degree of Occupational Therapy Doctorate

By

Kathryn Westley, BS

December 2018

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By

Kathryn Westley, BS

November 5, 2018  
Approved

---

Ann Stuart, OTD, OTR/L  
Clinical Assistant Professor  
Duquesne University  
(Faculty Mentor)

---

Danielle Engle, OTR/L, FWEC  
Therapy Manager  
HealthSouth Rehabilitation Hospital of  
Largo (Site Mentor)

---

Anna Olexsovich, OTD, OTR/L  
Occupational Therapist  
The Marden Companies  
(External Mentor)

---

Jaime P. Muñoz, PhD, OTR/L, FAOTA  
Chair and Associate Professor  
Department of Occupational Therapy  
(Committee Member)

---

Fevzi Akinci, PhD, MHA  
Dean  
Rangos School of Health Sciences

## ABSTRACT

### TAKE CHARGE FOR THERAPY DISCHARGE: OUTCOMES OF A PATIENT EDUCATION PROGRAM APPLYING THE CO-OP APPROACH

By

Kathryn Westley, BS

December 2018

Capstone Project supervised by Ann Stuart, OTD, OTR/L

A thorough needs assessment at HealthSouth Rehabilitation Hospital of Largo revealed slight dissatisfaction scores on the Press Ganey survey for both the occupational therapy department and discharge planning processes. This quality improvement project, *Take Charge for Therapy Discharge*, implemented a two-session patient education protocol using the Cognitive Orientation to Occupational Performance (CO-OP) approach. Using the Patient-Specific Functional Scale (PSFS), participants identified and prioritized three therapy goals and rated their perceived current performance. Results demonstrated a significant difference between the participants' PSFS pre and post-intervention scores. Patients' improved self-perceived goal attainment scores served as evidence that, in addition to using the CO-OP approach, the therapists were actively addressing the patients' prioritized therapy goals.

## DEDICATION

I would like to dedicate this capstone project to all my family and friends who have offered unlimited support throughout my life and college career. I cannot begin to describe how thankful I am. To my friends, Molly, Barbie, Clare, Erin, Adriana, Justin, and Ryan, thank you for your abilities to constantly cheer me up and allow me to enjoy my college years. You will always hold special places in my heart and I will always look back on these years with a smile because of you.

To my parents, Flo and Steve, thank you for believing in my dream to become an occupational therapist, even when that involved helping me relocate five states away for my fieldwork experiences. To my brothers, Michael and Ryan, thank you for giving me the tough love that I needed to push through these past few years of schooling. To my grandmother, Ann, your constant prayers and kind thoughts have kept me motivated through the years and reminded me why I chose such a meaningful profession. And finally, this capstone project is dedicated to the memory of my grandfather, Ronald, and my uncle, Patrick, who have always inspired me to pursue my dreams, but passed away before seeing me graduate. This is for you, my guardian angels.

## ACKNOWLEDGEMENT

This capstone project would not have been possible without all the individuals who have been a part of my journey as an occupational therapy student. I would not be the creative, research-based, occupational therapist I am today without your help. First and foremost, I wish to thank Dr. Ann Stuart, Danielle Engle, and Dr. Anna Olexsovich for agreeing to offer their time and expertise to serve on my capstone committee. I wish to extend a special thanks to Dr. Stuart, my faculty mentor, for the countless hours of phone calls, emails, editing, and encouraging throughout this capstone process. My capstone project would not have been possible without the collaboration and support from Danielle Engle, my site mentor. You helped me turn all of my ideas into a reality and you embody the leadership and clinical skills that I hope to have one day.

My entire capstone journey would not have been possible without the constant support from the occupational therapy department at Duquesne University. The occupational therapy professors have prepared me for the workforce more than I could even imagine. They have pushed me to grow in my knowledge, competence, and overall confidence over the years.

Lastly, I wish to thank the entire staff at HealthSouth Rehabilitation Hospital of Largo. Throughout my time as a level-two fieldwork student and upon my return as a doctoral student, the staff, especially the therapy department, had all taken time to get involved and promote my learning. I learned valuable clinical skills from each and every therapist, which I will continue to use in my future employment.

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## LIST OF ABBREVIATIONS

- (ANOVA) Analysis of Variance
- (CO-OP) Cognitive Orientation to Occupational Performance
- (DEC) Doctoral Experiential Component
- (FIM) Functional Independence Measure
- (FWEC) Fieldwork Educator Coordinator
- (MOHO) Model of Human Occupation
- (OT) Occupational Therapy
- (OTD) Occupational Therapy Doctorate
- (OTR/L) Occupational Therapist Registered and Licensed
- (PSFS) Patient Specific Functional Scale
- (SPSS) Statistical Package for Social Sciences
- (WITH) Wellness Information and Tools for Health

## CHAPTER ONE - The Practice Scholar Capstone Project

### Problem Statement

The aging population is prone to conditions of aging requiring medical care. Age related illnesses, such as cardiac, musculoskeletal, and orthopedic diagnoses are more prevalent as individuals age, and these can lead to multiple hospitalizations. These re-hospitalizations can have negative effects on cost containment, patient outcomes, and satisfaction with the rehabilitation process. Patients, their caregivers, therapists, and healthcare companies are all affected by these instances of re-hospitalization. In 2011, Bill HR 3590 was introduced into federal legislation that offered \$500 million to the Community-based Care Transitions Program, which helps facilities to prevent instances of re-hospitalization through the addition of evidence-based programs (Hansen, Young, Hinami, Leung, & Williams, 2011). Targeted and improved patient education can have a positive effect in mediating these issues of hospitalizations and re-hospitalizations, thereby keeping elder adults in their home communities.

At least 26% of the country's population is comprised of the older adult population, those over 65 years of age (Cohn & Taylor, 2010). In fact, every day in the United States, roughly 10,000 individuals from the 'baby boomer' generation celebrate their 65<sup>th</sup> birthdays, making them part of the increasing geriatric population (Cohn & Taylor, 2010). The aging process is associated with poorer health outcomes, often leading to hospitalization (Pollack et al., 2016).

As healthcare facilities are constantly striving to improve their service delivery, they often analyze data such as their re-hospitalization rates (Yam et al., 2012). Re-hospitalizations are redundant and extremely costly. The Medicare Payment Advisory Commission estimates that roughly 75% of re-hospitalizations within 30 days could be avoided, which would save an average of \$15 billion in healthcare costs (Hansen et al., 2011). This breaks down to an average of \$7,500 per re-admission in unwarranted costs (Evdokimoff, 2011). Roughly 20% of all

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hospital admissions, of adults over the age of 65, were due to re-hospitalizations (Oates et al., 2013). One source states that for every five hospitalizations, one will potentially result in re-hospitalization (Jack et al., 2009). Some of these re-hospitalizations could be prevented through improved patient education and explanations of the discharge planning process, as well as connections to available community resources (Oates et al., 2013). Furthermore, occupational therapy has been found to be the primary discipline whose acute care interventions statistically reduced re-hospitalizations for those with chronic diseases such as cardiac, respiratory, and diabetes (Rogers, Bai, Lavin, & Anderson, 2017).

Many patients lack awareness of their deficits, their rights, and available resources, such as support groups, financial assistance, transportation services, etc. Patients may have a decreased understanding of their condition, poor literacy rate, or an altered state of consciousness due to medication, and are not fully aware of their rights and potential resources that are available to them (Pollack et al., 2016). Other patients struggle to comprehend the information that is provided to them in hospital settings because being hospitalized can be an overwhelming process and these patients would benefit from increased participation from occupational therapists to teach the patient to advocate for their rights (Pollack et al., 2016).

The occupational therapy profession recognizes self-management as an instrumental activity of daily living (American Occupational Therapy Association, 2017). Health management and maintenance is an occupational term used to describe the actions of maintaining routines that promote health and wellness (AOTA, 2017). Occupational therapists provide client-centered care and are professionals that serve to advocate for their patients through patient education on a variety of components including the recovery process, community resources, insurance coverage of durable medical equipment, available transportation options, etc. If occupational therapists

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consistently and strategically focus on these occupational deficits, it may impact the number of re-hospitalizations due to preventable causes.

When hospitalized, patients may not consistently be engaged in therapy and education processes. Research has shown that only roughly 40% of healthcare professionals directly involve their patients in the goal setting process, thereby often leaving the professionals to determine the priorities for care (Holliday, Antoun, & Playford, 2005). Other research demonstrates a positive correlation between patient involvement in the goal setting process and increased motivation to participate in therapy sessions (Young, Manmathan, & Ward, 2008). Patients who assist in the process of developing their own therapeutic goals are more likely to participate, adhere to their home exercise programs, as well as have an increase in satisfaction and self-management skills than patients that do not (Byrnes et al., 2012). When patients take an active role in establishing goals for therapy, they are able to analyze their occupational roles and routines to prioritize their needs throughout the therapy process.

Occupational therapists serve as advocates and support systems throughout the therapy process and are key personnel that address practical planning for life after being discharged from the hospital. The occupational therapy profession guidelines, skilled services, and connection to community resources all serve to support the role of occupational therapists as advocates for patient rights. Communities offer a wide variety of supportive resources for each patient population; however, many patients are simply not aware of these groups or their immense benefits. Occupational therapists provide a unique insight into the connection between a patient's needs, and the available community resources and realistic funding options (Barbara & Curtin, 2008).

Effective discharge planning plays a vital role in the reduction of re-hospitalizations. Medicare's *Conditions of Participation* from Centers for Medicare and Medicaid Services

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recognizes discharge planning as a legally necessary component of the hospitalization and rehabilitation process in the United States (Shepperd et al., 2010). This legal requirement has been established to ensure that patients experience a smooth transition between appropriate levels of care (Yam et al., 2012). In a study that interviewed recently discharged patients about their discharge planning experiences, many expressed dissatisfactions in areas of patient education, training in skills for self-management, and expressed difficulty transferring skills (Evdokimoff, 2011). Therefore, discharge planning protocols should address these areas, as well as access to community supports and resources (Hansen et al., 2011). When discharge planning protocols are designed effectively, they will improve each patient's understanding of the topics discussed while reducing the frequency of re-hospitalizations (Wong et al., 2011). After re-designing the facility's discharge planning process, one study demonstrated a 33.9% decrease in hospital utilization costs, which averages roughly \$400 savings for each discharge (Jack et al., 2009). In America, there are over 32 million discharges of the adult population alone each year (Jack et al., 2009). By improving the discharge planning process, millions of dollars could be saved from being spent on re-hospitalization charges that could have been avoided (Shepperd et al., 2010).

After all of these program aspects have been addressed, it may affect the patient's satisfaction with the level of care. Ensuring that treatments are client-centered is becoming a main priority in quality assurance and accreditation standards, which can be measured through client satisfaction levels (Custer, Huebner, & Howell, 2015). When patients are satisfied with their experiences, they are more motivated to participate, therefore leading to being more likely to achieve better outcomes from therapy (Custer et al., 2015). In a research study by Custer, Huebner, and Howell (2015), the research team interviewed patients regarding their satisfaction with therapy and results demonstrated that generally, patients had higher satisfaction scores



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when they were actively involved in setting therapy goals, were respected by all team members, and felt as though treatments were being personalized to their needs. Additionally, this study found a correlation between occupational performance and satisfaction, particularly that as the Functional Independence Measure (FIM) scores for each of the six self-care activities increased by one point, patient satisfaction levels increased by 42% (Custer et al., 2015). Since the FIM is currently being administered at HealthSouth Rehabilitation Hospital of Largo each day, it will be relevant to analyze any connection between each patient's change in occupational performance from admission to discharge and their satisfaction level upon discharge for the *Take Charge for Therapy Discharge* program.

Although some research exists supporting the benefits of patient education, gaps in the literature exist connecting patient education programs using the Cognitive Orientation to Occupational Performance (CO-OP) approach to reduction of re-hospitalization.

### **Needs Assessment**

Sub-acute rehabilitation is a special type of inpatient facility. After being discharged from the acute hospital setting, patients may be admitted to sub-acute inpatient facilities either for short-term rehabilitation after an injury or to receive further medical attention for complex or debilitating illnesses (HealthSouth, 2018).

A needs assessment was completed at HealthSouth Rehabilitation Hospital of Largo, which served as the doctoral experiential component (DEC) site for this capstone project. This sub-acute HealthSouth facility primarily served a geriatric population (HealthSouth, 2018). The mission of HealthSouth Largo hospital was “to be the healthcare company of choice for patients, employees, physicians and shareholders by providing high quality care in the communities we serve,” which was demonstrated through the holistic level of care provided at this facility (HealthSouth, 2018). This 77,000-square-foot facility housed 70 inpatient beds as well as two

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large, fully equipped therapy gyms (HealthSouth, 2018). For therapy services, each patient was assigned to a team of one physical therapist and one occupational therapist, based on their primary diagnosis. There were five therapy teams: medical/surgical, stroke, cardiopulmonary, orthopedic, and neurological. Therapists were expected to maintain a high level of productivity throughout their work day and patients were required to participate in a minimum of three hours of therapy, five days a week (Centers for Medicare & Medicaid Services, 2012). Patients were treated for therapy individually, concurrently, or in group sessions. Patients at HealthSouth Largo had an average length of stay between ten to fifteen days.

In an effort to determine the needs of the facility, a variety of methods were used (Appendix A). Methods included semi-structured interviews through phone calls and email conversations with Danielle Engle, OTR/L, FWEC, who was the DEC site mentor and Therapy Manager. Danielle was an active member in the needs assessment process and helped organize a meeting with the other therapy staff members to discuss potential project ideas. This needs assessment identified a potential gap in patient education prior to discharge. Prior to the DEC, the case management department hosted patient orientation and discharge classes; however, these sessions were generalized and lacked therapy-based patient education. The orientation session focused mainly on an orientation to the facility's resources, such as the patient lounge, patios for gathering with family or friends, or places like cafeteria. The session also explained the daily schedule including meal times, doctor visits, and mentioned the requirement to complete three hours of daily therapy but did not further explain details about the therapy process. Case management's discharge class primarily focused on medication management and stressed that individuals must incorporate a medication regimen into their daily routine to decrease the likelihood of being re-admitted due to medication non-compliance. This class briefly mentioned some methods of preventing falls but did not address a variety of other

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important discharge topics. Therefore, the quality of and outcomes from patient education could be improved at HealthSouth Largo with modifications to the orientation and discharge classes. Specifically, changes that emphasize and reinforce the therapy process were considered since this was a rehabilitation hospital with a primary goal for patients to make functional gains.

HealthSouth Rehabilitation Hospital of Largo used Press Ganey surveys (Appendix B), which are formal questionnaires mailed to patients upon discharge, asking patients to rate their satisfaction with services provided during their inpatient stay (Press Ganey, 2018). Prior to beginning the DEC, patients expressed slight dissatisfaction with both the occupational therapy department and the discharge planning process in their Press Ganey satisfaction surveys. Therefore, the capstone project, titled *Take Charge for Therapy Discharge*, consisted of a two-session patient education program that occurred upon admission and prior to discharge. Patients were introduced to the Cognitive Orientation to Occupational Performance (CO-OP) approach in a *Goals Group* upon admission to improve the discharge planning process and increase patient involvement in goal setting. This approach taught patients strategy training techniques to increase effective and sustainable goal-setting, problem-solving, and progress assessment skills upon discharge.

