

2010

Development of an Educational Resource Tool to Improve Hospital Wide Knowledge of Rehabilitation Care and Services

Vickey R. Allen
Gardner-Webb University

Follow this and additional works at: https://digitalcommons.gardner-webb.edu/nursing_etd



Part of the [Critical Care Nursing Commons](#)

Recommended Citation

Allen, Vickey R., "Development of an Educational Resource Tool to Improve Hospital Wide Knowledge of Rehabilitation Care and Services" (2010). *Nursing Theses and Capstone Projects*. 172.
https://digitalcommons.gardner-webb.edu/nursing_etd/172

This Thesis is brought to you for free and open access by the Hunt School of Nursing at Digital Commons @ Gardner-Webb University. It has been accepted for inclusion in Nursing Theses and Capstone Projects by an authorized administrator of Digital Commons @ Gardner-Webb University. For more information, please see [Copyright and Publishing Info](#).

Development of an Educational
Resource Tool to Improve Hospital
Wide Knowledge of Rehabilitation
Care and Services

By

Vickey R. Allen

A thesis/project submitted to the faculty of
Gardner-Webb University School of Nursing
In partial fulfillment of the requirements for the
Degree of Master of Science in Nursing

Boiling Springs, North Carolina

2010

Submitted by:

Approved by:

Vickey R. Allen, BSN, RN

Janie Carlton, EdD, MN, RN

Date

Date

Acknowledgment

I would like to thank my children, Bruce and Brianne, for their patience and support throughout my entire adult educational process; most especially during my graduate education.

Table of Contents

Chapter	Page
List of Tables.....	v
List of Figures.....	vi
Abstract.....	vii
I Introduction.....	1
Background.....	2
Theoretical Framework.....	3
Orem.....	3
Benner.....	7
Purpose and Rationale.....	10
II Review of Literature.....	11
Orem.....	11
Benner.....	16
Rehabilitation Nursing.....	19
III Project Description.....	27
Subjects.....	27
Setting.....	27
Instrument.....	27
Procedure.....	28
IV Outcomes and Evaluation Plan.....	29
V Discussion.....	36
Project Summary.....	36
Implications for Nursing.....	38
Implications for Future Study.....	39
References.....	40

Appendices

Appendix A: Questionnaire.....43
Appendix B: Resource Tool.....44

List of Tables

Table 1: Demographics Data of Participants.....	30
Table 2: Post Evaluation Tool for Non-Rehabilitation Nurses.....	34
Table 3: Post Evaluation Tool for Rehabilitation Nurses.....	35

List of Figures

Figures 1: Philosophy of Caring	2
Figures 2: Care Map: Use of Orem's SCDNT.....	6
Figure 3: Care Map: Use of Benner's Novice to Expert Theory.....	9
Figure 4: Chart of responses to specific items 1-10.....	31
Figure 5: Chart of responses to specific items 11-20.....	31
Figure 6: Chart of responses to specific items 21-34.....	32
Figure 7: Chart of responses to specific items 35-39.....	32

Abstract

Health Care Organizations (HCO) are businesses. In an effort to be successful and to remain viable, HCOs must provide a myriad of services to meet their customer's needs. Included in these services is competent rehabilitation care that manages patients holistically. Utilizing Orem's theory of self care deficit, this project will demonstrate the growing need for rehabilitation services and the importance of all healthcare providers to understand the profession in general. In addition, this project will provide a resource tool to educate healthcare workers and others; students and non-licensed personnel, on the care and services patients receive during their stay in an Inpatient Rehabilitation Facility (IRF); thus enabling healthcare providers to recognize a potential rehab patient early in their acute care hospital stay and begin discussing rehab services and benefits with the patient and family more timely. Furthermore, the resource tool will provide acute care nurses with needed information to improve the patients' transition from acute care services to rehabilitation services while increasing their knowledge of rehabilitation nursing in general.

Chapter I

Introduction

Self-Care is essential in decreasing the number of chronic illnesses diagnosed and co-morbid conditions that tend to go hand in hand with chronic illnesses. Self care activities will improve the overall health status of patients by improving compliance and providing the education and tools needed to both patients and family members.

United States Department of Health and Human Services and the Centers for Disease Control and Prevention are both supportive of efforts to promote self care activities. U.S. DHHS believes “self-care lies at the heart of putting people in control and plays a key role in improving the management of long term conditions” (U.S. DHHS, 2000). Also, the CDC believes that by supporting people and giving them the education and tools needed to care for themselves, many people will have fewer chronic illnesses. Those that are diagnosed with chronic illnesses will manage their conditions better and have longer lives.

Rehabilitation nursing grew out of the need to address issues of self-care deficits arising from injuries and/or chronic illnesses. In contrast to acute care nursing, Rehabilitation nursing is a philosophy of care that promotes independence; not a work setting or phase of treatment; thus making the knowledge of the care and services provided by the Rehabilitation team essential for all healthcare providers. Acute care providers need to understand that Rehabilitation nurses assist persons affected by chronic illness or physical disability to adapt to their disabilities, achieve their greatest potential, and work toward leading productive, independent lives. Rehabilitation nurses use a holistic approach to meeting patients’ medical, vocational, educational, environmental, and spiritual needs.

Background

Many nurses have little to no understanding about the role of the rehabilitation nurse (Kneasfy & Long, 2002). This lack of understanding about the specialty of rehabilitation nursing and the care and services provided to patients is evidenced by comments from fellow nurses such as “do you take patients with PICC lines?”; “should I leave in the foley catheter?” as well as “I told the patient not to expect the same level of medical care from you as they received here so they’ll be prepared”. The rehabilitation staff has been instructed to address these outdated misconceptions on a case by case basis; immediately upon hearing such statements but this does not reach the mass audience needed to change perceptions about rehabilitation nursing, improve the obvious knowledge deficit and ease the patients’ transition from an acute care facility to an inpatient rehabilitation setting.

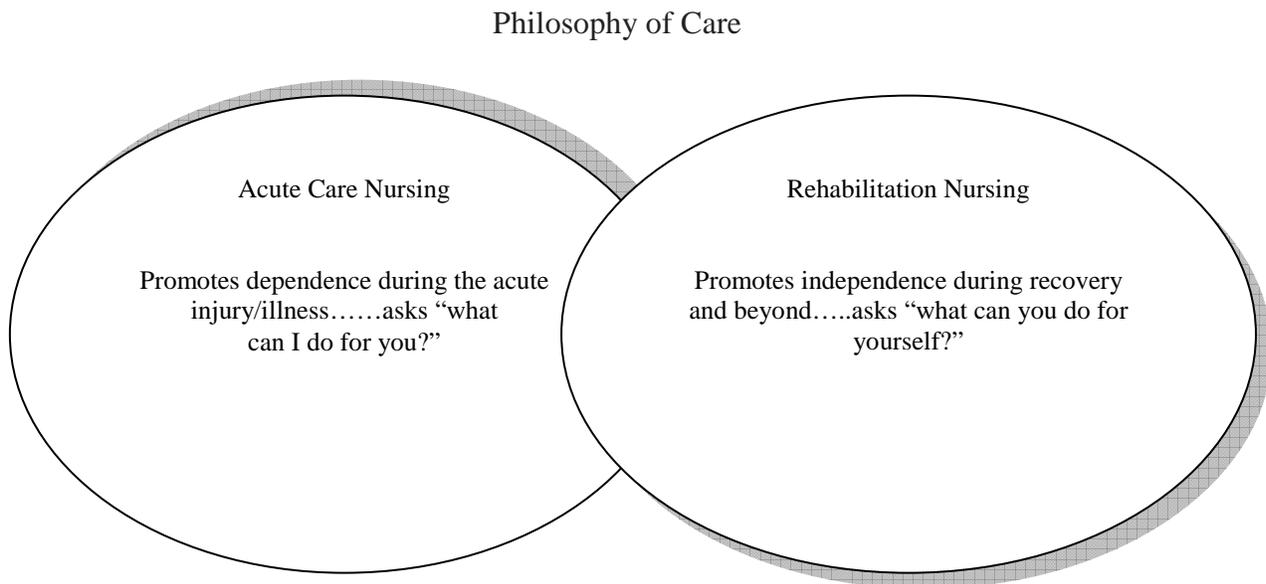


Figure 1 Overlap of all nursing is caring

Theoretical Framework: Dorothea Orem

Dorothea E. Orem's Self-Care Deficit Theory of Nursing (SCDNT) is the heart of what nursing is; thus it was used to guide the Rehabilitation concepts and educational project. Orem's SCDNT is expressed in three theories; theories of self-care, self-care deficit and nursing systems. The self-care deficit theory of nursing serves nurses engaged in nursing practice, in development and validation of nursing knowledge and in teaching and learning nursing. The theory of self care deficit describes the limitations in meeting the requirements for ongoing care and the effects these have on health and well-being of the person or dependent (Toomey, 2006). Simply stated, the theory recognizes that nurses and family members care for patients when a condition or illness prevents patients from caring for themselves.