The needs assessment also showcased key strengths of this facility. There were well-trained staff. Each of the 5 teams had an occupational or physical therapist in a leadership position (Appendix C). There were also many physical resources at HealthSouth Largo including a computer lab with printers, two large gymnasiums, a fully-equipped classroom, and office space for organization of materials.

The needs assessment suggested that services in the sub-acute inpatient units might be strengthened by improving the quality of patient engagement in the therapy process and their level of participation when identifying and personalizing meaningful therapy goals. Quality

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might also be improved by addressing the discharge planning process and facilitating patient education that facilitates carryover of techniques.

### **Aim and Purpose of Capstone Project**

The addition of patient education sessions, with an emphasis on the therapeutic process and potential outcomes, upon admission and prior to discharge was designed to allow patients to identify which occupations are the highest priorities to incorporate into their daily routine, while practicing the CO-OP approach. It is expected that increased motivation from active participation in goal-setting will positively impacted their success upon discharge as measured by self-perceived goal attainment.

*Take Charge for Therapy Discharge's* mission was to better serve the inpatient population at HealthSouth Rehabilitation Hospital of Largo through the addition of new and focused patient education sessions. This program's vision was that patients would express positive experiences with the therapy process and would have improved role competence and occupational performance upon discharge through carryover of goal-related educational concepts and techniques. *Take Charge for Therapy Discharge* was designed to meet patient education needs through sessions that taught self-advocacy and problem-solving skills and use of available resources that promoted safer, more successful and sustained post-hospitalization functioning.

## **CHAPTER TWO: Review of Relevant Literature**

### **Introduction**

In order to promote the highest level of therapy participation, it was beneficial for individuals to show a genuine interest in the activities in which they were being asked to engage. This capstone project hypothesized improved outcomes in a patient's therapy performance, discharge satisfaction, and self-management competence, via increasing participation in establishing and actively monitoring meaningful therapy goals. Patient education sessions were provided utilizing

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a CO-OP approach. The *Take Charge for Therapy Discharge* program was designed to develop, implement, and evaluate the addition of a two-session group therapy protocol for patient education. A comprehensive review of current and relevant literature was completed and used to guide the *Take Charge for Therapy Discharge* program (Appendix D & Appendix E). The following quality improvement questions guided the 16-week DEC placement in the sub-acute inpatient unit at HealthSouth Rehabilitation Hospital of Largo, Florida.

- *Does a patient's participation in a two-session patient education program improve patient satisfaction with their inpatient stay in the sub-acute unit?*
- *Does a patient's participation in a two-session patient education program lead to increased competence in the ability to self-manage their illness?*

### **Synthesis of Literature**

The Cognitive Orientation to Occupational Performance (CO-OP) approach is a top-down strategy training method that was introduced in 2001 to improve functional performance in children with developmental coordination disorder and has since been used with a variety of populations (Scammell, Bates, Houldin, & Polatajko, 2016).

The CO-OP approach involves a goal-plan-do-check strategy to assist patients in problem solving for use during functional tasks (Dawson et al., 2009). Following this strategy, the patients identify which goal they are going to address, develop a plan for how to accomplish the goal, do the steps that they identified in their plan, and check to see if their plan worked or if it needs to be revised and reattempted (McEwen et al., 2015). It is beneficial to begin with three therapeutic goals to focus future sessions using the CO-OP approach (Polatajko, McEwen, Ryan, & Baum, 2012). The patient is expected to repeat the goal-plan-do-check method until they successfully accomplish their goal (Polatajko, McEwen, Ryan, & Baum, 2012). However, although patients are expected to repeat this process, there is no recommended number of

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repetitions as this varies for each patient and each task (McEwen et al., 2015). This allows patients to problem-solve and monitor for appropriate changes to their plans without explicit instructions on how to do so (McEwen et al., 2015). It is very beneficial to use a visual representation of the goal-plan-do-check method to remind individuals of the necessary steps to accomplish a task (McEwen et al., 2015).

The CO-OP approach also emphasizes the use of guided discovery by having the therapist offer questions, cues, and coaching to allow the patients to problem solve on their own, rather than being told the solutions (Dawson et al., 2009). This CO-OP approach with guided discovery requires a shift in the occupational therapist's role, to become more passive and serve as an external support while the patient takes a more active role (Skidmore, Swafford, Juengst, & Terhorst, 2018). Guided discovery is particularly relevant during the plan phase, when the occupational therapist prompts the patient to distinguish their own small steps for accomplishing the goal, rather than being told (McEwen et al., 2015). The therapist uses coaching to direct the patients to break the occupation down into smaller, more manageable steps (Dawson et al., 2013). The patient then checks to see if the plan worked and if it was not successful, the therapist uses guided discovery to collaborate with the patient on a new plan (Polatajko et al., 2012). By allowing patients to problem solve and identify their own solutions, it is highly associated with a transfer of skills in the future (McEwen et al., 2015). Therefore, patients will have an increased expertise in the ability to self-manage their conditions after discharge. Additionally, patients are more confident in their skills when they know that they are responsible for the success that they achieved, rather than being told what to do (Dawson et al., 2009).

Strategy training, associated with the CO-OP approach, is used to promote self-monitoring through problem solving techniques (Dawson et al., 2009). Individuals with executive dysfunction deficits due to traumatic brain injury are likely to experience difficulty

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with psychosocial distress and a general reduction in quality of life (Dawson et al., 2009). Lack of insight into one's deficits (anosognosia) is associated with poor judgement and lack of safety awareness, therefore requiring supervision (Skidmore et al., 2015). The CO-OP, used in an inpatient rehabilitation setting, reinforces skill acquisition, strategy training, generalization of skills, and transfer of skills to improve functional performance and independence upon discharge (Scammell et al., 2016). Strategy training involves the ability to detect, evaluate, and make appropriate changes to one's behavior, which is a global technique that can be applied to all occupations (Skidmore et al., 2015).

The CO-OP approach has demonstrated significant benefits in functional performance since it is designed to teach a global method for problem solving that can be applied to all occupational activities, improving performance after discharge (Wolf et al., 2016). The CO-OP approach emphasizes the importance of allowing individuals to prioritize their own therapeutic goals to increase motivation for rehabilitation (Scammell et al., 2016). Patients with traumatic brain injuries experienced a positive impact when they took an active role in setting therapy goals that they found meaningful to their occupational roles and routines through using the CO-OP approach (Dawson et al., 2009). One study demonstrated a positive correlation with using strategy training to restore functional independence, while poor awareness of deficits and problem-solving strategies related to a decreased ability to restore independence (Skidmore et al., 2018). Another research study demonstrates the benefits of incorporating the CO-OP approach during the acute phase of rehabilitation since experience-dependent synapses, leading to patterns of behavior, have a large impact on long-term outcomes (Skidmore et al., 2018). Additionally, a neuroimaging study has suggested that cognitive strategy training along with motor output has demonstrated increased likelihood of transferring skills (McEwen et al., 2015).

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The CO-OP approach is associated with improvements in preparation for discharge, reduced functional impairments, and improved health (Wolf et al., 2016). By self-monitoring and working through the problems, it allows patients to gain a universal problem-solving skill that can be generalized and transferred (Skidmore et al., 2018). The patient can use the goal-plan-do-check method during both trained and untrained occupations while increasing their independence (Wolf et al., 2016). The goal-plan-do-check method guides patients to define what they hope to achieve, plan how they will accomplish it, complete their plan, and check to see if they had a successful outcome (Polatajko et al., 2012). Not only does the CO-OP approach incorporate a problem-solving strategy, but it provides a template for how to incorporate caregivers into the patient's occupational routines through cueing to further sustain discharge competence and safety (Dawson et al., 2009).

By applying individualized goal-setting and strategy training to each targeted patient education topic in the *Take Charge for Therapy Discharge* program, patients were expected to demonstrate improved functional independence and enhanced skills in self-management. It is important to address these skills early on in the therapeutic process, so individuals can apply these skills during each therapy session and gain the necessary repetitions of this method that could promote success post-discharge.

### **Summary**

As indicated on the HealthSouth Largo Press Ganey scores, sub-acute rehabilitation patients have expressed slight dissatisfaction with both the occupational therapy department and the discharge planning process. Patient education is a vital aspect of the discharge planning process, which likely has a correlation with reduced hospitalization rates. Gaps in the literature exists regarding the effectiveness of the CO-OP approach and whether greater involvement in the goal setting process improves a patient's critical knowledge and skills for post-discharge.



## TAKE CHARGE FOR THERAPY DISCHARGE

*Take Charge for Therapy Discharge* was designed to improve the client-centered and discharge-focused plan of care. By implementing a new evidence-based protocol to actively engage and educate patients throughout the entire therapy process and creating a comprehensive discharge planning protocol, the instances of re-hospitalizations may be reduced, therefore improving patient outcomes in functional independence, self-management, and satisfaction, as well as saving HealthSouth, insurance payers and patients/families a large unwarranted financial burden.

### CHAPTER THREE: Capstone Project Methods

#### Project and Setting

The capstone project, titled *Take Charge for Therapy Discharge*, consisted of a newly developed two-session patient education program for inpatients at HealthSouth Rehabilitation Hospital of Largo, Florida, and continued via therapy staff after the doctoral candidate left. This program occurred upon admission and prior to discharge to better focus on key elements of active participation in the therapy rehabilitation process. Specific patient education protocols were created to reinforce the patient's early engagement in setting meaningful goals and to teach the process of goal setting and strategy training to facilitate carryover of these skills upon discharge. Additionally, the therapy staff was trained to ensure sustainability of this program. Program outcomes were shared with therapy staff and hospital administration.

A weekly schedule was established to best capture patients' rolling admissions and to establish a predictable therapy process routine (Appendix F). Three *Goals Groups* were held each week: Mondays, Tuesdays, and Thursdays. Monday sessions included appropriate patients that were admitted on the previous Wednesday or Thursday. Tuesday sessions included patients that were admitted on the previous Friday, Saturday, or Sunday. Thursday sessions included patients that were admitted on the previous Monday or Tuesday. *Therapy Discharge Group*

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sessions were held twice per week on Wednesdays and Fridays. The Wednesday sessions included patients that were anticipated to be discharged the following Thursday through Sunday. The Friday sessions included patients that were anticipated to be discharged the following Monday through Wednesday.

### **Sample**

The therapy department at HealthSouth Rehabilitation Hospital of Largo had five diagnostic teams: medical/surgical, stroke, cardiopulmonary, orthopedic, and neurological. The census changed daily but there were generally 7-14 patients on each team (D. Engle, personal communication, April 20, 2018). Convenience and purposive sampling were used to gather participants (Taylor, 2017). A graded implementation technique was used for this program. The program began with three patients the first week of the program and the census within the sessions gradually increased in each group session, as appropriate. The gradual increase in participants allowed for minor adjustments to be made to the process, including time management to ensure that the session did not run longer than thirty minutes each time. Appropriate minor changes to the content, presentation, and flow of the group sessions were initiated to maximize success in each session, based on feedback from patients and therapy staff members who supervised the group sessions. By the end of the third week of program implementation, the group began including up to six appropriate patients per session.

In order to ensure the appropriateness of patients to participate in this program, the doctoral candidate, Kathryn Westley, completed extensive chart reviews each morning. She reviewed each patient's previous occupational therapy documentation, such as evaluation notes and/or daily progress notes to analyze their cognitive FIM scores being assessed each day, such as comprehension, expression, social interaction, problem solving, and memory (Mackintosh, 2009). This screening process was completed for all patients receiving cognitive FIM scores of

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minimal assistance or better on all of the six categories. Patients were excluded from the *Goals Group* if they demonstrated significant cognitive impairments of moderate assistance or worse, hindering their ability to comprehend and apply the information and techniques provided during patient education. The doctoral candidate then consulted with each patient's occupational therapist to obtain their clinical judgement as to whether the patient could appropriately participate in the *Goals Group*. When appropriate, the *Goals Group* was added to the patient's schedule for the following day. When scheduling conflicts arose, the doctoral candidate collaborated with the appropriate therapist to determine a resolution.

A similar screening process was used to gather participants for the *Therapy Discharge Group*. Patients' charts were reviewed to identify the most recent cognitive FIM scores recoded by the occupational therapist. Patients were excluded if they scored moderate assistance or worse for any of the cognitive FIM sections. If patients scored minimal cognitive assistance or better, the doctoral candidate reviewed the most recent weekly team conference documentation to gather the expected discharge date and disposition. Inclusion criteria for the *Therapy Discharge Group* were those patients who were being discharged to the community, such as to an independent living facility or home with outpatient services or home health services. Patients were excluded if they were being discharged to a skilled nursing facility.

In order to gather the most appropriate participants, patients were selected from the various five therapy teams. HealthSouth did not allow more than 6 individuals to attend a group therapy session at once, which was beneficial in this instance since it allowed for smaller, more intimate education sessions (D. Engle, personal communication, April 20, 2018). The *Take Charge for Therapy Discharge* program had a total of 145 participants across 13 weeks. See Figure 1 for a graphic display of the breakdown of the program participants. Of those 145 individuals, 115 patients participated in the *Goals Group*. Only 45 of those patients who attended

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the *Goals Group* were able to also participate in the *Therapy Discharge Group* due to a variety of reasons such as scheduling conflicts, unanticipated changes in the discharge plan, etc.

However, in order to maximize the benefits of the program, the doctoral candidate gathered additional appropriate patients who met the inclusion criteria so that six patients attended each discharge session. Therefore, 70 patients attended only the *Goals Group*, 30 patients attended only the *Therapy Discharge Group*, and 45 patients attended both groups.

### **Primary Goals and Objectives of the Program**

Goal 1: In 5 months, at least one occupational therapist from each team, who demonstrates competency in the topic areas of the project, will take on a leadership role to sustain this project.

- Objective 1: In 7 weeks, evidence-based protocols for orientation and discharge planning will be established, with a focus on strategy training, to increase program sustainability.
- Objective 2: In 8 weeks, 80% of occupational therapy staff members will attend a staff educational session regarding the incorporation of identified patient goals, as well as carryover of the strategy training techniques into therapy sessions

Goal 2: In 4 months, HealthSouth Rehabilitation Hospital of Largo will experience a 10% improvement in Press Ganey satisfaction scores for the therapy department sections of the survey.

- Objective 1: Within 1 week of admission, at least 80% of patients meeting the inclusion criteria on the specified therapy teams, will attend the orientation session to increase their understanding and expectations of the therapy process.
- Objective 2: Within 1 week of admission, each patient in the program will identify at least 3 prioritized occupational therapy goals, with the assistance of a therapist, to be addressed throughout their inpatient stay.

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Goal 3: In 4 months, HealthSouth Rehabilitation Hospital of Largo will experience a 10% improvement in Press Ganey satisfaction scores for the discharge planning section of the survey.