The major concepts in Orem's theory are as follows:

Self-Care- each person has a need for self care in order to maintain optimal health and wellness and each person possesses the ability and responsibility to care for themselves and dependants.

- Self-Care Deficit- the relation between an individual's self-care needs and the lack of ability to personally meet them due to a physical or emotional deficit.
- Nursing System- nurses compensate for the patients' inability to care for self and provide therapeutic self-care, support and protection either wholly, partially or via assessment and education.
 - Total compensatory support encompasses total nurse care- client unable to care for self.
 - Partial compensatory support involves both the nurse and the client sharing in the self care requirements.
 - Educative/supportive compensatory support elicits the help of the nurse solely as a consultant, teacher or resource person. Client is responsible for their own self care.

It is important to note that a person can fluctuate between support modalities at any given time throughout life.

Orem's SCDNT is based on several major assumptions as it relates to the nursing profession, human behavior, nurses and the environment (Toomey, 2006).

1. Assumptions about Nursing

- Nursing is human actions formed by nurses through exercise of deliberate, intentional acts to include assessment, interventions and evaluation for individuals or families who constitute a dependent care need/component.
- Nursing is designed to help the client achieve or maintain a level of optimal health and wellness by acting as an advocate, redirector, support person and teacher, and to provide an environment conducive to therapeutic development.

2. Assumptions about Nurses

- Nurses will act for or do for another when needed
- Nurses will guide and direct as needed
- Nurses will provide psychological or physical support when a need is perceived.
- Nurses will provide and maintain an environment conducive to supporting an individuals' personal development.
- Nurses will teach a patient and/or family needed information to decrease self-care deficits.

3. Assumption about Human Behavior (Men, Women & Children.....Patients)

- Humans have a strong desire to be normal. "Normalcy is used in the sense of which is essentially human and that which is in accordance with the genetic and constitutional characteristics and talents of individuals" (Orem, 2001, p.225)
- Human beings require constant, deliberate care to themselves and their surroundings to remain alive and function in accordance with natural human endowments.
- Mature human beings experience a lack of what is needed to exist in the form of limitations for action in care of self and others involving and making of life-sustaining and function regulating actions.

4. Assumptions about Environment (physical, chemical & biological)

- Family will care for loved ones when they are unable to care for themselves.
- A state of health encompasses the health of individuals and groups.
- Humans are in constant communication and interchange among themselves and their environment to remain alive and functioning.
- Surroundings could affect a patients' ability to care for self

There are many common self-care requisites known to all men, women and children;

- (a) Maintenance of adequate oxygen food and water intake
- (b) The maintenance of balance between activity and rest
- (c) The maintenance of balance between solitude and social interaction,
- (d) The provision of care related to elimination and excrement
- (e) The prevention of dangers to human life, functioning and well being and
- (f) The promotion of normalcy

The value of Orem's theory has been tested and utilized many times in numerous research studies involving newborns to geriatrics and has been proven worthy to the nursing professional and standards of care. When patients and/or nurses recognize privations in the form of action in self-care and become involved to assist in lessening the privations, Orem's theory is at work.

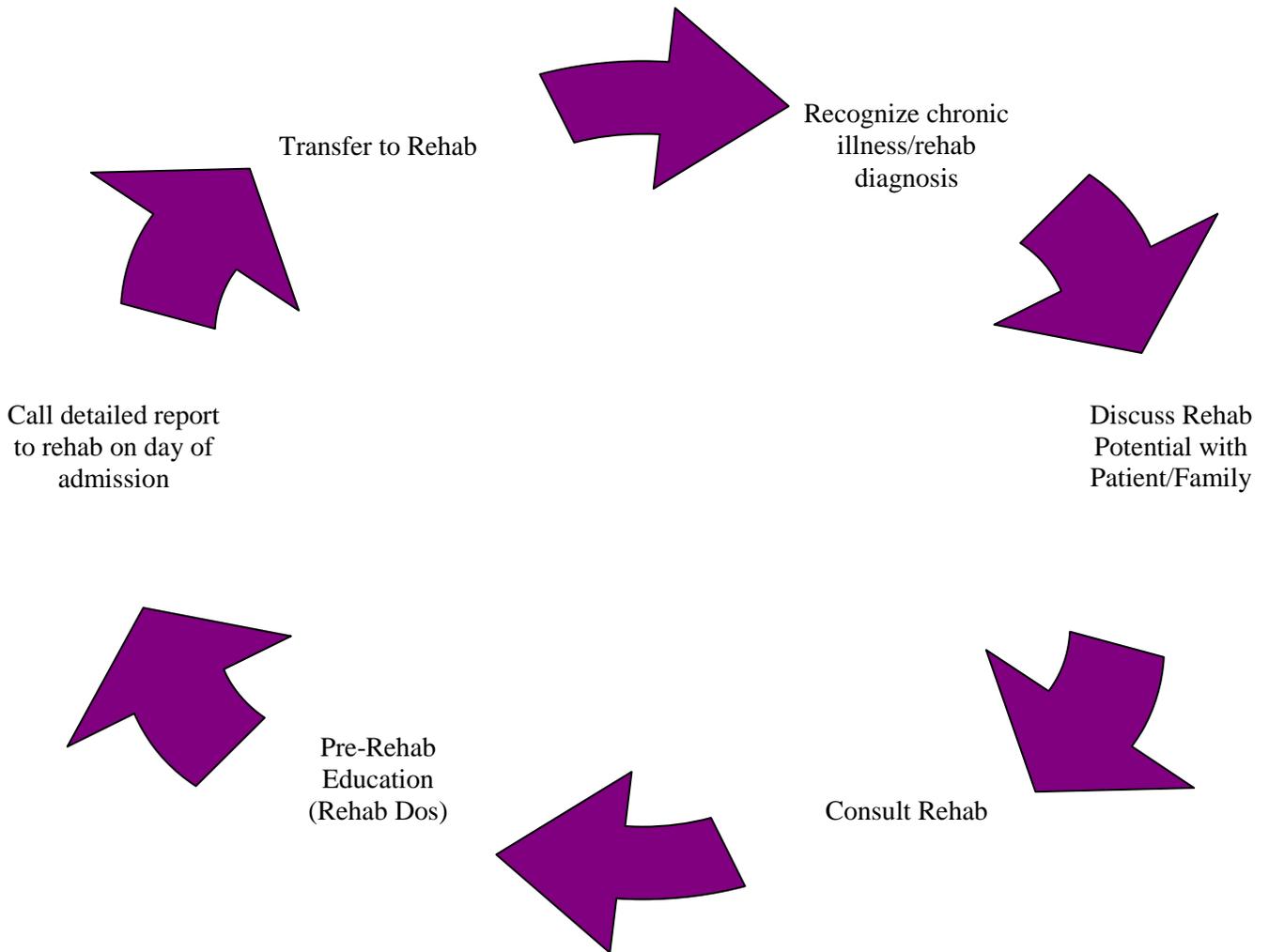


Figure 2 Rehab admission process utilizing Orem's SCDNT as a guide

Theoretical Framework: Patricia Benner

Patricia Benner's Novice to Expert Theory is essential in this project as it relates to the lack of knowledge non-rehabilitation healthcare providers have about rehabilitation nursing in general and underscores the need to provide background experience and knowledge to improve the continuity of care to all patients. Benner's theory is not restricted by age, illness, health or location of nursing and defines why non-rehabilitation healthcare providers have a knowledge deficit as it relates to rehabilitation nursing and services; lack of experiential knowledge. This project will move the non-rehabilitation practitioner from the novice to proficient stage as their learning relates to rehabilitation nursing, services provided and patient education.

The major concepts of Benner's theory are as follows:

Effective delivery of patient/family care requires collective attentiveness and mutual support of good practice embedded in a moral community of practitioners seeking to create and sustain good practice; however, such collective endeavors must be comprised of individual practitioners who have skilled know how, craft, science, and moral imagination, who continue to create and instantiate good practice (Benner & Benner, 1999).

- Novice- the practitioner has no background experience in the area or situation they are involved in; cannot distinguish relevant information from irrelevant information.
- Advanced Beginner-the practitioner has enough experience to grasp some aspects of the situation or area they are involved in; either by info sharing from the mentor or actual previous involvement in the situation. The advanced beginner can only grasp relevant information when in the same situational context, not a larger perspective; focus is more tasks oriented not a more global view. Person still relies heavily on more experienced practitioner.

- Competent- the practitioner now has enough knowledge and experience to use conscious and deliberate planning for current and future situations; distinguishing relevant and irrelevant information consistently. The competent practitioner is more efficient, can predict outcomes based on plans, and is focused on organization of tasks instead of time management as it relates to patient's needs. The competent practitioner is generally hyper-responsible for the patient to the point of being unrealistic. Active teaching, mentoring and learning is crucial in this stage of growth.
- Proficient- the practitioner can now see the situation as a whole rather than tasks only; begins to use intuition to guide practice and decisions. The practitioner can see changes and responds to changes as they occur; easily filtering out relevance as the situation evolves. The practitioner has much more confidence in their abilities thus they interact more with the patient and family.
- Expert- the expert practitioner uses intuition to guide practice in a situation without wasting time considering a range of alternative treatments or diagnoses. The expert can identify the problem easily as the expert is familiar with the patient as a person. In addition, the expert practitioner has a strong clinical and resource base, possesses know-how, and has the ability to see the broader picture and any untoward possibilities. Meeting the patient's needs is most important to the expert nurse even if it means changing the plan of care.

Caring endeavors stem from knowledge and skill about everyday human needs; caring practices must be attuned to the individual person being cared for and the situation in which it is occurring. Skilled action and know-how are linked in caring for patients now and over time; thus practitioners must consider long-term needs and outcomes for the individual being care for.

Utilizing Brenner's theory, the goal is to help the novice nurse move through the continuum of learning and experience to an expert nurse with the repeated use of the resource tool.

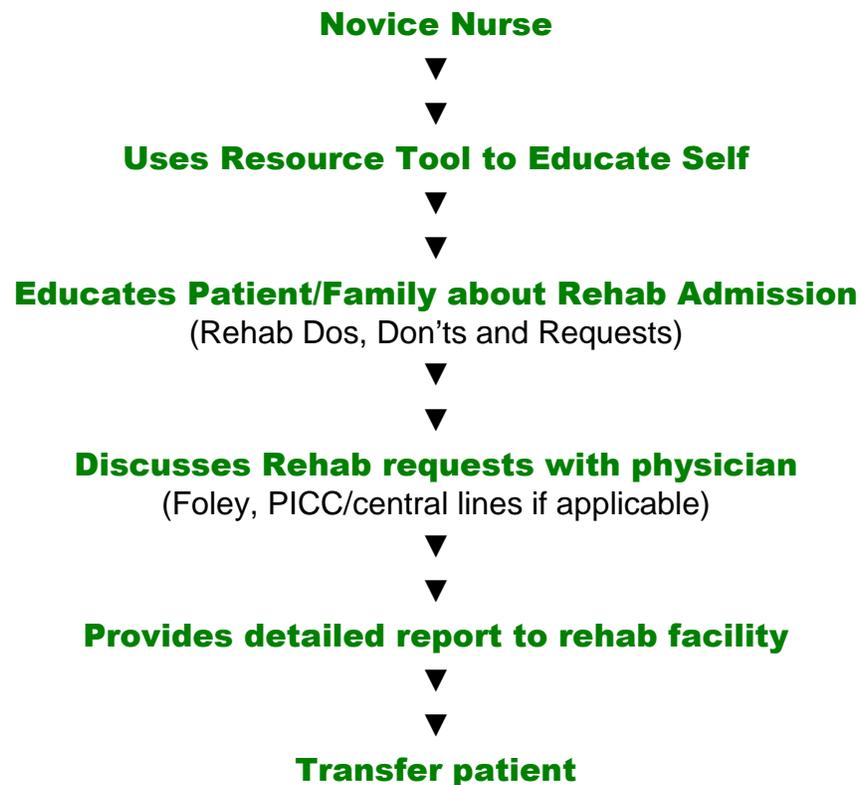


Figure 3: The care map uses Benner's Novice to Expert Theory to guide care plan for educating potential rehab patients.

Purpose and Rationale

The purpose of this project is to increase the overall knowledge of rehabilitation nursing for non-rehab work units (acute care services) to include students and new hires; thus helping non-rehab practitioners understand the care and services provided to patients. In addition, the resource tool will be a working document to educate non-rehab practitioners on how to prepare referred patients for the rehabilitation setting. The rehabilitation nurse has a role in ensuring that all healthcare practitioners are aware of the services available and how the services offered benefit the patient/family, as well as, how to access those services to improve continuity of care to those served.

Chapter II

Review of Literature: Orem

Patients are moving quicker and sicker through the hospital continuum of care; thus patients are arriving to Inpatient Rehabilitation Facilities with a greater acuity than in years past. It is important for all healthcare providers to assess and recognize self care deficits immediately in an effort to begin providing the appropriate care, services and education needed to restore the patient to their optimal level of health. Orem's SCDNT has been used in a variety of research projects involving many clinical settings demonstrating the benefits of early recognition of self-care deficits and nursing interventions.

Donna Callaghan conducted a research study to investigate the relationships among health promoting self-care behaviors, self-care efficacy and self care agency. She used a conceptual framework integrating Pender's health promotion model, Bandura's social cognitive theory and Orem's self care deficit theory to demonstrate how combining theories can enhance interventions that improve self care agency. The study involved 379 adults; mostly white females, married or never married, did not live alone and all had health insurance. Also all subjects were also involved in the healthcare environment by employment or education. The researcher utilized the following tools to gather information for the study: Health Promoting Lifestyle Profile II (HPLPII), Self-Rated Abilities for Health Practices (SRAHP) and Exercise of Self-Care Agency (ESCA). The study had some limitations and built in variables but the prevailing outcome of the study was that spirituality is more strongly related to self care agency than self efficacy and self care behaviors are learned thus can be directed towards health promoting self care actions.

This above mentioned study is useful as it demonstrates how beneficial integrating health promotion and self care deficits can serve to improve the health status of patients (Nursing Science Quarterly, 2003).

Carol Cutler, RN, DNSc, CS utilized Orem's Self-Care Theory as the framework for her research project involving psychiatric patients. Ms. Cutler examined patients with psychiatric diagnosis' to determine their perceptions of their capabilities and limitations for self-care actions in the recovery and maintenance of their health. The ten power components necessary for a person to maintain self-care measures are (1) the ability to sustain attention for self-care and management external factors that influence self-care; (2) physical ability to perform self-care actions on own volition; (3) control of own body position while performing actions; (4) rational thought about needs; (5) motivation to be in optimal health; (6) decision making skills about needed care and ability to follow through; (7) ability to comprehend and retain knowledge and teaching about self-care actions; (8) intact cognitive and interpersonal skills that enhance self-care; (9) prioritization skills as it relates to self-care activities and (10) ability to integrate a consistent pattern of self-care into their social and physical environment (Orem, 1991).