- Objective 1: In 12 weeks, patient education sessions will have been conducted at least four times a week, with 80% attendance of appropriate patients, to increase knowledge of strategy training techniques for improving problem-solving skills upon discharge.
- Objective 2: By the final week of their inpatient stay, 80% of patients who participated in the *Goals Group* will correctly demonstrate and apply the goal, plan, do, and check method associated with the CO-OP approach to facilitate carryover after discharge.

### **Program Structure**

The *Take Charge for Therapy Discharge* program consisted of two patient education sessions, with a focus on specific therapeutic processes in each session, one session occurring upon admission and the other occurring prior to discharge.

Upon admission, participants attended a *Goals Group* in which patients were educated about the therapy process and actively collaborated with therapists to identify personally meaningful therapy goals. This session covered the difference between occupational therapy, physical therapy, and speech therapy; and explained the requirement to complete three hours of therapy a day, five days per week (Centers for Medicare & Medicaid Services, 2012). The difference between the goals of each therapy department was discussed so patients had a better understanding of the therapy focus for each rehabilitation discipline. The information was delivered through a PowerPoint presentation projected on the wall in the classroom.

Additionally, patients were given a two-page handout to summarize the information presented in the session. The first page included a summary of what to expect during the inpatient stay (Appendix G). The second page included a summary of the main priorities for occupational, speech, and physical therapies (Appendix H). At the bottom of the handout it allowed patients to

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write their therapists' names as a reminder. Additionally, on each handout, the therapy departments were circled using a colored marker that corresponded with the color of the polo shirt that the therapists of that department wore. For example, occupational therapy staff wore blue polos and OT information was circled in blue. This handout color coding according to therapy dress code served as an indicator for the patient. Handouts were added to the three-ring Wellness Information and Tools for Health (WITH) notebook each patient was given upon admission, thereby incorporating the *Take Charge for Therapy Discharge* program with existing facility educational processes.

The Patient Specific Functional Scale (PSFS) (Appendix I) was used in the initial session with each patient to facilitate self-identification of additional therapy goals to address prior to discharge (Sterling & Brentnall, 2007). Patients were instructed to write newly identified therapy goals on HealthSouth's therapy roadmap worksheet in their WITH notebook (Appendix J). This worksheet was a simple tool for tracking progress and it also supported open communication about therapy goals with therapists throughout the therapy process. The OTD candidate recorded all patient responses on patient goal tracking sheets for future data analysis (Appendix K).

Prior to discharge, patients participated in a *Therapy Discharge Group* to learn what to expect on the day of discharge, including having no scheduled therapy and being prepared to be discharged by roughly one o'clock in the afternoon (D. Engle, personal communication, April 20, 2018). Additionally, this session included brief refreshers on high-impact discharge topics addressed in previous therapy sessions such as energy conservation, durable medical equipment, adaptive equipment, fall prevention, and accessing community resources. Patients were reminded of the CO-OP approach and were given examples of how it could be applied to these topics. Each session allowed time for questions and discussion. During the *Therapy Discharge Group*, patients were given a packet, which was added to their WITH notebook to reinforce their

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learning. The packet included a fall prevention worksheet (Appendix L) with reminders of common ways to prevent falls upon discharge, such as locking wheelchair brakes before standing up. A worksheet focusing on energy conservation (Appendix M) explaining the “4 P’s” of energy conservation and the pursed lip breathing technique was also included in the packet. Additional worksheets (Appendix N and Appendix O) listed several energy conservation tips that the patient should utilize while completing various daily occupations, such as dressing, bathing, meal preparation, and cleaning.

### **Theoretical Framework**

The inpatient population at HealthSouth Rehabilitation Hospital of Largo lacked active engagement in setting therapeutic goals, and therefore had a decreased understanding of the therapy process. This issue at HealthSouth Largo was described through the use of the Model of Human Occupation (MOHO). This model was developed in the 1980s by Gary Kielhofner and has since become a very common guiding theory in the occupational therapy profession (Cole & Tufano, 2008). This occupational therapy-based frame of reference is based on the components of the ‘human system’ (the person), which include volition, habituation, performance, and the environment (Dunbar, 2015). MOHO examines an individual’s mind, body, and environment to explain how and why an individual performs an occupational activity (Melton, Forsyth, & Freeth, 2010).

The human system components of MOHO were used to guide the understanding of the issue at HealthSouth Largo. According to MOHO's principles, by allowing individuals to participate in creating their therapy goals, it addressed their volition and motivation, since they identified aspects which they were genuinely interested in improving (Graff et al., 2006). Additionally, habituation played a large role in this process through allowing patients to define their important roles and routines for establishing and accomplishing their therapy goals

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(Dunbar, 2015). As a patient's sense of competence in their skills improved through active engagement in therapy, they developed a sense of relative mastery in terms of personal causation.

MOHO's focus on the environment as a main component in an individual's occupational performance also applied to the population at HealthSouth Largo. The inpatient population had a large social component as part of the environment. Particularly, the *Goals Group* and *Therapy Discharge Group* occurred in a group setting format with a range of up to five other patients. This natural social environment was supportive of their recovery according to MOHO, since it allowed patients to consider the topics from different perspectives, based on group dialogue (Cole & Tufano, 2008). For example, patients were prompted to share their therapy goals aloud with the group, which had a positive impact since it encouraged other patients to consider some goals they previously had not thought of.

Not only was MOHO applied to the patients at HealthSouth Largo, but it was also used to guide the understanding of the therapy staff at the site (Vessby & Kiellberg, 2010). Through the addition of new patient education classes, it required a shift in the habituation of the therapy staff. Each month, two therapists were selected to take on the leadership role of the *Goals Group* and *Therapy Discharge Group*. This new role was associated with new responsibilities to further engage patients in the therapy process while leading the group sessions as well as in subsequent therapy sessions. By making the changes to the patient education process, the therapists were developing newly improved habits, which further define their roles as a therapist/educator.

### **Program Implementation**

*Take Charge for Therapy Discharge* was implemented by the occupational therapy doctoral candidate, Kathryn Westley. The on-site OT supervisor, Danielle Engle, was present during all patient education sessions to provide feedback and assistance as necessary and an



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additional therapist attended each session to observe and provide feedback. Therapy notes for each patient's performance during sessions were documented by the OTD candidate and co-signed by the OT supervisor. The OTD candidate created a new group therapy note in the interdisciplinary online documentation system, which individualized the new entry with the patient's newly developed therapy goals. These new goals were also documented in a feature of HealthSouth's online documentation system that allowed for the goals to be shown on the dashboard of each patient's file so that all staff could view the goals upon opening the patient's chart. Since the sessions were being supervised by a therapist and have continued in this manner as therapists have assumed leadership for the *Take Charge for Therapy Discharge* group sessions after the doctoral candidate completed the DEC experience, sustainability was enhanced as these groups count towards the mandatory three hours of therapy required for each patient (D. Engle, personal communication, April 20, 2018). The therapy minutes were documented as either individual, concurrent, or group, based on how many patients attended the group session that day.

A visual representation of the timeline for implementation during this 16-week DEC project was created to provide a general overview of the process (Appendix P). The first three weeks of the DEC consisted of the doctoral candidate creating the evidence-based patient education protocols and materials for the orientation to therapy with the CO-OP approach, as well as the discharge planning section with all of the smaller topics which were discussed in that session. By creating packets and handouts, sustainability was increased by having all of the information in this program clearly defined for future use. Additionally, during these initial weeks, the doctoral candidate observed the orientation and discharge classes that were hosted by the case management department. The doctoral candidate collaborated with a variety of

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professionals at the site including therapists, case managers, therapy technicians, and the director of rehabilitation to gather ideas and advice for program development.

Program implementation began during week 4 and continued through week 16. A pre-established weekly schedule ensured all staff had a clear understanding of which sessions were held on which days. *Goals Group* sessions were held every Monday, Tuesday, and Thursday during weeks 4-16. In this *Goals Group*, the doctoral candidate gathered consent to participate from each participant and patients filled out a short demographic survey. Outcome evaluation began during the initial *Goals Group* sessions by administering the PSFS to create therapy goals. The *Therapy Discharge Group* sessions were hosted every Wednesday and Friday during weeks 5-16. The PSFS was re-administered during these sessions to measure change in self-perceived goal attainment from the initial session. Additionally, patients took a short satisfaction survey during *Therapy Discharge Group* for process evaluation of the program.

The clearly defined schedule ensured participation in this program became a priority, while also allowing therapists to maintain an organized plan for treatment. The sessions were scheduled for thirty minutes in length, due to feasibility and therapist productivity requirements. In order to successfully complete this program, patients were encouraged to attend the *Goals Group* and the *Therapy Discharge Group*, so therapists used the pre-determined schedule to plan each patient's therapy schedule for the week.

Due to scheduling conflicts, the formal staff training session was not hosted until the 16<sup>th</sup> week of the DEC. However, beginning week 5 of the DEC, all full-time speech, occupational, and physical therapists attended and participated in at least one *Goals Group* and one *Therapy Discharge Group* throughout program implementation to become familiar with the content and process of these sessions.

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During the 16th week of the DEC, the doctoral candidate hosted a formal therapy staff training session, with at least 80% attendance of all occupational therapy staff, as identified in the program goals. At the beginning of this staff training session, the doctoral candidate facilitated a discussion of the therapy staff's knowledge of the CO-OP approach. Then, the doctoral candidate explained the evidence-based training approach while providing examples of application to patient goals. For example, for the topic of energy conservation, an example was provided in which the patient's goal was to complete their morning grooming routine at the sink without becoming fatigued. The patient would be guided to collaborate with their therapist to develop a plan to keep all necessary supplies organized on the sink's countertop, have a seat or wheelchair available for seated rest breaks, and remember to incorporate pursed lip breathing while completing the morning grooming tasks. The patient would then complete their grooming routine at the sink one morning and be encouraged to monitor their progress by counting the number of necessary seated rest breaks or number of instances of shortness of breath, etc. The therapy staff were encouraged to ask questions and discuss the CO-OP approach as a group. At the end of the session, the doctoral candidate facilitated a discussion about how this approach could be incorporated into the patients' daily routines. This session also served to review the goals of the capstone project, share topics presented in group therapy sessions, and explain how to carryover the techniques into everyday sessions with patients. In this staff training session, the doctoral candidate also presented preliminary program results.

To ensure sustainability of the program, the doctoral candidate combined all protocol and evaluation materials into a neatly organized binder and saved all materials electronically on a flash drive, given to the site supervisor upon completion of the capstone. In collaboration with the site supervisor who was also the Therapy Manager, it was decided that all full-time occupational, physical, and speech therapists had the expectation to take in a leadership role to

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further sustain this project. The doctoral candidate created a sign-up sheet with a monthly rotation schedule for the next year in which one therapist hosts all *Goals Group* sessions for a month, while another leads the *Therapy Discharge Group*.

### Capstone Project Evaluation Tools

A variety of evaluation tools were used to assess the *Take Charge for Therapy Discharge* Program (Appendix Q). The main focus of the outcome evaluation was to determine the effects of increasing patient participation in the therapy process and to assess the outcomes of using the CO-OP approach during occupational therapy sessions. A quasi-experimental design was used to evaluate the outcomes of this program. This non-experimental group comparison study design was both feasible and rigorous (Nelson, Kielhofner, & Taylor, 2017). *Take Charge for Therapy Discharge* consisted of a one-group pre-test/post-test design to measure each patient's performance and satisfaction with therapy goals from admission to discharge. Between *Goals Group* and *Therapy Discharge Group*, patients incorporated the techniques from the CO-OP approach into their regular therapy sessions for a new approach to problem solving during occupations.

The Patient Specific Functional Scale (PSFS) was used as the outcome evaluation for the *Take Charge for Therapy Discharge* program. During the *Goals Group*, the doctoral candidate administered the PSFS to assist patients in identifying meaningful therapy goals for discharge. This self-reported outcome measure was patient-specific and allowed patients to identify whether they experienced a change in their functional ability to complete a desired task (Hefford, Abbott, Arnold, & Baxter, 2012). During the initial assessment, the therapist read the scripted prompt from the assessment guidelines aloud, which asked the patients to identify any activities that they were having trouble completing in their everyday routine (Sterling & Brentnall, 2007). The therapist then prompted the patients to rate their ability to complete those activities on an eleven-

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point Likert scale, with 0 representing that the patient was not able to perform the activity anymore due to their decline in function, and 10 represented that the patient was fully able to complete the activity at the same level of participation as before the recent injury or health problem (Horn et al., 2012). The PSFS was then re-administered in the *Therapy Discharge Group*, when the therapist prompted the patients to assign a value to their ability to complete the activities that they identified in the *Goals Group* (Sterling & Brentnall, 2007). This assessment tool has been reported to be easy to use in clinical settings and allowed the therapist and patients to collaboratively establish goals (Horn et al., 2012). The PSFS only requires roughly five to ten minutes to administer and does not require any specialized training to administer (Sterling & Brentnall, 2007). This outcome measure demonstrated statistically significant results for reliability, validity, and responsiveness when used with a population having musculoskeletal deficits (Hefford et al., 2012). Although the PSFS has mainly been used with patients with musculoskeletal deficits, study results have demonstrated a strong potential in a physiotherapy clinic with a wide variety of conditions and suggested further research for more generalized populations (Horn et al., 2012). The PSFS tool allowed the therapist to analyze the patient's self-perceived progress towards their goals before and after incorporating the CO-OP approach during functional tasks.

Process evaluations focused on assessing how well the program ran according to plan and sought to identify the strengths, weaknesses, and areas for improvement so that adjustments could be incorporated, as needed, to promote success and sustainability of the program. The process of the *Take Charge for Therapy Discharge* program was analyzed through a formative evaluation, rather than a summative evaluation. The formative evaluation was focused on assessing the effectiveness of the delivery of the program, rather than the specific outcomes that were being measured (Braveman, Suarez-Balcazar, Kielhofner, & Taylor, 2017). For example,

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the program evaluation was focused on the patient satisfaction scores and the direction of the change in scores from initial evaluation to the re-evaluation score, rather than the actual self-identified performance score the patient assigned to each goal. Evaluation occurred through both quantitative and qualitative means, both of which were addressed in the patient satisfaction tool used to assess process design (Braveman et al., 2017). These types of evaluations were useful in measuring how well the program was addressing the needs of the population and the goals of the program (Braveman et al., 2017). It was important to evaluate how well the program's services were being delivered from the perspective of the patients so that changes could be made to promote relevant and meaningful improvements.

The process evaluation for *Take Charge for Therapy Discharge* was measured through patient satisfaction surveys (Appendix R). At the end of the *Therapy Discharge Group*, patients were given time to take the short survey, which was printed out and provided to them. It was beneficial to have patients fill out the survey in person to ensure that it was completed in a timely manner. Patients who completed both the *Goals Group* and *Therapy Discharge Group* were asked to rate 9 statements using a forced 4-point Likert scale ranging from strongly disagree to strongly agree. Additionally, there were three open-ended questions to elicit further feedback on the strengths and weaknesses of the program.

Since it was very important to gather all relevant data from each participant in the program, attendance and participation were crucial. The satisfaction surveys for process evaluation were completed during the *Therapy Discharge Group* to allow patients to complete the survey before they left the room so that the therapist could ensure every survey was accounted for. Additionally, some participants required special accommodations to complete the written survey, such as hand-over-hand assist or assist to read the survey aloud to accommodate for reading deficits.