According to Cutler, only three of the ten power components are directed related to the patient with a psychiatric diagnosis; physical ability to perform activities on own volition (ADLs), the ability to pay attention to and make decisions (compliance with medication regime) and ability to comprehend and retain knowledge as it relates to diagnosis, symptom management, mood and affect.

Many tools have been developed to measure perception of self-care agency but none specifically for the psychiatric patient. The Perception of Self-Care Agency (PSCA) tool was nonetheless used for Cutler's research study as it includes items related to physical and mental self-care; making it more appropriate for patients with mood disorders than any other tool available at the time of the study. The PSCA is a tool that measures an estimation of a patients' perception of their self-care abilities thus most appropriate for patients with physical illnesses.

Although tools to assess self-care in the areas of symptom management and medication compliance; Cutler concludes that medication compliance and symptom management are extremely important in decreasing relapses in psychiatry patients. Thus nursing interventions need to be geared towards recognition of symptoms, conducting medication education, problem solving, symptom management, and recognition and reporting of mood and affect changes and acute versus chronic stages of diagnosis. Nurses must assess the patients' competence in self-care activities; physically and mentally and along with the patient implement treatment plans to manage illness (Mental Health Nursing, 2003).

Additionally, Orem's Self-Care Theory was used by Carol Dashiff, Ph.D., RN in her study to "describe the perceptions of diabetes self and dependent care responsibility among young adolescents and their parents in two-parent families and to examine the relationship of these perceptions to metabolic control of diabetes" (Journal of Family Nursing, 2003).

Dashiff had 31 respondents (ages 12-15) with two parent families; she modified the Diabetes Family Responsibility Questionnaire (DFRQ) to assess adolescent self-care and parent dependent care. Dashiff assessed metabolic control by obtaining two consecutive Hemoglobin A1C results (it is used as a standard tool to determine blood sugar control in patients known to

have diabetes); two months apart. The findings of the DFRQ suggested that fathers are perceived to have less involvement in diabetes management than mothers. Insulin dependent diabetic patients demonstrated less disease management despite parental involvement than those patients not dependent on insulin to manage diabetes.

Adolescents that perceive they are most responsible for managing their diabetes have better control; however, in general adolescents are in poorer control of their diabetes as they age and parents lose some control over their adolescents' behaviors. The study could benefit from a larger participant pool and a longitudinal study process.

The study "Day surgery patients' convalescence at home: Does enhanced discharge education make a difference?" conducted by Young, O'Connell and McGregor uses Orem's SCDNT to determine if education is the key to successful self-care management post-operatively.

The researchers used a simple interrupted time series design, comparing generic post-operative education with specially designed "procedure specific" instructions. The participants were asked to keep a post-op diary that contained a specific Symptom Management Scale and Symptom Management Index designed by the researchers. The participants were contacted and interviewed by researchers on the tenth post operative day; findings indicated that the enhanced education had no significant effect on the recovery period or the patients' self-care abilities. However, the patients' recovery and ability to self-manage at home may be related to the patients' own healing abilities and prior knowledge of the importance of self-care (Nursing and Health Sciences, 2000).

Additionally, Frances Bernier, MSN, RN, C utilized Orem's SCDNT to demonstrate the affects of nursing care and self-care management on patients with urinary incontinence. The study "Relationship of a Pelvic Floor Program for Urinary Incontinence to Orem's SCDNT" conducted in 2001 demonstrates the value of the continence nurse and her ability to serve as facilitator, educator, resource person and cheerleader to patients while they achieve success in self-management of their continence problems. When patients present to continence centers, the nurse immediately recognize and accept their role and begin to establish trust and respect while developing an individualized program to assist patient with managing incontinence problems. The goal of the nurse is to garner active participation from the patient in all aspects of continence management; while the nurse works to improve the patient's symptoms. The study demonstrates that when nurses' deliver care based on Orem's SCDNT, continuity of care is inevitable.

The review of literature demonstrates continued interest and value in Orem's Self-Care Deficit Nursing Theory as well as how the theory can be applied to many patient care areas to improve patient outcomes and self-care management.

Rehabilitation nursing is totally about recognizing a patient and family need, performing interventions to fill the need while educating clients on self-care management techniques.

Review of Literature: Benner

While patients are waiting for admission to rehabilitation units following the acute care phase, it would be advantageous to the patient and family for acute care teams to prepare patients and their families for the different role nurses will play in their rehab. Assisting the acute care nurse to move along the continuum of novice nurse to expert nurse in rehabilitation services is essential.

Susan Barreca & Seanne Wilkins conducted a research study using Brenner's Novice to Expert theory; specifically the hermeneutic process (way in which people make sense of all experiences that come from being interconnected to others, objects, events and places). The purpose of the study was to explore the perceptions, beliefs and feelings of a group of nurses caring for patients on a stroke rehabilitation unit. The study utilized a hermeneutic interview process; eight nurses volunteered for the interview process (three RNs and 5 LPNs).

Barreca & Wilkins used broad open ended questions to gather information from the nurses. The findings suggested that nurses enjoyed caring for stroke patients and found viewed their care pivotal to the rehabilitation setting although some nurses reported they found it difficult to step back and allow the patients to do for themselves because of time constraints in their day to day work. In addition, nurses felt like patients did not receive the full benefit of nursing due to competing demands for the patient time by therapists and other members of the rehabilitation multidisciplinary team, nurses feel devalued as team members; however despite challenges, findings suggest nurses maintain their positive attitudes.

This study demonstrates the need to improve the knowledge and perception of the rehabilitation nurse to foster collegial support and contribute to rehab nurse's job satisfaction.

Many new graduate nurses are overwhelmed by multiple tasks, interruptions to their orientation and demands that staff shortages have on their orientation. Overwhelming the new graduate nurse and lack of perceived support leads to high turnover.

Jennifer Kingsnorth-Hinrichs utilized Benner's Novice to Expert Theory along with Locke's Goal Directed Theory to demonstrate the value of a segmented orientation process for new graduate nurses hired for the Emergency Department (ED). The goal of the research study was to analyze the effects of a segmented orientation process on turnover of new graduate nurses in a specialty area.

The study followed 26 new graduate nurses over two and a half years to assess the value of a segmented orientation program in the Emergency Department. Their orientation was divided into five segments: 1) formal orientation to main ED, 2) front-end assessment, 3) resuscitation-trauma/codes, 4) phase I precepting and 5) triage. This segmented process allowed the new graduate to focus on one area at a time to decrease anxiety and prevent them from becoming overwhelmed.

The results of the segmented orientation was deemed successful as 22 of the nurses remain in the ED of study; two were asked to leave because they did not meet competency expectations, one left to travel and one transferred to the pediatric intensive care unit. During the process of developing and fine tuning the segmented orientation, many experienced nurses had to be reminded of the skill and competency level of those they were orienting to ensure the new graduates received the support they needed to be successful members of the team (RN, 2009).

Additionally, the study conducted by Lynne Currie and Linda Watterson, 'Investigating the role and impact of expert nurses', utilized Benner's Novice to Expert theory to identify the attributes of the expert nurse as well as the direct and indirect impact they have on patient care, healthcare organizations and nursing in general. The term "expert nurse" is used broadly to describe many nurses; however, Currie and Watterson defined the expert nurse as highly effective communicators and reflective practitioners who exhibit heightened awareness and retains some direct contact with patients and improving care. This definition coincides with Brenner's definition as it relates to intuition and expert clinical care.

A longitudinal study with a survey was used to gather information on patient outcomes over three years. The study was conducted in the UK and the findings demonstrated a decrease in infection rates, increase in compliance rates related to nutritional components and subsequently a decrease in expenditures for healthcare organizations. Expert nurses have also had a positive effect of symptom control and psychological care. While the findings of the study indicate a need for clarity of the term 'expert nurse', as well as what the expectations are for the expert nurse, the study shows that care provided by expert nurses has a positive direct and indirect outcome on patients and healthcare organizations (British Journal of Nursing, 2009).

Benner's Novice to Expert theory has been utilized and tested time and again. The value of the theory to nursing practice remains relevant today. Skill acquisition, experience and time will progress a novice nurse to expert with the proper support from experienced peers and leaders. Expert nurses will recognize a potential rehabilitation patient and begin the process of educating the patient and family on the benefits and services of rehabilitation nursing without being directed to do so. This intuitive nursing practice will have a positive impact of the rehabilitation patient and ease their transition.

Review of Literature: Rehabilitation Nursing

Rehabilitation nurses care for patients of all ages; neonates to geriatrics. In addition to a variety of ages, rehabilitation nurses care for patients with many disabilities, illnesses and diagnosis'. The patient populations served consist of patients with spinal cord injuries, brain injuries, strokes, orthopedic injuries, and oncology diagnosis' as well as patients that have become debilitated from prolonged hospitalizations.

Spinal Cord Injuries usually occur with a blow that fractures or dislocates a person's vertebrae, the bone disks that make up the spine. Most injuries do not sever your spinal cord; they cause damage when pieces of vertebrae tear into cord tissue or press down on the nerve parts that carry signals. When a person sustains a complete spinal cord injury, the cord cannot relay messages below the level of the injury; resulting in paralyzes below the level of injury. An incomplete injury allows some movement and sensation below the injury. After treatment for the acute injury, patients will require long term medicine and rehabilitation therapy to reach their optimal level of health and functional levels faster, so they, and those around them, can return to a more productive lifestyle.

According to the National Institute of Disability and Rehabilitation Research; approximately 250,000 Americans have a spinal cord injury with 11,000 new injuries annually. 52% of Americans are paraplegic (two limbs paralyzed); 47% are quadriplegic (all four limbs paralyzed) and 82% of all spinal cord injured patients are male. The average age of the spinal cord injury patient is 31 years old with 56% of all injuries occurring between the ages of 16 and 30; most spinal cord injuries are due to motor vehicle accidents, violence, falls and sports (NIDRR, 2009).

Persons with spinal cord injuries need extensive medical care, physical, occupation and recreational rehabilitation, as well as patient and family education and supportive services.

A traumatic brain injury (TBI) is an acquired brain injury, occurring when a sudden trauma causes damage to the brain. TBI can result when the head suddenly and violently hits an object, or when an object pierces the skull and enters brain tissue. Symptoms of a TBI can be mild, moderate, or severe, depending on the extent of the damage to the brain. A person with a mild TBI (concussion) may remain conscious or may experience a loss of consciousness for a few seconds or minutes; they may also experience headache, confusion, lightheadedness, dizziness, blurred vision or tired eyes, ringing in the ears, bad taste in the mouth, fatigue or lethargy, a change in sleep patterns, behavioral or mood changes, and trouble with memory, concentration, attention, or thinking. A person who has sustained a moderate or severe TBI may display signs of a mild brain injury as well as a worsening or lingering headache, repeated vomiting or nausea, convulsions or seizures, difficulty or inability to arouse from sleep, dilation of one or both pupils of the eyes, slurred speech, weakness or numbness in the arms or legs, poor or loss of coordination, and increased confusion, restlessness, or agitation.

According to the Centers for Disease Control and Prevention approximately 1.7 million people sustain a brain injury annually; majority of the injuries are classified as mild (75%). Males sustain more brain injuries than females; most prevalent ages are those 0-4 years, 15-19 years of age and persons 65 and older. Brain injuries are sustained from motor vehicle accidents (17.3%), struck by/against events (16.5%), falls (35.2%) and violence (10%).

The treatment for a brain injury may include medications, physical, occupational, speech and recreational therapy as well as behavior modification and support services that allow patients to reintegration back into their communities (CDC, 2010).

Stroke is the third leading cause of death in the United States; approximately 137,000 people sustain a stroke annually. Stroke can cause significant disabilities; paralysis, speech and emotional difficulties. The risk factors for a stroke are inactivity (39.5%), obesity (33.9%), hypertension (30.5%), cigarette smoking (20.8%), high cholesterol (15.6%) and diabetes (10.1%). The signs of a stroke include sudden numbness or weakness of the face, arms or legs, sudden confusion or trouble speaking or understanding others, sudden trouble seeing in one or both eyes, trouble walking, dizziness, or loss of balance or coordination and sudden severe headache with no known cause (CDC, 2010). Immediate treatment and intervention is needed when signs and symptoms are noted. Stroke recovery can be a long process; after stabilizing the patient medically, a stay in an acute care rehabilitation facility is only the beginning. The average length of stay for a person with a stroke is 21 days. The goal of stroke rehabilitation is to maximize each individual's level of functioning and independence at home and in the community, and to provide education to the individual, family and caregiver; thus stroke recovery consists of medication, management of chronic illnesses, physical, occupational, speech and recreational therapies as well as stroke education for the patient and family.

Rehabilitation for persons with orthopedic conditions and injuries are as vast as the conditions and injuries themselves. Orthopedic rehabilitation specializes in providing physical rehabilitation for individuals whose orthopedic cases range from routine to complex.

Medical care focuses on regaining strength and mobility while nursing care focuses on helping persons build endurance so they can return to an active and independent lifestyle as quickly as possible.

Orthopedic conditions and injuries can be caused by arthritis (osteo and rheumatoid) and other degenerative diseases, sports injuries, workers compensation injuries, falls, motor vehicle accidents and injuries from violence. According to the CDC, 7.9 billion dollars are spent annually on hip and knee replacements due to some form of degenerative joint disease; osteoarthritis. An orthopedic injury requires varying lengths of stay in rehabilitation facilities with the average length of stay for patients undergoing total joint replacements is seven days and amputee care averages 14 days. Treatment plans for those with orthopedic injuries consist of medications, wound care, physical and occupational therapies, education and support services for reintegration into their community.

With more than 1.4 million new cases of cancer each year, cancer rehabilitation has become more prevalent and focuses on comprehensive patient care to provide improved quality of life with physiatrist interventions. Cancer rehabilitation emphasizes preventative, supportive, restorative and palliative aspects of care. Education and emotional support is vital for both patient and family members during daily physical, occupational and recreational therapy sessions as tolerated; medication and support services are also included in the treatment plan.

General rehabilitation nursing care is given to those persons that are debilitated from prolonged hospital stays. General rehabilitation care consists of medication management, wound care, physical, occupational and recreation therapy as well as education and support services for patients and their family members.

The goal of all rehabilitations services is to restore optimal health and functioning to all patients; despite diagnosis and provide continuum of care that allows the patient to reintegrate into their communities. This goal is met with both inpatient and outpatient services, with the support of the dedicated multidisciplinary rehabilitation nursing team.

The rehabilitation team consists of many roles; the physiatrist, Registered Nurses acting in many capacities, Licensed Practical Nurses and unlicensed personnel.

A physiatrist is a medical doctor that specializes in physical medicine and rehabilitation. The physiatrist works tirelessly to restore optimal function to people with injuries to the muscles, bones, tissues, and nervous system (American Heritage Stedman's Medical Dictionary, 447) while leading the rehabilitation team in the pursuit of optimal outcomes.

Registered Nurses (RN) are essential in the continuum of care for persons with disabilities or chronic illnesses. Our RNs serve in many capacities to ensure our patients receive quality, safe evidenced based care (Association of Rehabilitation Nurses). Some of the roles held by RNs are as follows:

- Rehabilitation RN managers have primary responsibility for implementing the mission, vision, policies, goals, and objectives of the organization and the nursing/clinical services within our specialty. Nurse Managers serve as liaisons between rehabilitation nursing, other disciplines, and administration. In the liaison role, rehabilitation nurse managers promote the philosophy and goals of the organization, the development of team relationships, and congruent rehabilitation practices. In addition, Nurse Managers allocate available resources for the efficient delivery of rehabilitation care and participate in executive decision making related to departmental functions.
- Rehabilitation RN admissions liaison nurses are responsible for activities and duties related to recruitment of patients, in-service education of patients and their loved ones, as well as staff and the general public. In addition, the admission liaison nurse performs preadmission evaluations, and admission of clients to services along the rehabilitation continuum of care.