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Another crucial aspect of the data collection was to ensure that patients were providing accurate and honest responses. Since the surveys were administered with the therapist in the room, some patients may have felt uncomfortable being honest and may have rated their satisfaction higher. Prior to handing out the patient satisfaction surveys, the leader explained that the survey was for learning purposes so that the program itself could be evaluated and improved. It was re-iterated that the surveys would remain anonymous and that critical feedback was greatly appreciated so that the process could be improved in the future.

### **Capstone Project Evaluation Processes**

The data for this program were collected through various means. The demographic surveys, satisfaction surveys, and PSFS values were all collected in person during the patient education sessions. This ensured that all relevant data was collected and accounted for. The doctoral candidate gathered additional demographic data for each participant from their online documentation, such as their medical record number and their primary diagnosis.

The Press Ganey surveys were mailed to each patient upon discharge from HealthSouth Rehabilitation Hospital of Largo (Press Ganey, 2018). Due to the slow mailing process and poor response rate, any surveys that were returned were received roughly two months after the patient was discharged from the facility. Each month, the generalized reports of the Press Ganey surveys were emailed to all HealthSouth therapists. Each Press Ganey survey was labeled with the patient's medical record number, therefore the doctoral candidate was able to compare the identification number to the group session attendance records to determine which surveys were returned from patients who participated in either the *Goals Group*, *Therapy Discharge Group*, or both groups.

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### Data Analysis

During the *Goals Group* sessions, patients were asked to complete a short 8-question survey to collect relevant demographic information (Appendix S). A participant code was assigned to each individual and written on this survey in order to match these demographic data to the results during data analysis for each individual. The demographic survey contained data such as gender, age, diagnosis, socioeconomic data, marital status, living situation, and employment status.

The demographic data was used during data analysis to determine if these person factors impacted a patient's PSFS scores. Additionally, during the *Goals Group* sessions, patients participated in the PSFS assessment to identify therapy goals. A paired T-test was used at the end of the implementation phase of the program to calculate the difference in functional performance scores of identified occupational goals (Taylor, 2017). For those who participated in both the *Goals Group* and *Therapy Discharge Group*, the test analyzed the statistical difference of scores in the initial session prior to receiving therapy, compared to the scores from the final session after receiving skilled services with the CO-OP approach.

In the *Therapy Discharge Group*, patients completed a patient satisfaction survey. The scores from the program survey were analyzed upon discharge of each patient to ensure a constant analysis of the effectiveness of the program. This data analysis consisted of calculating the percentage of patients that responded at particular levels. This method allowed for changes to be made to the process as needed, based on feedback. For example, one patient commented that it may have been helpful to bring in examples of the adaptive equipment, rather than just showing pictures (Participant 12, personal communication, June 14, 2018). The sessions subsequent to receiving this suggestion all included this suggestion along with brief demonstrations of how to use each tool.



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Additionally, responses from the Press Ganey reports were analyzed with each monthly aggregated report. These results were compared to the baseline results prior to the start of the DEC to establish any differences. A t-test was used to compare two unrelated groups (Taylor, 2017). For program sustainability, the results of this program were continuously analyzed for quality improvement. This program was designed with a goal of reaching a 10% increase in Press Ganey satisfaction scores for both the therapy department as well as discharge planning. Both of these scores combined, as well as the comment sections of each survey, were taken into consideration when studying the outcomes of the *Take Charge for Therapy Discharge* program.

The majority of program data was quantitative in nature; however, some qualitative data emerged through the comments during data collection. At the bottom of patient satisfaction surveys, there were optional open-ended questions, which yielded qualitative data. These data were analyzed through coding. Open coding consisted of developing main categories and served as the first glance for developing themes in the data (Fram, 2013). Axial coding acted as the second look which combined items with common characteristics into one theme (Fram, 2013). Selective coding was the final step of the coding process and involved the creation of subcategories for each overarching theme (Fram, 2013). Through reviewing the qualitative responses more than one time, it allowed for common themes to emerge, which provided excellent evidence into the strengths, weaknesses, and areas for improvement of the program.

At the end of each session, the doctoral candidate entered all of the data into a password protected Microsoft Excel document. The table (Appendix T) contained data such as the patient's identification code, diagnostic category, gender, age, responses to the demographic survey, and goals and values from the PSFS. Each of the data in this Excel document was coded to prepare for data analysis using the Statistical Package for Social Sciences (SPSS) program. By updating

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the document each day, it allowed for organization of data and allowed for increased ease for future data analysis.

After running descriptive statistics on the 45 patients who completed both group sessions, it was important to check for normality prior to running statistical tests. The Shapiro-Wilk test was used to analyze the normality using a histogram of the descriptive statistics (Ghasemi & Zahediasl, 2012). The Shapiro-Wilk test resulted in a value of 0.128, so the doctoral candidate rejected the alternative hypothesis and concluded that the data came from a normal distribution.

Since the data met the requirements for normality, a paired samples t-test was used, resulting in a significance of 0.00, which was less than 0.05. Therefore, there was a statistically significant change in the perceived satisfaction scores using the PSFS from pre to post therapeutic interventions for those 45 patients that successfully completed the *Take Charge for Therapy Discharge* program.

### **Summary**

*Take Charge for Therapy Discharge* not only addressed the need for increased patient education and reinforcement of therapy techniques, but it also provided a unique addition of the CO-OP approach to teach patients problem-solving strategies to better prepare for effective discharge from this inpatient facility. *Take Charge for Discharge* had indications that it served as a valuable resource for HealthSouth Rehabilitation Hospital of Largo. Patients demonstrated positive satisfaction with the patient education classes both on their satisfaction surveys and through communications with other staff members at the inpatient rehabilitation facility. The addition of this evidence-based protocol was intended to increase a patient's competence in the ability to self-manage upon discharge to the community through use of the CO-OP approach.

## CHAPTER FOUR: Results

### Broad Overview of Findings

A comprehensive data analysis was completed for the *Take Charge for Therapy Discharge* program at HealthSouth Largo. The tests demonstrated that the program data was relatively normal, therefore allowing for further statistical analysis. The analysis was completed in an order from simple to complex tests, beginning with descriptive statistics and leading up to mixed ANOVA.

Functional mobility was the most commonly self-identified goal across all diagnostic groups in the *Take Charge for Therapy Discharge* program. There was a statistically significant difference between the pre and post-intervention self-perceived goal attainment scores for all participants. In regard to the impact of various demographic factors, it was found that a patient's diagnosis was the only factor that demonstrated a marginal impact on their PSFS scores. Specifically, patients who recently experienced a stroke exhibited the most improvements in their PSFS from *Goals Group* to *Therapy Discharge Group*. Results from the patient satisfaction survey demonstrated that overall, patients were pleased with the program and provided positive feedback.

### Description of Participants

Throughout weeks 4-16 of program implementation of the *Take Charge for Therapy Discharge* program, 36 *Goals Group* and 21 *Therapy Discharge Group* sessions occurred, with each session lasting 30 minutes in length. No more than 6 patients were scheduled to attend each group session due to supervision coverage by a therapist (Centers for Medicare & Medicaid Services, 2012). In order to be considered for inclusion to the *Take Charge for Therapy Discharge* program, each patient had to have a score of a least minimal assistance or better on

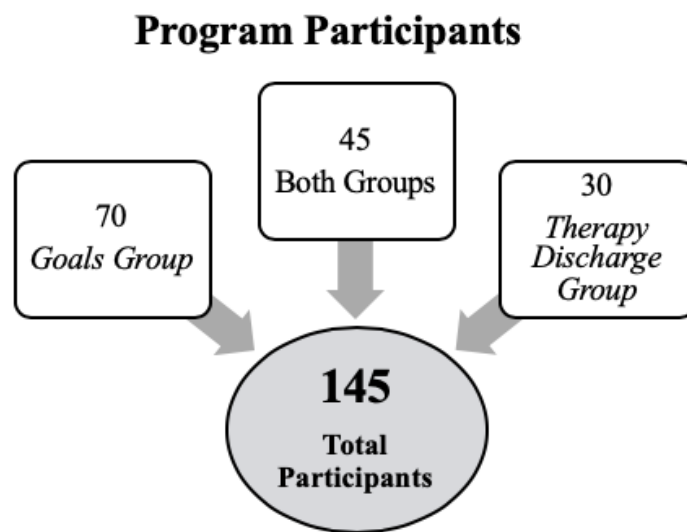
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their most recent cognitive FIM assessment, which is scored daily by all therapy disciplines (Mackintosh, 2009).

The *Take Charge for Therapy Discharge* program had a total of 145 participants. See Figure 1 for a graphic representation of the breakdown of the number of program participants. 115 total patients participated in the *Goals Group* and 75 total patients participated in the *Therapy Discharge Group*. However, of those, only 45 participants attended both group sessions to successfully complete the program. Therefore, the *Take Charge for Therapy Discharge* program had a drop-out of 70 patients that began the program with the *Goals Group*, but never attended the *Therapy Discharge Group*. This drop-out rate was due to a variety of reasons such as scheduling conflicts, unanticipated early discharges, poor medication side effects, or patient refusal to participate.

**Figure 1**

*Count of Program Participants*



Descriptive statistics data analysis was completed on the 45 patients who successfully completed the program by attending both the *Goals Group* and *Therapy Discharge Group*. The group ranged in age from 35-95 years old with a mean age of 72.0 and a standard deviation of

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13.6. Of those 45 individuals, most patients were female (64.0%). Most patients were married (40.0%), living with their spouse (44.4%), and retired (75.6%) prior to their most recent hospitalization. The primary diagnostic categories for the 45 participants were as follows: 14 with cardiopulmonary conditions, 10 patients with neurological and 10 others with orthopedic impairments, 8 with general conditions, and 3 patients who had experienced a stroke. Those patients with general conditions included impairments such as spinal cord injury, major multiple trauma, or generalized weakness. See Table 1 for a summary of individual level characteristics describing the sample population.

**Table 1**

*Descriptive Statistics of Program Participants*

<b>Participant Demographics</b>	<b>Total Sample (n = 45)</b>
<b>Age, mean (SD)</b>	72.04 (13.63)
<b>Gender, n (%)</b>	
Female	29 (64.4)
Male	16 (35.6)
Other	0 (0.0)
<b>Marital Status, n (%)</b>	
Married	18 (40.0)
Single, Never Married	14 (31.1)
Widowed	10 (22.2)
Divorced	2 (4.4)
Significant Other	1 (2.2)
<b>Living arrangement prior to hospitalization, n (%)</b>	
With my Spouse	20 (44.4)
Alone	12 (26.7)
With my Children	7 (15.6)
Other	6 (13.3)
<b>Employment status prior to hospitalization, n (%)</b>	
Retired	34 (75.6)
On Disability	7 (15.6)
Working Full-Time	3 (6.7)
Unemployed	1 (2.2)
Working Part-Time	0 (0.0)
<b>Primary Diagnostic Category, n (%)</b>	
Cardiopulmonary	14 (31.1)
Neurological	10 (22.2)
Orthopedic	10 (22.2)
General	8 (17.8)
Stroke	3 (6.7)

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### Specific Descriptions of Findings

Further data analysis was completed to determine if there was a connection between a patient’s diagnostic category and the types of goals they identified as being personally meaningful. See Table 2 for the frequency of therapy goals by diagnostic category. Patients with cardiopulmonary-related illnesses identified functional mobility goals (21.9%), stamina goals (13.5%), and bathing goals (11.5%). Patients with neurological diagnoses selected goals of functional mobility (20.3%), home management (13.0%), and bathing, dressing, and transfers (10.1%). Patients with orthopedic diagnoses prioritized functional mobility (22.2%) and bathing, dressing, and transfers (12.2%). Patients in the general diagnostic category selected goals of functional mobility (19%) and dressing and balance (14.3%). For patients post-stroke, the prioritized goals included functional mobility (25.9%), communication (18.5%), and bathing and transfers (11.1%).

**Table 2**

*Frequency of Therapy Goals by Diagnostic Category*

	Neurological, n (%)	Orthopedic, n (%)	Stroke, n (%)	Cardiopulmonary, n (%)	General, n (%)
<b>Functional Mobility</b>	14 (20.3)	20 (22.2)	7 (25.9)	21 (21.9)	12 (19.0)
<b>Bathing</b>	7 (10.1)	11 (12.2)	3 (11.1)	11 (11.5)	7 (11.1)
<b>Transfers</b>	7 (10.1)	11 (12.2)	3 (11.1)	8 (8.3)	7 (11.1)
<b>Dressing</b>	7 (10.1)	11 (12.2)	2 (7.4)	10 (10.4)	9 (14.3)
<b>Stamina</b>	5 (7.2)	4 (4.4)	0 (0.0)	13 (13.5)	7 (11.1)
<b>Balance</b>	6 (8.7)	8 (8.9)	1 (3.7)	6 (6.3)	9 (14.3)
<b>Home Management</b>	9 (13.0)	8 (8.9)	0 (0.0)	7 (7.3)	1 (1.6)
<b>Communication</b>	2 (2.9)	0 (0.0)	5 (18.5)	1 (1.0)	2 (3.2)
<b>Toileting</b>	4 (5.8)	6 (6.7)	0 (0.0)	6 (6.3)	5 (7.9)
<b>Cognition</b>	6 (8.7)	2 (2.2)	1 (3.7)	4 (4.2)	0 (0.0)
<b>Coordination</b>	2 (2.9)	1 (1.1)	2 (7.4)	3 (3.1)	1 (1.6)
<b>Medication Management</b>	0 (0.0)	4 (4.4)	0 (0.0)	2 (2.1)	2 (3.2)
<b>Community Mobility</b>	0 (0.0)	4 (4.4)	0 (0.0)	1 (1.0)	1 (1.6)

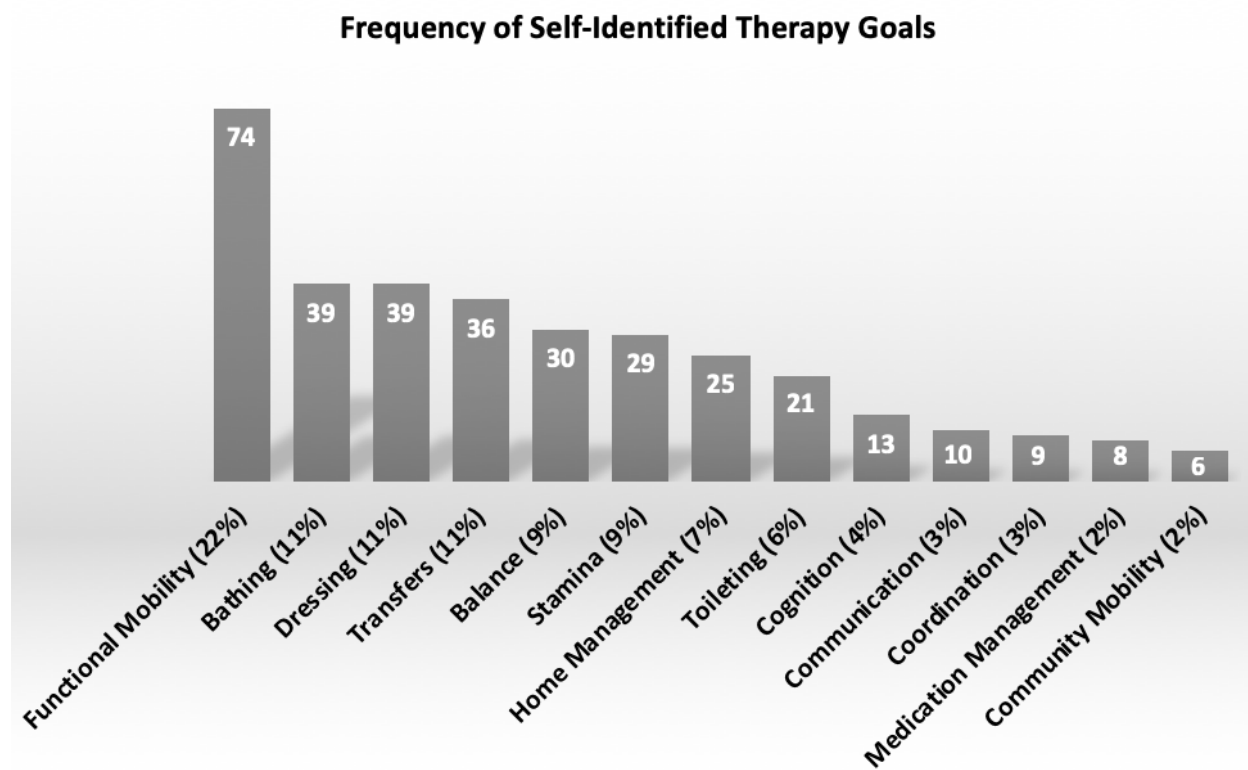
These results were further analyzed to determine the frequency of each of the self-identified goal categories. During the *Goals Group*, the 45 patients across all diagnostic groups set a total of 339 goals. See Figure 2 for a visual representation of the frequency of each category

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for therapy goals. Functional mobility was the most frequently identified and comprised 22% of all patient-selected therapy goals in the program. Bathing, dressing, and transfers were the next most common therapy goals, each being 11% of the total goals that patients identified through the PSFS.

**Figure 2**

*Frequency of Self-Identified Therapy Goals*



Prior to running statistical tests, the data was checked for normality. A simple histogram was created using the mean difference between pre and post-intervention scores from the PSFS assessment. This histogram gave the indication of a normally distributed bell curve.

To further assess the data for normality, a Shapiro-Wilk test was used. This test was an appropriate fit because of the 45-patient sample size. The Shapiro-Wilk test is not sensitive enough to detect normality in groups with less than 25 participants and it is too sensitive to

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determine normality for sample sizes larger than 50 (Marshall & Boggis, 2016). Since this statistical test resulted in a p-value of 0.1, the alternative hypothesis was rejected. Therefore, it was concluded that the data came from a normal distribution, since the p-value was greater than 0.05. Since the data was recognized as being normally distributed, it allowed further statistical analysis to be completed.

A paired samples t-test was then completed since the *Take Charge for Therapy Discharge* program involved data that was matched from pre to post-intervention using the PSFS. See Table 3 for the paired samples t-test of the differences in PSFS scores. This statistical test analyzed the paired difference between data points and whether they equaled a value of 0. Although the data was ordinal by nature, since the dataset had at least 7 variables and was approximately normally distributed, it was analyzed with parametric tests (Marshall & Boggis, 2016). The 45 patients who participated in both groups for the *Take Charge for Therapy Discharge* program at HealthSouth Largo rated their perceived goal attainment higher after skilled interventions ( $M = 7.1$ ,  $SD = 1.5$ ) than their initial scores ( $M = 2.7$ ,  $SD = 1.5$ ),  $t(44) = -15.9$ ,  $p = 0.0$ .

**Table 3**

*Paired Samples T-Test of the Differences in PSFS Scores*

Paired Differences								
				95% Confidence Interval of the Difference				
	Mean	SD	SD Error Mean	Lower	Upper	t	df	Sig. (2- Tailed)
<b>Changes in Average Pre-Post PSFS Scores</b>	-4.4	1.8	0.3	-4.9	-3.8	-15.9	44	0.0



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A mixed analysis of variance (ANOVA) test was used to determine which characteristics of the patients were most related to a significant change in their performance. The ANOVA was used to compare three or more mean variables to determine if the differences of means were greater than what would occur by chance (Portney & Watkins, 2009). See Table 4 for the results of the mixed ANOVA test of within-subject effects. To better organize the data for statistical analysis, the ages were divided into three ranges: young adult (25-44 years), middle adult (45-64), and older adult (65+) (Klein & Schoenborn, 2001). After analyzing the interaction effects of diagnosis, employment status, age range, gender, living arrangement, and marital status on a patient's perceived satisfaction scores using the PSFS, a patient's medical diagnosis was the only factor that was found to be marginally significant (0.07). Patients who experienced a stroke had the most improvements in their PSFS scores from pre to post-intervention. See Figure 3 for a line graph demonstrating the results of diagnostic category as a statistically significant within-subject factor.

**Table 4**

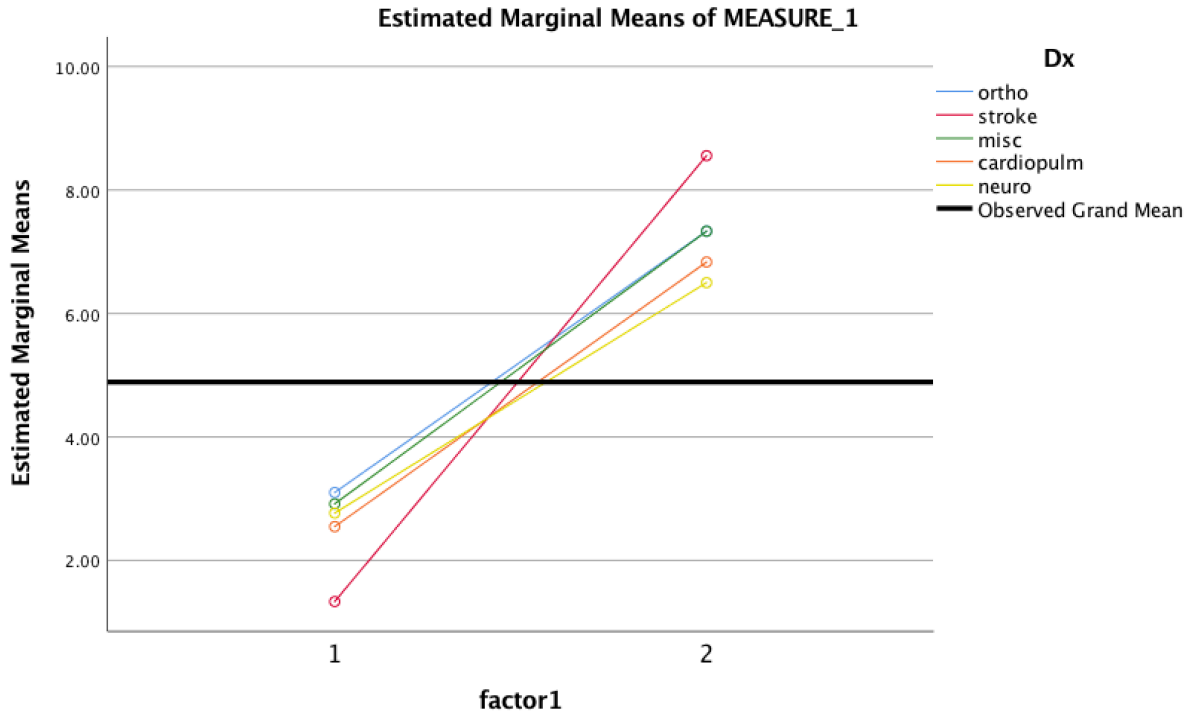
*Mixed ANOVA Test of Within-Subjects Effects*

	Sum of squares	df	Mean square	F	Sig.
<b>Diagnosis</b>	14.381	4	3.595	2.398	0.066
<b>Employment Status</b>	5.183	3	1.728	1.024	0.392
<b>Age Range</b>	1.718	2	0.859	0.497	0.612
<b>Gender</b>	0.281	1	0.281	0.163	0.688
<b>Living Arrangement</b>	1.933	3	0.644	0.365	0.779
<b>Marital Status</b>	2.694	4	0.673	0.376	0.824

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**Figure 3**

*Mixed ANOVA Test of the Effects of Diagnosis as a Person Factor*



The *Take Charge for Therapy Discharge* patient satisfaction surveys were analyzed. See Table 5 for descriptive statistics of the patient satisfaction surveys for the *Take Charge for Therapy Discharge* program. The descriptive statistics of the continuous data were run to include the mean and standard deviation for each of the items on the satisfaction survey. The *Goals Group* section contained 4 items with an overall mean satisfaction rating of 3.6 out of 4.0. The *Therapy Discharge Group* section had 2 items and a combined mean satisfaction of 3.5 out of 4.0. There were 6 items related to the overall *Take Charge for Therapy Discharge*, which had a mean satisfaction rating of 3.8 out of 4.0.

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**Table 5**

*Descriptive Statistics of the Patient Satisfaction Surveys*

Survey Item Description	Total Sample (n = 45)
<b>Goals Group, mean (SD)</b>	
This session explained what to expect for therapy sessions	3.6 (0.5)
The information explained in this session was similar to what I experienced in therapy	3.6 (0.5)
I helped to create my therapy goals	3.6 (0.5)
My therapists worked with me on the goals I created during this session	3.4 (0.7)
<b>Therapy Discharge Group, mean (SD)</b>	
This session shared important information about my discharge	3.6 (0.6)
I felt ready for my discharge from HealthSouth	3.4 (0.7)
<b>Overall Take Charge for Therapy Discharge Program, mean (SD)</b>	
I understood the reasons for the program	3.7 (0.5)
I will continue to use the skills I learned in this program	3.7 (0.5)
The program was well-organized	3.7 (0.4)
The leader of this program helped me with my questions and concerns	3.7 (0.5)
The leader of this program was kind	4.0 (0.1)
The leader of this program treated me with respect	4.0 (0.2)

The patient satisfaction surveys also contained 3 open-ended questions which elicited qualitative data. In response to the first question asking what they liked about the *Take Charge for Therapy Discharge* program, patients stated responses such as ‘well-organized,’ ‘taught me a lot,’ and ‘answered my questions,’ which all were coded as a theme of ‘informative.’ The second question asked patients to describe aspects they would change about the *Take Charge for Therapy Discharge Program*, in which they responses with items such as ‘show me how to use the equipment,’ ‘explain more about the financial coverage,’ and ‘more examples of the

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techniques,' which all were coded as a theme of 'more comprehensive explanations.' The third question invited patients to write additional comments. One patient stated, "I was so anxious when I first arrived, and you answered all my questions and address my concerns. I truly felt like you cared about me as a person and treated me with respect" (Participant 24, personal communication, June 22, 2018). Another participant stated, "While I talked with you, I was more than just another patient who required a set number of therapy minutes, you saw me as a regular person" (Participant 33, personal communication, July 4, 2018). These similar comments were coded as a theme of 'respectful leader.' Therefore, through open, axial, and selective coding, three main themes emerged from these qualitative responses.

Finally, descriptive statistics were analyzed for HealthSouth's Press Ganey satisfaction surveys. Out of the 145 total *Take Charge for Therapy Discharge* participants, a total of 10 surveys were returned during the DEC, allowing for data analysis. Press Ganey surveys were collected for 4 participants who only attended the *Goals Group*, 1 patient who only attended the *Therapy Discharge Group*, and 5 patients who successfully completed the program by participating in both group sessions. For patients who only attended the *Goals Group*, 5 items on the Press Ganey survey were analyzed, with an overall mean satisfaction rating of 4.8 out of 5.0. Press Ganey survey analysis for patients who only attended the *Therapy Discharge Group* only included 1 item, with a mean satisfaction of 4.0 out of 5.0. For patients who attended both groups, 6 survey items were analyzed and reported a mean overall satisfaction rating of 4.9 out of 5.0.

## CHAPTER FIVE: Discussion

### Outcomes

The needs assessment yielded a potential gap in patient education and participation throughout the therapy process for patients in the inpatient unit at HealthSouth Rehabilitation

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Hospital of Largo as related to patient discharge satisfaction and competence. The therapy staff at this inpatient rehabilitation hospital used the FIM as a daily assessment of each patient's functional performance and cognition; however, this did not assess the patient's perspective on their progress (Mackintosh, 2009). Therefore, the PSFS was selected as a standardized assessment to gather data on the patient's self-perceived goal attainment using the personally meaningful goals the patient developed during the *Goals Group*.

To review the overall results of *Take Charge for Therapy Discharge*, it was important to return to the original program goals that were identified to assess their level of attainment. See Figure 4 for the attainment of each program goal. The *Take Charge for Therapy Discharge* goal regarding sustainability, 1A, was fully achieved. Each full-time occupational, physical, and speech therapist was assigned one month throughout the next year to take on a leadership role for the *Take Charge for Therapy Discharge* group sessions. The doctoral candidate provided HealthSouth Largo with a complete and organized collection of files for the evidence-based protocols for this program. Two binders were created, one for the *Goals Group* materials and the other for the *Therapy Discharge Group* materials, and all materials were additionally backed-up on a flash drive that was given to the site supervisor. All therapy staff members, as well as the Director of Therapy, attended a staff training session provided by the doctoral candidate which included a review of the preliminary results of the *Take Charge for Therapy Discharge* program. Additionally, a presentation of the comprehensive results of this program was emailed to the site supervisor and shared with staff upon completion of data analysis. Therefore, the staff at HealthSouth Largo received the necessary training in the techniques of the CO-OP approach, the basic understanding of the flow of the group sessions, as well as the evidence-based protocols to increase sustainability of this program.

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Goals 1B and 1C that were initially established for the *Take Charge for Discharge* program were not actually feasible for data collection. These original goals identified a plan to have a 10% improvement in Press Ganey satisfaction scores for both the occupational therapy and discharge sections of the survey within 4 months. Upon further understanding and experience with the Press Ganey surveys, it was clear that these goals were not realistic in nature since these results would take much longer than 4 months, possibly years, to make a significant change in the mean scores.

The objectives associated with the goals to improve Press Ganey satisfaction scores were more realistic in nature. The first objective of goal 1B was not met since insurance requirements limited group therapy sessions to a maximum of 6 patients per group, so it was not feasible for 80% of all appropriate patients to participate in the *Take Charge for Therapy Discharge* program (Centers for Medicare & Medicaid Services, 2012). The second objective of goal 1B was met since all patients who participated in the *Goals Group* identified at least 3 personally meaningful therapy goals to guide their inpatient rehabilitation.