- Rehabilitation RN case managers are charged with ensuring the patient receive quality, cost-effective healthcare services. The rehabilitation nurse case manager meets these charges by organizing rehabilitation healthcare services. They work closely with the medical team, facility, patient/family and third party payors to promote optimal level of health.
- Rehabilitation RN educators assesses initial and ongoing learning needs, plans and implements programs to meet these needs, and evaluates the outcomes of plans on the learner, the organization, and patient care. The rehabilitation nurse educator serves as a role model by demonstrating how to apply theory and incorporate research findings into clinical practice. The rehabilitation nurse educator collaborates with staff nurses, managers and others on the multi-disciplinary team to accomplish the educational goals.
- Rehabilitation RN researchers develop and maintain the knowledge base for nurses who care for individuals/families and groups with physical disability and chronic illness. Generally, a rehabilitation nurse researcher analyze and synthesize research to develop evidence-based practice relevant to rehabilitation nursing, develop clinical interventions to support implementation of research into practice and evaluates the impact of research utilization on clinical practice.
- Rehabilitation staff RN assist patients with adapting to an altered lifestyle, while providing a therapeutic environment for clients and their families' development. The rehabilitation staff nurse develops, implements and oversees treatment strategies that are based on scientific nursing theory related to self-care with the goal of promoting physical, psychosocial, and spiritual health.

Licensed Practical Nurses (LPN): The role of the LPN is to support the physician and registered nurse by performing tasks related to the care plan, assessing and reporting outcomes related to tasks performed and maintaining a therapeutic environment for the patients and their loved ones.

Unlicensed Assistant Personnel (UAP): UAPs consist of Certified Nursing Assistants I & II; provides basic direct nursing care under the direction of a licensed nurse, Unit Secretaries; provides clerical support to the nursing team by performing order entry, customer service and many other support services, Service Aides; provides support by performing duties as patient transport, customer service rounding, delivery and pick up of meal trays, sitter/safety duties and

many other tasks that support nursing.

Rehabilitation nurses must have a broad nursing knowledge to include areas of medical-surgical nursing, oncology nursing, orthopedic nursing, bariatric care, pediatric nursing and rehabilitation (functional) nursing. Annual nursing competencies include education in the areas of blood administration, central line care, veni-punctures, restraint management, medical reconciliation, order management, Hendrich Falls tool and infection control. Other competencies include heparin protocol, bowel and bladder management, ventilation care and management, skin and wound care/management as well as hypo/hyperglycemia recognition and treatment. In addition, rehabilitation nurses are basic life support providers and instructors, certified in advanced cardiac life support, pediatric advanced life support, non-violence crisis intervention and chairs of code blue and rapid response teams.

Rehabilitation nurses value education and like all specialty areas, rehabilitation nurses have a variety of educational levels. Rehabilitation nurses have obtained Masters of Nursing degrees, Bachelor of Science degrees and Associate of Nursing degrees. To obtain certification status; Certified Rehabilitation Registered Nurses (CRRN), RNs must have a minimum of two years of rehabilitation nursing experience and pass the certification exam with a passing score of 500 out of a maximum possible score of 600.

Rehabilitation nursing is supported by Association of Rehabilitation Nursing (ARN) and the American Nurses Association (ANA). ARN's mission is to promote and advance professional rehabilitation nursing practice through education, advocacy, collaboration, and research to enhance the quality of life for those affected by disability and chronic illness. ARN offers annual educational conferences each Fall to provide information on the latest evidenced

based care practices for rehabilitation patients.

In addition, ARN publishes the magazine '*Rehabilitation Nursing*' quarterly and provides opportunities for research grants and projects. There are both local and national chapters of ARN; both have ongoing educational opportunities and community projects.

Inpatient Rehabilitation Facilities (IRF) are accredited by The Joint Commission (TJC); independent, not-for-profit organization, that accredits and certifies more than 17,000 health care organizations and programs in the United States. Joint Commission accreditation and certification is recognized nationwide as a symbol of quality that reflects an organization's commitment to meeting certain performance standards and the Commission on Accreditation of Rehabilitation Facilities (CARF); an independent, nonprofit accreditor of human service providers in the areas of aging services, behavioral health, child and youth services, employment and community services, medical rehabilitation, and opioid treatment programs. IRFs also must meet all requirements of state and local regulatory agencies; Department of Health and Human Services, Occupational Safety and Health Organization, NC Labor Department and NC Board of Nursing.

Rehabilitation nursing is a specialty with knowledge and experience levels ranging from novice to expert as any other nursing specialty. This project utilizes Orem's SCDNT, specifically the assumptions about nursing to explain the need and basis of rehabilitation nursing in general. In addition, Brenner's Novice to Expert Theory is used to guide the development of the resource tool; moving the non-rehabilitation practitioner from the novice stage to at least the proficient stage by providing needed background knowledge to improve the patient's transition from the acute care setting to a rehabilitation arena.

Chapter III

Project Description

Subjects:

The study participants consisted of 352 healthcare providers; 294 Registered Nurses, seven Licensed Practical Nurses and 51 Nursing Assistants. All participants voluntarily completed the designed questionnaire during their annual competency week in March of 2008. The educational levels of the participating Registered Nurses varied from Associates Degrees to Masters Degrees. Complete demographic information for participant sample is presented in Table 1.

The purpose of the questionnaire was to establish a baseline perception of and knowledge level of rehabilitation nursing prior to ensure the proposed resource tool would meet the needs of the intended audience.

Setting:

The setting for this research project was the campus of a 22 hospital Health Care Organization in the southern United States. Both the 900 bed acute care hospital and 140 bed free standing rehabilitation facility was integral in the project.

Instrument:

Researcher developed a simple questionnaire as an educational needs assessment tool to gather baseline data. The tool consisted of demographic information and questions to establish perceptions of rehabilitation as a profession and clinical perceptions of rehabilitation nursing. A complete copy of questionnaire is listed in appendix (Appendix A). The results varied from question to question; see full results in Figures 4, 5, 6 & 7.

Procedure:

An educational needs assessment tool is a systematic process to acquire an accurate, thorough picture of the strengths and weaknesses of a group of people. The obtained data is used to determine priority goals and to develop a plan of action to build on strengths and improve knowledge deficits. The plan is to use the information gathered to develop a working educational booklet on Rehabilitation Nursing.

After developing the questionnaire, researcher received permission from the VP of Nursing at the acute care hospital to incorporate the questionnaire in the annual competency training of nurses and nursing assistants. The completion of questionnaire was strictly voluntarily; researcher took full responsibility for distributing and collecting questionnaires.

Five hundred questionnaires were printed and left for non-Rehabilitation staff during their annual competency week. The participants (RNs, LPNs, NAs and Resident MDs) were asked to complete and return the questionnaire prior to leaving the auditorium as a “needs assessment” tool.

Chapter IV

Outcomes and Evaluation Plan

Outcomes:

The researcher collected 352 (n=352) completed questionnaires at the end of annual competency week for a response rate of 70%. Three hundred one participants were nurses and 51 were nursing assistants; no medical residents completed the questionnaire. Of the 301 nurses, 294 were RNs and 7 were LPNs. Within the RN participants, 3 had obtained the level of MSN, 82 had obtained their BSN and the remaining 209 had obtained their ADN. See Table 1 for complete summary of demographic data.

The questions garnered various responses; however the question relating to a desire to “be more knowledgeable about rehabilitation nursing” received 352 “yes” responses for a response rate of 100% of returned questionnaires. See Figures 4-7 for complete response data to specific questions as they relate to tasks.