For goal 1C, the first objective was partially met. In agreement with the objective, patient education sessions were hosted at least four times a week; however, the specific criteria of 80% of appropriate patients was not achieved. Even if all appropriate patients were scheduled to attend, there were multiple instances in which patients could not attend due to a variety of reasons, such as scheduling conflicts, unanticipated discharges, poor medication side effects, or unexpected illnesses. The second objective of goal 1C was not achieved. This objective required patients to demonstrate correct application of the goal, plan, do, and check method of the CO-OP approach; however, due to the strict 30-minute time slot for the group, it was not feasible to provide all of the necessary patient education as well as allocate time for each patient to

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demonstrate this approach. However, patients, their caregivers, and therapists often provided anecdotal evidence of increased participation in therapy through the use of the CO-OP approach.

In August, the final month of the DEC placement, HealthSouth Largo hosted a celebratory lunch in honor of receiving improved overall patient satisfaction scores on Press Ganey surveys. Although specific causes for improved scores cannot be pinpointed, HealthSouth staff and the doctoral candidate believe the *Take Charge for Discharge* program was a contributing factor.

**Figure 4**

*Attainment of Program Goals and Objectives*



Important information about HealthSouth Largo emerged through analysis of the descriptive statistics. Figure 2 identifies functional mobility, bathing, dressing, and transfers as the most commonly identified therapeutic goals using the PSFS for patients who attended the *Goals Group*. In Table 2, it can be determined that patients identified functional mobility most commonly, regardless of their primary diagnosis. One explanation for this finding was that functional mobility goals apply to both occupational and physical therapy disciplines. For example, one patient may have considered an occupational therapy goal of functionally moving around their kitchen to complete a cooking activity, while another patient identified a physical therapy goal of walking from their bedroom to bathroom using a walker. Both of these examples

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would have been coded as ‘functional mobility,’ therefore possibly increasing the frequency of this as a self-identified goal.

The results from the mixed ANOVA demonstrate significant findings. A patient’s primary diagnostic category was found to be the only person factor that demonstrated statistically significant results. This relationship likely had a link to the types of goals patients identified, based on their diagnostic category. For example, patients who experienced a stroke commonly identified communication as a top priority, which was likely due to the fact that strokes often lead to language and communication deficits, which other diagnostic categories do not frequently experience. Additionally, patients with cardiopulmonary conditions frequently selected stamina as a priority. These patients often experience deficits with strength and endurance as a result of their cardiopulmonary conditions, therefore it was reasonable that this was a main priority to be addressed in therapy.

Figure 4 illustrates that patients who experienced a stroke demonstrated the most improvements in their PSFS scores from pre to post-intervention. One explanation for this finding was that patients who experience a stroke tend to make the most functional gains during the acute phase of their recovery (Krakauer, 2006). Therefore, this patient population was more likely to experience functional gains during their inpatient stay, as opposed to patients with other diagnoses, such as orthopedic or cardiopulmonary conditions, in which patients may have been restricted in their performance due to precautions.

Results from the *Take Charge for Therapy Discharge* satisfaction survey demonstrated that patients were generally satisfied with the program. Patients provided the highest scores for items regarding the doctoral candidate as the leader of the group. For example, items describing the leader’s kindness and level of respect for the patients both received overall satisfaction score of 4.0 out of 4.0. Patients also often left comments in a similar manner praising the qualities of



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the leader. The patients were less satisfied with how well the therapists incorporated their self-identified therapy goals into sessions (3.4 out of 4.0) and how prepared they felt for discharge (3.4 out of 4.0). These results can be used to guide future adjustments to this program and similar protocols in the future. For example, the protocol could be adjusted to promote a better system for addressing patient-identified therapy goals and well as revisions to the content and delivery of the *Therapy Discharge Group*.

Results from HealthSouth's Press Ganey surveys demonstrated an improvement in overall satisfaction after implementation of the *Take Charge for Therapy Discharge Program*. While this improvement is not solely due to this program, the staff did consider this program a main contributing factor. Analysis of the 10 Press Ganey surveys for *Take Charge for Therapy Discharge* participants demonstrated that patients who attended both the *Goals Group* and *Therapy Discharge Group* reported higher satisfaction scores on the Press Ganey (4.9 out of 5.0) compared to those who only attended the *Goals Group* (4.8 out of 5.0) or only attended the *Therapy Discharge Group* (4.0 out of 5.0).

### **Limitations**

While the PSFS assessment addressed the gap in patient participation, it served as one potential limitation of this capstone project. Since the PSFS was a self-report measure, there was a potential for bias in the results since it relied on the patient's honesty. Patients may have adjusted their score to demonstrate progress or some patients may have truly lacked the introspective analysis needed to rank their performance. Additionally, each patient may have considered the '0-10' rating scale differently, and a score of '6' for one patient may have looked drastically different than another patient. Although this self-report measure introduced potential limitations to the study, it served to expand the patient feedback on the therapeutic process and would benefit from further research.

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Additionally, the selection of a non-randomized, pre-test/post-test design may have added a potential limitation to this capstone project. With this type of design, the experimenter's expectations served as a potential threat to validity as well as selection bias; both of which may have impacted the rigor of the outcome evaluation (Nelson et al., 2017). Due to the lack of randomization in this design, confounding variables may have developed that impacted the patient's outcomes (Nelson et al., 2017).

Another potential limitation of this study was the poor response rate for Press Ganey surveys. Of the 145 patients who participated in either the *Goals Group*, *Therapy Discharge Group*, or both sessions, only 10 Press Ganey surveys were returned. Therefore, the program had a Press Ganey response rate of only 7%. Since the hospital policy was to mail these surveys to patients after being discharged, the patients were less likely to respond. For those patients who did complete the survey, it had a roughly two-month delay due to the time spent in the mailing system.

### **Opportunities**

The results from the *Take Charge for Therapy Discharge* program can be used to guide further research or program planning. The statistical analysis of the PSFS scores can be used as support for insurance reimbursement of the need for the *Goals Group* and *Therapy Discharge Group* to provide improved, client-centered patient education and therapy using the CO-OP approach. Additionally, the qualitative feedback through comments on the satisfaction surveys can be used to shape future changes to this program. For example, one patient stated that the session would benefit from demonstration of how to use some of the adaptive equipment (Participant 67, personal communication, June 29, 2018). The CO-OP approach that was used to guide the *Take Charge for Therapy Discharge* program can also be applied during therapy sessions or in other programs at the site to improve the patient's ability to problem-solve and

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achieve their desired goals. Additionally, the results from this capstone project will be presented at the 2018 American Occupational Therapy Association national conference to promote continuing education for other practitioners regarding this evidence-based program development using the CO-OP approach. Finally, this capstone project will be submitted to academic journals to promote program development using the CO-OP approach at other sites.

If a similar program were to be implemented in the future, a few changes would be recommended. It would be beneficial to increase the follow-up with patients and therapists between the *Goals Group* and *Therapy Discharge Group* to assess their application of the CO-OP approach and address any questions or concerns they may have. For example, this could include observation of therapy sessions to gain insight into how these techniques are being applied during treatments. Furthermore, the sessions in this program were only 30 minutes in length due to scheduling conflicts and productivity requirements; however, future implementation should consider allocating more time for these patient education sessions to allow for further explanation of content and techniques. It would be beneficial to include an assessment of a therapist's competency in the CO-OP approach to ensure that they are knowledgeable of how these techniques can be used to guide patients toward goal attainment. In addition to assessing a therapist's competency, it would also be beneficial to use a short knowledge test or competency to examine a patient's ability to apply the goal-plan-do-check method toward real-life scenarios.

The *Take Charge for Therapy Discharge* program has future implications for quality improvement research studies. Future research would be beneficial to expand the research on this topic through a longer implementation to allow for further analysis of the long-term impacts. Since this DEC was 16-weeks, the length of time was not sufficient to allow for change in areas, such as the Press Ganey satisfaction scores. Additionally, further research on the significant

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findings of the functional improvements for patients who had a stroke would further support the results of the mixed ANOVA test.

### **CHAPTER SIX: Summary**

Prior to this DEC, the inpatient population at HealthSouth Largo was lacking effective education and understanding of the therapy process, as well as opportunities for being more actively engaged in personalized goal-setting and checking. Many patients expressed, through Press Ganey satisfaction surveys, that they were not fully aware of what was expected of them in regard to therapy requirements throughout their lengths of stay. It is important to have an open communication with patients and their family members, so they can fully and meaningfully participate in therapy. Additionally, while the staff at HealthSouth Largo continually adjusted the discharge planning process for each patient, many patients expressed that they were not aware of the updates and felt that their discharge was sudden.

Therefore, the *Take Charge for Therapy Discharge* program offered targeted and improved patient education sessions to increase patient involvement in the goal-setting process to increase a patient's ability to problem solve and attain their goals through the use of the CO-OP approach and to more actively engage patients in preparing for a successful discharge to the community. Through the CO-OP approach, patients self-assessed as becoming competent in the goal-plan-do-check method to organize their goals and self-manage their needs upon discharge to the community. These higher-level problem-solving skills could be generalized and transferred to other situations patients may have encountered in the community.

The *Take Charge for Therapy Discharge* program at HealthSouth Largo demonstrated significant and meaningful results relative to patient satisfaction with and participation in therapy and discharge processes. The majority of participants, regardless of their primary diagnosis, selected functional mobility as a main priority during their inpatient stay. Results demonstrated a

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statistically significant difference between the 45 participants' pre and post-intervention scores on the PSFS. Therefore, the patients improved self-perceived goal attainment scores served as evidence that in alignment with use of the CO-OP approach, the therapists were addressing the participants' prioritized therapy goals. A patient's primary diagnosis had the biggest impact on their performance in the program. Patients who experienced a stroke had the most improvements in their PSFS scores from pre to post-intervention. Overall participants demonstrated satisfaction with the program and provided positive feedback. The results of this program contributed to efforts to improve therapy service processes and patient satisfaction at HealthSouth Rehabilitation Hospital of Largo and have been continued at this site by therapy staff upon completion of the candidate's doctoral experiential component (DEC).

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Appendix A

*Needs Assessment and Data Collection Strategies*

<b>Strategy</b>	<b>Description of Tool</b>	<b>Who</b>	<b>When</b>
Initial phone interview	Semi-structured interview with 8 open ended questions	Danielle Engle (site mentor)	2/5/2018 for roughly 30 minutes
Online survey	Qualtrics survey with 6 questions	All OT/PT staff	Sent- 2/14/2018 Results were inconclusive
Emailed interview	Semi-structured interview with 8 open ended questions	Barbara Verrusio (therapy manager)	Sent- 2/6/2018 Received reply from Barbara- 2/19/2018
Press Ganey survey	Generalized weekly reports of mean satisfaction scores in each category	Met with Dr. Stuart for assistance in analyzing the reports	Received reports- 2/7/2018 Analyzed reports- 2/12/2018
Team Meeting	Danielle conducted a meeting to discuss potential DEC project ideas with other staff members	All OT/PT therapy team leads	2/16/2018
Conference call	GoToMeeting with some members calling from laptops and others from their phones	Danielle Engle, Dr. Stuart, Dr. Cook, & Dr. Donoso Brown	2/17/2018 for roughly 45 minutes

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## Appendix B

### Press Ganey Survey [Measurement Instrument] (HealthSouth, 2018)

B. NURSING CARE		very poor	poor	fair	good	very good
		1	2	3	4	5
1. Courtesy of the nurses .....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Availability of the nurses .....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. How well the nurses kept you informed about your treatment and progress .....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. How well the nurses instructed you about caring for yourself at home (including medications).....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Overall quality of nursing care you received on the following shifts:						
a. Day shift (7:00 AM - 3:00 PM).....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Evening shift (3:00 PM - 11:00 PM).....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Night shift (11:00 PM - 7:00 AM).....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments (describe good or bad experience): \_\_\_\_\_

C. PHYSICAL THERAPY		very poor	poor	fair	good	very good
		1	2	3	4	5
Please skip this section if you did not receive physical therapy at this facility.						
1. Courtesy of the physical therapist.....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. How well the physical therapist explained your treatment and progress.....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Extent to which you were involved in setting your physical therapy goals.....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. How well physical therapy helped you meet your goals.....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments (describe good or bad experience): \_\_\_\_\_

D. OCCUPATIONAL THERAPY		very poor	poor	fair	good	very good
		1	2	3	4	5
Please skip this section if you did not receive occupational therapy at this facility.						
1. Courtesy of the occupational therapist.....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. How well the occupational therapist explained your treatment and progress.....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Extent to which you were involved in setting your occupational therapy goals.....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. How well occupational therapy helped you meet your goals.....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments (describe good or bad experience): \_\_\_\_\_

E. DISCHARGE		very poor	poor	fair	good	very good
		1	2	3	4	5
1. How well staff explained your discharge plans .....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Training given to you and your family about your care after discharge.....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Assistance with post-discharge arrangements.....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments (describe good or bad experience): \_\_\_\_\_

F. PERSONAL ISSUES		very poor	poor	fair	good	very good
		1	2	3	4	5
1. When you first arrived, how well staff explained what your stay would be like .....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Accuracy of the information you received about the rehabilitation program .....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Staff concern for your privacy.....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. How well your pain was controlled .....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Degree of safety and security you felt .....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Extent to which staff treated you with respect .....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Staff sensitivity to the inconvenience that health problems and hospitalization can cause .....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Staff concern for your questions and worries .....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Extent to which staff gave you encouragement.....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Staff promptness in responding to your requests .....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments (describe good or bad experience): \_\_\_\_\_

G. OVERALL ASSESSMENT		very poor	poor	fair	good	very good
		1	2	3	4	5
1. How well staff worked together to care for you.....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. How well staff prepared you to function at home.....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. How well staff prepared you to function in the community.....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Overall rating of care you received during your stay.....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Likelihood of your recommending our facility to others.....		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments (describe good or bad experience): \_\_\_\_\_

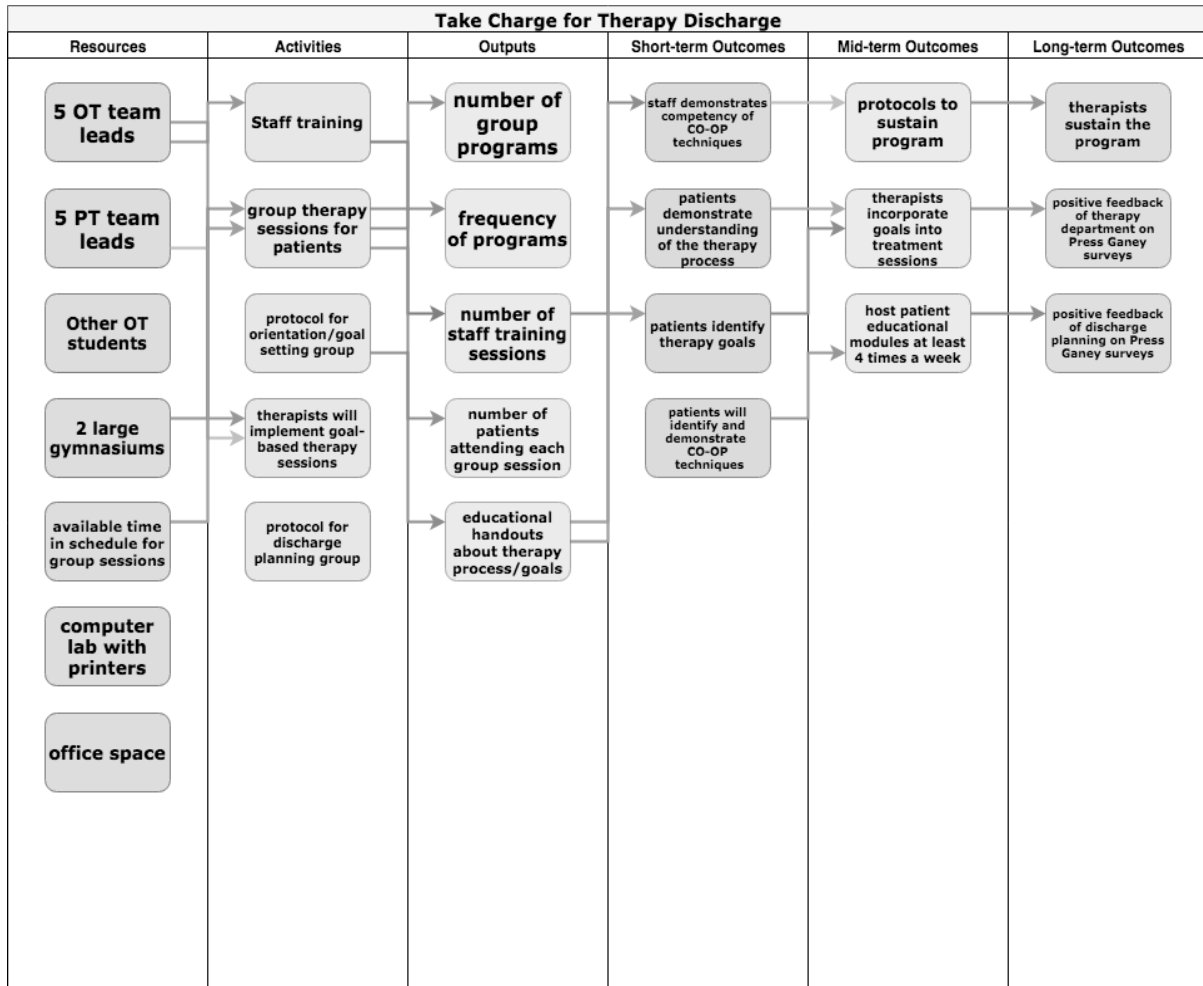
Patient's Name: (optional) \_\_\_\_\_

Telephone Number: (optional) \_\_\_\_\_

# TAKE CHARGE FOR THERAPY DISCHARGE

## Appendix C

### Logic Model



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## Appendix D

### *Key Studies Informing the Capstone Project*

<b>Citation</b>	<b>Study Purpose / Research Question</b>	<b>Design</b>	<b>Sample</b>	<b>Data Collection Strategies</b>	<b>Findings that Inform This Study</b>
Custer, 2015	To describe the development and application of a client satisfaction questionnaire and to test the predictors of satisfaction	Two-part descriptive study	All patients over the age of 18 who were inpatients or outpatients over a 27-month time span (1,104 participants)	Satisfaction with Continuum of Care Revised (SCC-R)	Functional status, presence of a neurological disorder, total rehabilitation hours, and admission to rehabilitation within 15 days of condition onset were identified as the best predictors of patient satisfaction during rehabilitation
Dawson & Binns, 2009	To determine the effectiveness of occupation-based strategy training for producing changes on trained real-world behaviors, and to determine whether far transfer of training effects to measures of real-world impact, including participation in everyday life, could be achieved	Partially randomized controlled trial	13 individuals with TBI, interventions occurred in their home settings	Canadian Occupational Performance Measure, Dysexecutive Questionnaire, Mayo-Portland Adaptability Inventory-4 Participation Index, & Assessment of Motor and Process Skills	Far transfer was demonstrated in the experimental group, which had significantly higher scores than the control group
Dawson & Gaya, 2009	To test the applicability of the CO-OP approach for use with adults with executive dysfunction resulting from TBI	Single case design	3 adults with TBI	Canadian Occupational Performance Measure (COPM)	Patients demonstrated statistically significant improvements in performance for 7/9 trained goals and 4/7 untrained goals
Jack, 2009	To test the effects of an intervention designed to minimize hospital utilization after discharge	Randomized trial with block randomization	749 English-speaking adults in the hospital with mean age of 49.9 years	Emergency department visits, hospitalizations within 30 days of discharge, self-reported preparedness for discharge, & frequency of follow-up within 30 days of discharge	Patients who participated in intervention sessions (including patient education) had lower hospital utilization rates after discharge
McEwen & Donald, 2015	3 research questions were identified (1. is the implementation of CO-OP KT associated with a change in the proportion of patients with cognitive impairment following a stroke accepted to inpatient rehabilitation? (2.) is the implementation of CO-OP KT associated with a change in rehabilitation clinicians practice, knowledge and self-efficacy related to implementing the CO-OP approach, immediately following and 1 year later? (3.) is CO-OP KT associated with changes in activity, participation, and self-efficacy to perform daily activities in patients with cognitive impairment following stroke at discharge from inpatient rehabilitation and at 1, 3, and 6-month follow-ups	3 interrelated studies were designed (quasi-experimental, single group pre-post evaluation, and non-randomized design)	The specific populations of each study were not clearly defined in this article (used 5 different inpatient rehabilitation units in the Greater Toronto Area)	Montreal Cognitive Assessment (MoCA)	The established CO-OP KT protocol will advance knowledge of the ability to change health care systems, knowledge, and patient outcomes
McEwen & Polatajko, 2015	To estimate the effect of CO-OP approach compared to usual outpatient rehabilitation on activity	Exploratory, single blind randomized controlled trial	35 individuals less than 3 months post stroke	COPM, Performance Quality Rating Scale (PQRS), Stroke Impact Scale Participation	CO-OP was associated with a large treatment effect on follow up



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	and participation in people less than 3 months post stroke			Domain, Community Participation Index, Self-Efficacy Gauge	performances of self-selected activities, and demonstrated transfer to untrained activities
Oates, 2013	To compare 30-day rehospitalization rates among patients cared for in different primary care practice models	Retrospective cohort study	23,344 adults 65 years and older from Boston Medical Center (collected over 5-year period)	Charlson Comorbidity Index (CCI)	The results were not significant enough to say that patients cared for on an interdisciplinary geriatric unit were less likely to be re-hospitalized than those receiving normal care
Polatajko, 2012	To determine magnitude and direction of change for client performance on 3 goals post stroke after CO-OP intervention or standard therapy	Randomized controlled trial	8 community residing individuals post stroke	COPM, Performance Quality Rating Scale (PQRS)	CO-OP group demonstrated larger performance improvements than the group receiving standard therapy
Skidmore & Dawson, 2015	To estimate the effect of strategy training, relative to reflective listening (attention control), for reducing disability and executive cognitive impairments	Single-blind randomized pilot study	30 inpatient participants with acute stroke with cognitive impairments	FIM, Color Word Interference Test of the Delis-Kaplan Executive Function System	Strategy training demonstrates the ability to address disability in the first 6 months after a stroke
Skidmore, 2018	To determine the degree that awareness status affects changes in independence attributed to strategy training	Randomized control trial – receive strategy training or attention control in addition to typical inpatient rehab	30 participants with cognitive impairments after stroke	Measured awareness with Self-Awareness of Deficits Interview and independence with FIM	Strategy training is beneficial to individuals with poor awareness and awareness status may not affect the response to strategy training
Skidmore & Whyte, 2015	To examine the effects of strategy training, a behavioral intervention used to augment usual inpatient rehabilitation, on apathy symptoms over the first 6 months after stroke	Secondary analysis of randomized controlled trial	30 inpatients with acute stroke with cognitive impairments	Apathy Evaluation Scale	Strategy training demonstrates the ability to maintain low levels of post stroke apathy
Wolf, 2016	To estimate the effect of CO-OP approach compared to standard occupational therapy on upper extremity movement, cognitive flexibility, and stroke impact	Exploratory, single blind randomized controlled trial	35 outpatients less than 3 months post stroke	Action Research Arm Test, Delis-Kaplan Executive Function System Trail Making subtest, Stroke Impact Scale	Early use of the CO-OP improves performance and remediates cognitive and arm movement impairments after stroke over usual care
Wong, 2011	To identify current discharge planning practices of health professionals working in acute and rehabilitation hospitals, determine the barriers in executing the discharge planning of the existing system, and suggest components in developing an effective patient discharge planning system	Qualitative study with focus group interviews	(not clearly stated who was involved in the focus groups)	Semi-structured group discussions	Must be organized, collaborative with strict protocols to plan for the supportive discharge

# TAKE CHARGE FOR THERAPY DISCHARGE

## Appendix E

### *Additional Research Informing the Capstone Project*

<b>Citation</b>	<b>Study Purpose / Research Question</b>	<b>Design</b>	<b>Sample</b>	<b>Data Collection Strategies</b>	<b>Findings that Inform This Study</b>
Byrnes, 2012	To evaluate the process and outcome of a multi-disciplinary inpatient goal planning rehabilitation program on physical, social, and psychological functioning for patients with spinal cord injuries	Clinical audit of quantitative and qualitative analyses	Consecutive series of 100 newly injured spinal cord injury inpatients	The Needs Assessment Checklist (NAC)  Patient-focused goal planning questionnaire and goal planning progress form	100 consecutively admitted SCI patients significantly improved in physically, socially, and psychologically from their baseline scores on admission to their discharge scores
Hansen, 2011	To describe interventions evaluated in studies aimed at reducing rehospitalization within 30 days of discharge	Systematic review	43 scholarly articles	MEDLINE, EMBASE, Web of Science, & Cochrane Library for English-language	No one intervention demonstrated significant results to associate with a decreased 30-day re-hospitalization rate
Scammell, 2016	To examine the extent and nature of the literature on CO-OP approach	Scoping review	10 online databases were used, 94 documents were found (27 research articles were used)	CINAHL, MEDLINE, EMBASE, Scopus, AMED, Cochrane Library, ProQuest, PsycINFO, PubMed, Web of Science	All selected research articles demonstrated results that the CO-OP approach was beneficial, many articles made slight changes to the protocol to adjust to the needs of their population
Shepperd, 2010	To determine the effectiveness of discharge planning patients moving from the hospital	Systematic review	11 randomized controlled trials	MEDLINE, Embase, SIGLE, Bioethics, Health Plan, Psych. Lit, Sociofile, CINAHL, Cochrane Library, Econ Lit, Social Science Citation Index, EPOC register	Two studies found that those with medical conditions who received discharge planning were more satisfied than those who received normal discharge procedures
Yam, 2012	To test the effectiveness of a framework for discharge planning	Consensus building using the Delphi approach	24 discharged patients	Phone interview	Patients expressed lack of “man-power” and necessary skills for successful discharge

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Appendix F

*Weekly Program Schedule*

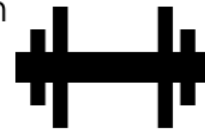
<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
Goals Group	Goals Group	Therapy Discharge Group	Goals Group	Therapy Discharge Group
2:30-3 p.m.	2:30-3 p.m.	2:30-3 p.m.	2:30-3 p.m.	2:30-3 p.m.

Appendix G

*Orientation to Therapy Handout*

## What Should I Expect in Therapy?

- Will be assigned to an OT/PT team (possibly also ST)
- **Total of 15 hours of therapy a week**
- Aim for 3 hours of therapy a day, 5 days a week
- May need therapy on weekends to make up any missed therapy time
- May include individual or group sessions
- Weekly conference meetings to discuss progress and future plans (therapy team meets on your behalf and your case manager will give you updates)



## Other Therapy Information



- Ask family/friends to bring in some of the **clothes you usually wear** at home so you can practice your normal routine of getting dressed in these types of clothes
- It gets cold in the building (may want to bring a jacket)
- Bring in shoes with a back. We do have hospital socks with grips you are welcome to wear but it is better to practice putting on/taking off and wearing the shoes you will be wearing after you leave
- Bring shoes down to therapy sessions

Appendix H

*Therapy Handout*

## What can therapy do for me?

### **OCCUPATIONAL THERAPY**

- Maximize your independence competing activities in your daily routine
  - Getting dressed
  - Taking a shower
  - Feeding yourself
  - Brushing your teeth and hair
  - Going to the bathroom
  - Any other activities you do during your day (cooking a meal, doing the laundry, etc.)
- Improving arm and upper body strength and coordination
- Thinking skills during these activities
- Safety and energy conservation techniques
- Balance while sitting, standing, and moving around for activities
- Posture and positioning while sitting, standing, and moving around for activities

### **PHYSICAL THERAPY**

- Walking and mobility (endurance and speed - using adaptive mobility equipment as appropriate)
- Balance while sitting and standing
- Going up and down the stairs
- Getting in and out of your bed
- Improving leg strength and coordination
- Safety skills while moving around
- Posture while sitting, standing, and walking

### **SPEECH THERAPY**

- Speaking (adaptive methods, if needed)
- Swallowing (safety to prevent choking)
- Language
- Communicating
- Thinking skills
- Sitting posture while eating and swallowing

**My Occupational Therapists are:**

**My Physical Therapists are:**

**My Speech Therapists are:**

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Appendix I

*Patient-Specific Functional Scale (PSFS)* – [Measurement Instrument]

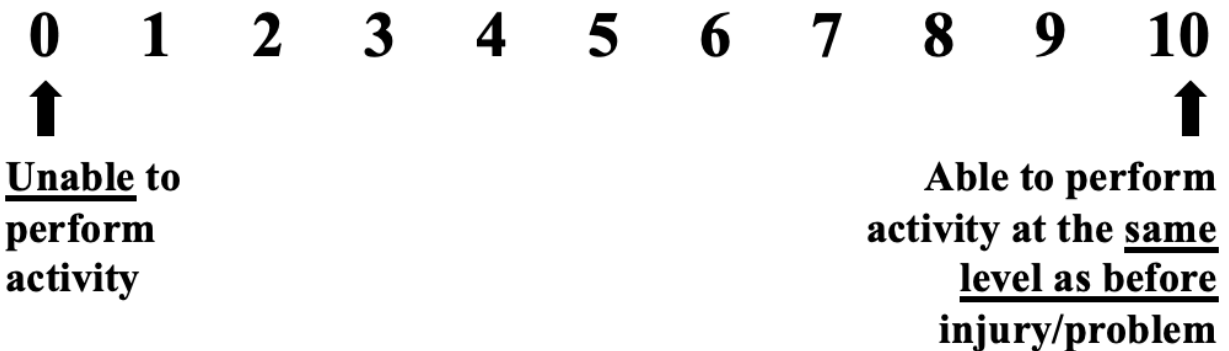
Adapted from (Stratford, Gill, Westaway, & Binkley, 1995)

Pre-Intervention Assessment:

1. “What are some important activities that you are unable to do or are having difficulty with?”
2. “How would you rate your ability to complete the activity in your current state?”
  - a. Complete this step for each of the activities that were identified by the patient in step 1

Post-Intervention Assessment:

1. Refer to each of the goals selected during the pre-intervention assessment
2. “How would you rate your ability to complete the activity in your current state?”
  - a. Complete this step for each of the activities that were identified by the patient during the pre-intervention session



Appendix J

Roadmap from WITH Notebook (HealthSouth, 2018)

## WHERE I AM IN MY REHABILITATION

NAME: \_\_\_\_\_

My goals for rehabilitation are...

[Empty box for writing goals]

- I will be ready to go \_\_\_\_\_
- I'm comfortable with my discharge plan, along with my caregiver's knowledge about my discharge plan.
- I've learned about my medications and dietary changes.
- My goals are being addressed.
- I've learned how to perform basic self-care to be more independent: getting in/out of bed, in/out of chairs, bathing, toileting, grooming, eating, dressing, walking, pushing myself in the wheelchair.
- I understand what my rehabilitation stay will be like and my estimated discharge date.
- I feel like the rehabilitation team understands my goals.

COMFORT  
PROFESSIONALISM  
RESPECT

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Appendix K

*Goal Tracking Sheet*

**Goal Tracking Sheet**

ID Code	Goal 1	Initial Score	Re-eval Score	Goal 2	Initial Score	Re-eval Score	Goal 3	Initial Score	Re-eval Score



Appendix L

*Fall Prevention Handout*

# Fall Prevention



**Falls are the second-leading cause of re-hospitalization and most falls occur in the home**



**Remove clutter from hallways / pathways**



**Lock wheelchair brakes before sitting down / standing up**



**Move / cover electrical cords on the floor**



**Attach bag to walker / wheelchair for holding items**



**Increase lighting in hallways and stair areas**



**Get your balance before starting to walk**



**Wear shoes with grips - don't walk barefoot**



**Add contrasting tape to edge of steps**



**Remove throw rugs from floor**



**Place lamp and phone by bed for safety**



**Install grab bars in bathroom areas**



**Consider wearing alarm device in case of fall**

Appendix M

Energy Conservation Handout

# THE Energy Conservation GUIDE



## The 4 P's

### 1 PRIORITIZE

select activities that are most important to complete; delegate some activities to family/caregivers

### 2 PLAN

plan your daily schedule; complete activities when you tend to have the most energy

### 3 POSITION

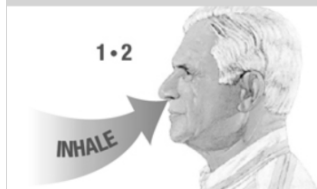
move body close to activity; sit during activity if appropriate; have supplies gathered and organized near activity

### 4 PACE

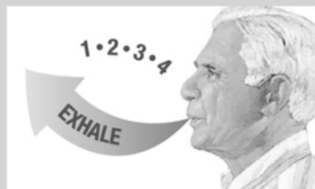
take rest breaks during activity; spread activities out throughout the day



## Pursed Lip Breathing



Inhale slowly through your nose for 2 seconds, keeping your mouth closed.



Purse your lips (like you are blowing out a candle) and exhale slowly through your mouth for 4 seconds



## Additional Reminders



Take rest breaks **BEFORE** getting fatigued



Take your time completing activities - do **NOT** rush



Use equipment or devices to assist so you can conserve your energy

Appendix N

*Energy Conservation During Activities Handout 1*

# Energy Conservation During Activities

---

## Getting Dressed

- Sit down while you put your clothes on
- Lay out your clothes for next day near where you plan to get dressed
- Keep your reacher/sock aide/shoe horn close to where you get dressed
- Wear clothing that is easy to put on and take off
- If you have a weaker side, DRESS that WEAKER extremity first
- It is easier to UNDESS the STRONGER extremity first



## Grooming

- Keep all the grooming supplies gathered and organized on the counter
- Sit down while you brush your teeth and hair, wash your face, etc.



## Taking a Shower

- Sit down on a tub bench/shower chair instead of standing
- Keep all shower supplies within an arm's reach of the bench/chair
- Use a long-handled sponge and extended shower head
- Be cautious of water temperature (hot water causes steam to build up and may lead to shortness of breath)



## Meal Preparation

- Gather all items
- Sit while preparing meal, if possible
- Use light-weight pots/pans/dishes
- Use electric appliances (can opener, blender, food processor, etc.)
- Consider making larger portions so you don't have to cook as often



## Laundry

- Gather dirty laundry in a light-weight basket
- Sit and use reacher to help load/unload clothing
- Sit while folding laundry



Appendix O

*Energy Conservation During Activities Handout 2*

## General Cleaning

- Use light weight cleaning equipment with long handles
- Take frequent breaks
- Consider keeping one vacuum upstairs and one downstairs, if needed
- Use a self-wringing mop to save your energy
- Organize items in a walker bag or rolling cart to transport things around the house
- Slide objects rather than lifting whenever possible
- Use long-handled dust pans to decrease the need for bending down
- Keep a trash can in each room to avoid unnecessary walking around



## Bathroom Cleaning

- Keep cleaning products in small bucket
- Spray and clean the surfaces one section at a time
- Sit while cleaning, if possible
- Keep counters free of excess clutter



## Kitchen Cleaning

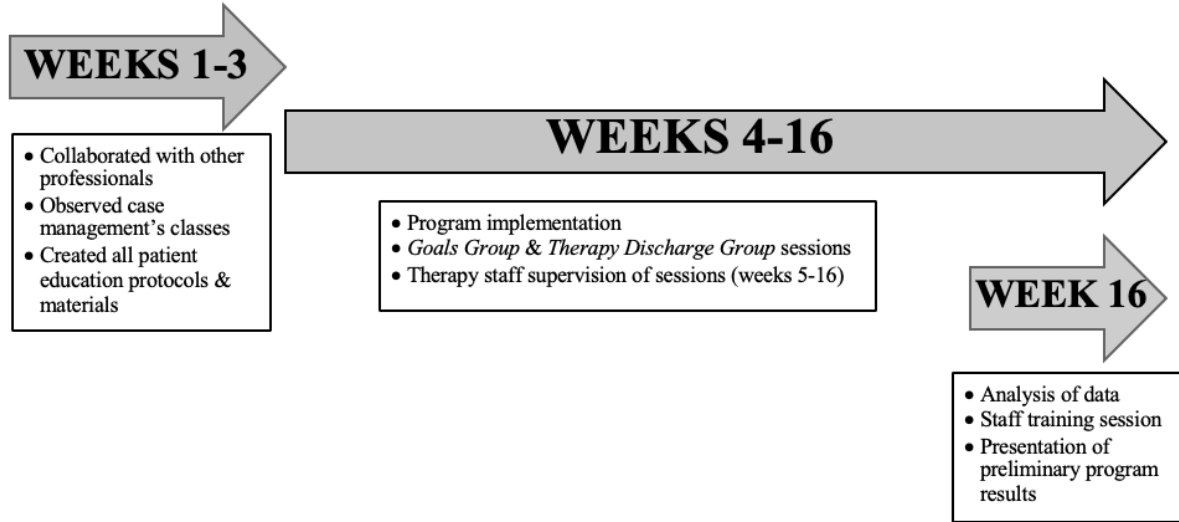
- Use self-cleaning oven
- Use dish washer if available
- Soak dishes before hand washing them
- Allow dishes to air-dry rather than drying them with a rag
- Consider using paper plates, cups, and napkins
- Sit while cleaning items, if possible



# TAKE CHARGE FOR THERAPY DISCHARGE

## Appendix P

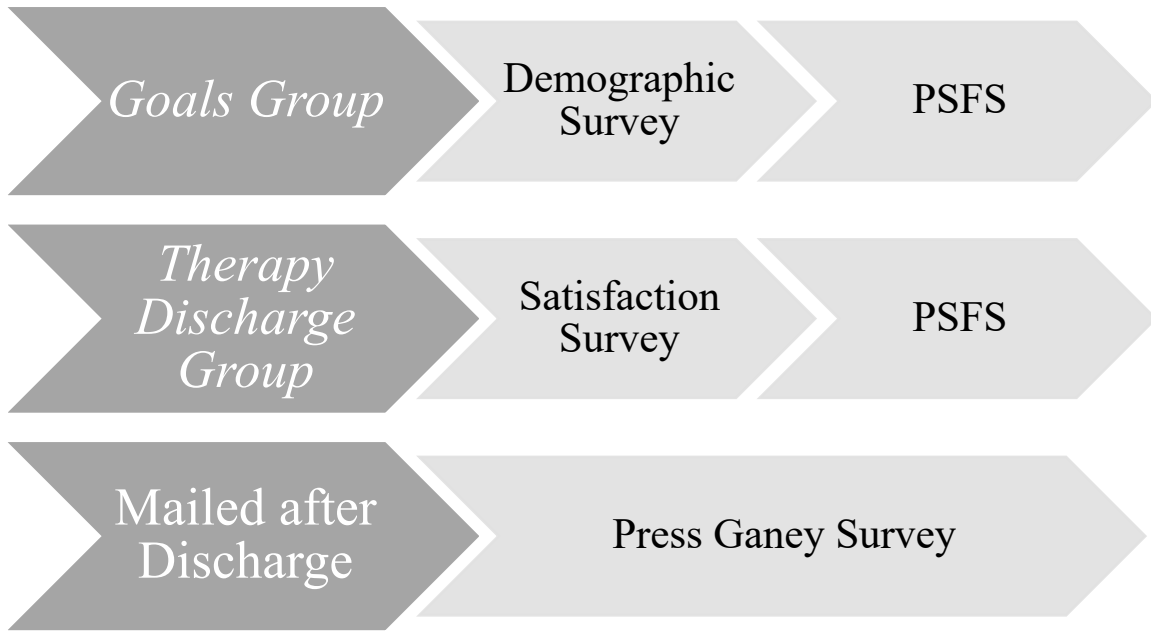
### *Timeline of Implementation*



TAKE CHARGE FOR THERAPY DISCHARGE

Appendix Q

*Assessments Graphic*



TAKE CHARGE FOR THERAPY DISCHARGE

Appendix R

*Patient Satisfaction Survey*

**PATIENT SATISFACTION SURVEY**

**Participant Identification Code:** \_\_\_\_\_

Please rate the following statements on a scale from 1 to 4:

<b>Statement</b>	<b>Strongly disagree</b> <b>1</b>	<b>Disagree</b> <b>2</b>	<b>Agree</b> <b>3</b>	<b>Strongly agree</b> <b>4</b>
<b><i>Goals Group</i></b>				
This session explained what to expect for therapy sessions.				
The information that was explained in this session was similar to what I experienced in therapy.				
I helped to create my therapy goals.				
My therapists worked with me on the goals I created during this session.				
<b><i>Take Charge for Therapy Discharge</i></b>				
This session shared important information about my discharge.				
I felt ready for my discharge from HealthSouth.				
<b><i>Overall program (including both group sessions listed above)</i></b>				
I understood the reasons for the program.				
I will continue to use the skills I learned in this program.				
This program was well-organized.				
The leader of this program helped me with my questions and concerns.				
The leader of this program was kind.				
The leader of this program treated me with respect.				

TAKE CHARGE FOR THERAPY DISCHARGE

**PATIENT SATISFACTION SURVEY**

**Participant Identification Code:** \_\_\_\_\_

**Please respond to a few additional questions:**

Aspects I liked about this program:

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Aspects I would change about this program:

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Overall comments about this program:

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**Thank you for your participation in this survey, it is greatly appreciated!**



# TAKE CHARGE FOR THERAPY DISCHARGE

## Appendix S

### *Demographic Survey*

#### DEMOGRAPHIC SURVEY

Participant Identification Code: \_\_\_\_\_

The purpose of this survey is to gather relevant demographic information of all patients participating in this program at HealthSouth Rehabilitation Hospital of Largo. This demographic data will be used to generate conclusions of the effects of this program but will be kept confidential. Thank you for your participation!

Please take the time to fill out this short survey of demographic information:

1. Please check the box next to the gender that you identify with:

- Female  
 Male  
 Other (please specify) \_\_\_\_\_

2. What is your age in years? \_\_\_\_\_

3. Please check the box next to the most appropriate description of your marital status:

- Single, never married  
 Significant other  
 Married  
 Divorced  
 Widowed

4. Prior to this hospital admission, I was:

- Living alone  
 Living with my spouse/significant other  
 Living with my children  
 Other (provide brief description) \_\_\_\_\_  
\_\_\_\_\_

5. Prior to this hospital admission, I was:

- Unemployed  
 Working full-time  
 Working part-time  
 Retired  
 On disability

**Thank you for your participation in this short demographic survey! We look forward to working with you in this program.**

TAKE CHARGE FOR THERAPY DISCHARGE

Appendix T

*Sample Program Data*

ID	Dx	Gender	Age	Marital	Living	Employment	Goal 1	Pre 1	Post 1	Goal 2	Pre 2	Post 2	Goal 3	Pre 3	Post 3
6	1	1	63	3	2	5	1	2	5	9	6	8	8	4	8
7	5	1	71	3	2	4	5	3	6	7	4	8	7	4	5
10	3	1	81	3	2	4	1	2	4	8	5	7	10	4	6
16	3	2	80	3	2	4	9	4	6	5	4	9	8	3	8
17	1	2	69	3	2	4	4	4	9	6	3	9	8	5	8
18	1	1	85	5	1	4	9	5	8	5	6	9	2	2	9
23	1	1	86	5	1	4	2	2	7	8	2	5	3	3	9
24	4	1	63	1	3	5	6	3	8	5	1	7	2	1	6
26	1	2	35	3	2	2	2	5	10	5	2	5	5	2	7
27	3	1	79	1	2	4	3	5	8	6	5	7	4	3	6
31	5	1	88	5	3	4	1	6	9	1	4	8	9	3	8
33	1	1	74	1	1	4	1	2	9	3	2	9	1	2	7
34	2	2	61	3	2	2	8	4	8	5	3	10	3	2	10
35	4	1	72	5	3	4	2	0	10	4	0	10	5	4	6
39	4	2	85	3	2	4	3	2	10	2	3	10	4	5	10
41	5	2	91	5	1	4	3	7	8	8	3	5	4	5	6
43	5	1	63	1	4	5	5	1	5	10	5	5	1	2	2
47	1	1	83	3	2	4	5	0	5	2	5	8	4	3	4
51	5	2	74	3	2	4	5	1	5	3	1	7	1	1	4
53	1	1	74	5	1	4	2	5	7	1	3	6	9	5	7
60	4	1	72	1	1	4	4	5	7	2	5	7	1	2	5
62	3	1	79	1	1	4	6	3	7	3	3	9	5	2	7
65	4	1	83	1	1	4	6	3	6	5	4	5	6	4	5
66	2	1	59	1	4	4	5	1	10	3	1	10	2	1	10
67	3	1	73	3	2	4	5	0	7	4	0	7	2	0	7
70	4	2	79	3	2	4	3	1	3	6	1	3	6	1	3
71	1	1	88	3	2	4	3	2	5	9	2	7	11	2	7
73	3	2	69	3	2	4	9	2	8	2	6	9	3	7	10
74	4	1	77	1	1	4	4	5	10	1	5	6	1	4	10

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