Table 1: *Demographic Data*

	Range	Frequency	Percent
Age	20-25 yrs	34	9.7
	26-30 yrs	57	16.2
	31-35 yrs	55	15.6
	36-40 yrs	79	22.4
	41-45 yrs	62	17.6
	46-50 yrs	30	8.5
	51-55 yrs	22	6.3
	56+ yrs	13	3.7
Gender	Female	290	82.4
	Male	62	17.6
Years Nursing Experience	0-2 yrs	99	23.3
	2-4 yrs	76	21.6
	4-6 yrs	3	0.9
	6-8 yrs	29	8.2
	8-10 yrs	51	14.5
	10+ yrs	97	27.6
Years with Organization	0-2 yrs	66	18.8
	2-4 yrs	85	24.1
	4-6 yrs	8	2.3
	6-8 yrs	21	6.0
	8-10 yrs	85	24.1
	10+ yrs	87	24.7
Education Level	NA	51	14.5
	LPN	7	19.9
	ADN	209	59.4
	BSN	82	23.3
	MSN	3	0.9
Rehab clinical in Nursing program	Yes	344	97.7
	No	6	1.7

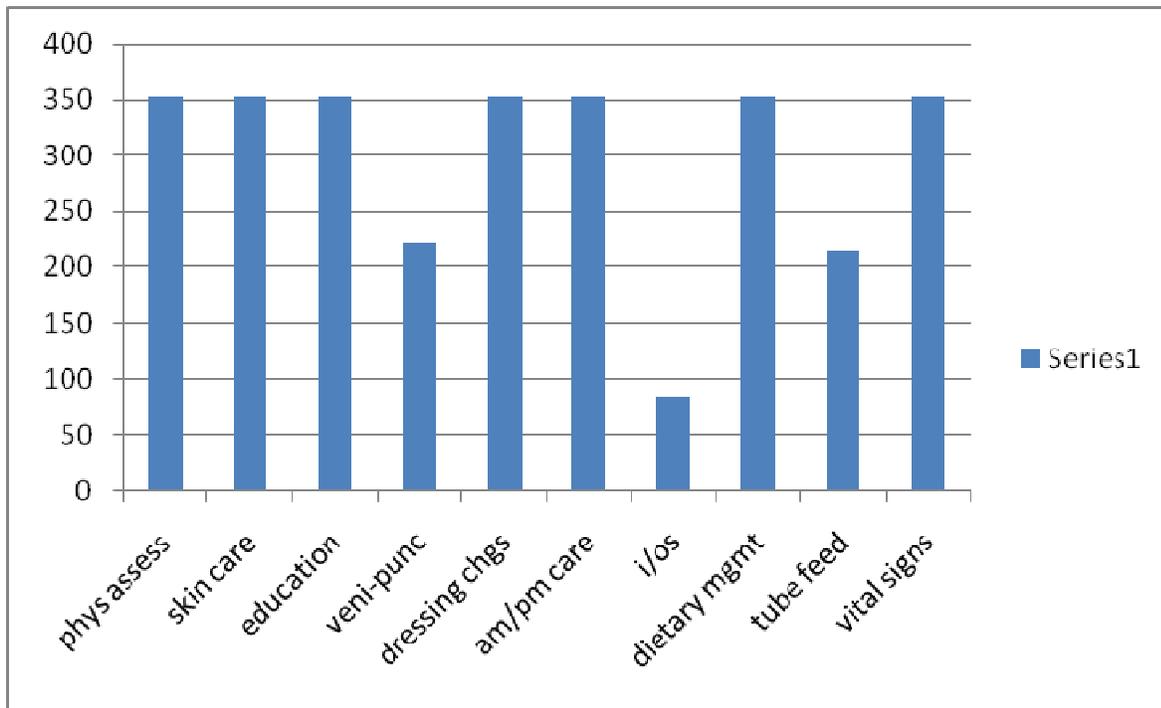


Figure 4 Participants responses to tasks 1-10

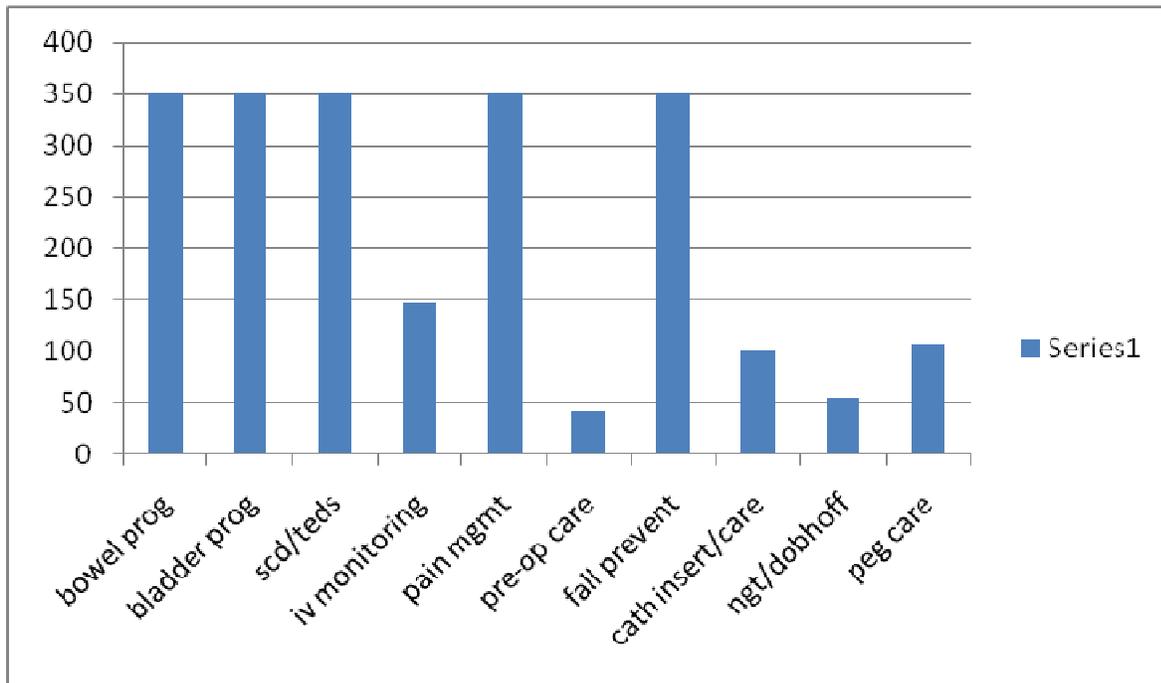


Figure 5 Participants responses to tasks 11-20

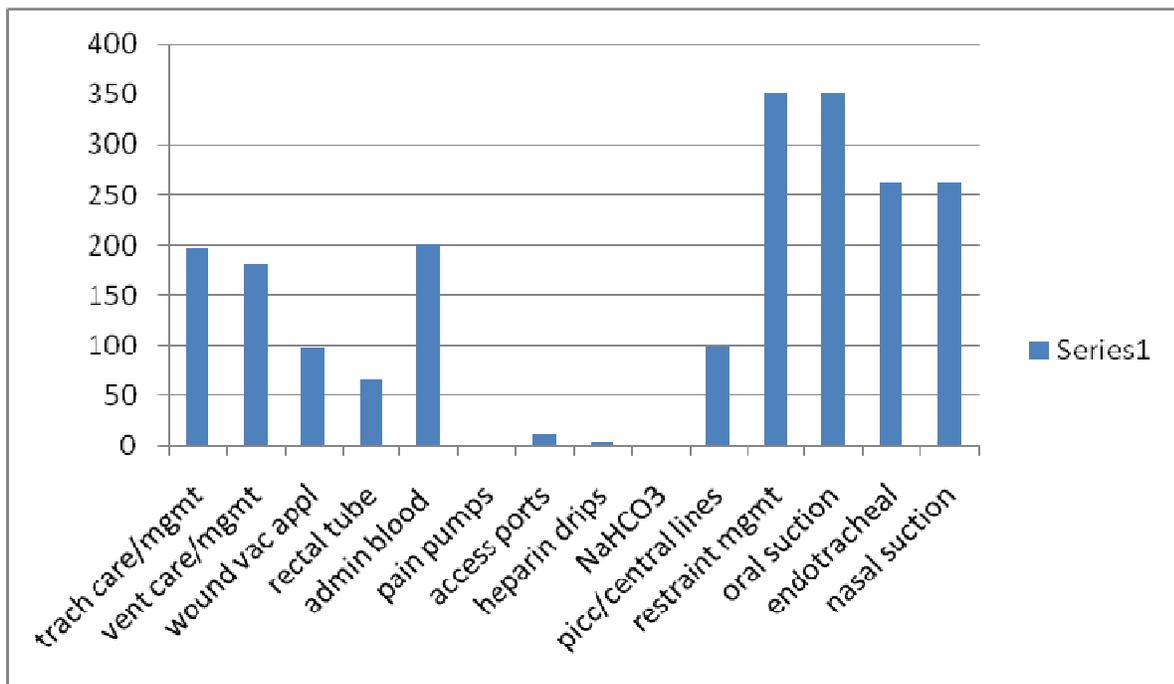


Figure 6 Participant responses to tasks 21-34

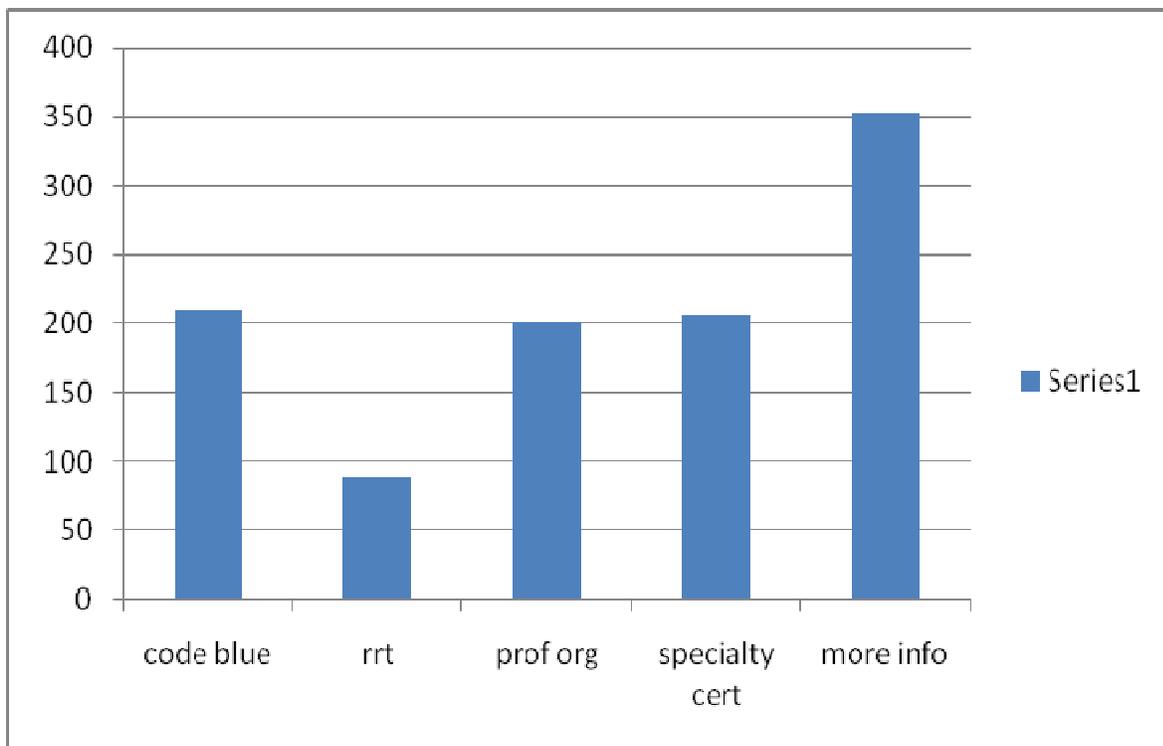


Figure 7 Participant responses to tasks/questions 35-39

Evaluation Plan

The researcher will evaluate the knowledge and skill acquisition from the utilization of the rehab resource tool six months after roll out of education and placement of the tool on each acute care unit.

The process that will be used to evaluate the effectiveness of the tool will be a post evaluation tool for all non-rehabilitation nurses, as well as, the nurses on the rehabilitation team. This twofold evaluation will provide the researcher with the necessary information to make appropriate changes to the resource tool if applicable. See Tables 3 & 4 for Post Evaluation Assessment Tools.

Table 2: *Evaluation Tool for Non-Rehabilitation Nurses*

Post Assessment Tool for Non-Rehabilitation Nurses		
Questions	Yes	No
Q1. Do you refer to the Rehab Resource Tool for needed information?		
Q2. Is the Rehab Resource Tool useful in educating staff about Rehab?		
Q3. Is the Rehab Resource Tool useful in educating patients and/or family?		
Q4. Are patients &/or family receptive to pre-rehab education?		
Q5. Do you feel better equipped to answer questions related to Rehab?		
Q6. Are physicians cooperative with rehab requests (catheters, IV access)?		
Q7. Do we need to revise resource tool?		
<p><i>Comments: If you answered “yes” to Q7 please comment on what needs to be added, removed or updated. Thanks for your dedication to safe, quality care throughout the healthcare continuum.</i></p>		

Table 3: *Evaluation Tool for Rehabilitation Nurses*

Post Assessment Tool for Rehabilitation Nurses		
Questions	Yes	No
Q1. Are you getting the information needed from the reporting facility?		
Q2. Are you spending less time educating patients/family about basic rehab principles?		
Q3. Have you noticed a decrease in service recovery issues due to promises made from previous facility?		
Q4. Fewer PICCs, central lines and foley catheters being removed by transferring facility on day of admission?		
Q5. Do we need to revise resource tool?		
<p><i>Comments: If you answered “yes” to Q5 please comment on what needs to be added, removed or updated. Thanks for your dedication to Rehab nursing.</i></p>		

Chapter V

Discussion

Project Summary:

Rehabilitation nursing is a specialty that demands a wide array of clinical skills and expertise to provide competent, safe patient care to all populations served. Patients move quickly through the continuum of care of acute care hospitals and arrive to inpatient rehabilitation facilities quicker and sicker; thus rehabilitation nurses and support staff must be prepared to care for patients of all acuity levels.

Rehabilitation nurses and their support staff provide physical and emotional support to patients and the families of patients with illnesses or disabilities that affect their ability to function normally and that may alter their lifestyle. Rehabilitation nurses may perform many basic nursing tasks, like cleaning wounds, administering medications, assisting patients with bodily functions, charting, and coordinating with a medical team, but they also perform tasks which are specifically related to rehabilitation. Performing rewarding task such as helping a patient learn to walk, eat, talk, write, or perform activities of daily living after an injury or illness which has impaired such skills.

Patient education and empowerment are also included among the goals of rehabilitation nursing. Assisting patients to regain optimal health and level of functioning as quickly as possible is the goal of all rehabilitation care and services.

As with all nursing specialties, rehabilitation nurses are expected to stay abreast of the latest evidenced based care practices, educational and support resources and tools/equipment that will enable patients to reintegrate into their communities with relative ease.

It is the responsibility of all rehabilitation nurses to ensure their non-rehab counter-parts are well versed in the care and services provided by rehabilitation staff to optimize the utilization of rehabilitation services for all appropriate patients. Increasing the knowledge of the non-rehab practitioner will have a positive impact on patient outcomes, family coping skills and healthcare organizations as a whole.

This project assessed baseline knowledge of non-rehabilitation nurses and nursing assistants; which indicated that many acute care healthcare providers did not fully understand the care and services provided by rehabilitation nurses. This demonstrates a need to educate acute care staff on rehabilitation services and benefits to patients.

The limitation of the project was questionnaires were only completed by nursing personnel; not the medical team. Obtaining a baseline assessment of non-rehabilitation medical doctors would be beneficial as a tool could be developed with them in mind as they refer patients to rehabilitation facilities.

Coupling Orem's SCDNT to explain rehabilitation nursing with Benner's Novice to Expert Theory reinforces the need for non-rehabilitation nurses to be better educated about rehab care and services; the lack of knowledge leads to missed opportunities to educate patients and families as well as decreased referrals to much needed rehabilitation which can have a negative impact on patient outcomes.

The completed educational resource tool will educate non-rehabilitation practitioners by specifically outlining the roles of the multidisciplinary team members, describe the patient population served, list routine tasks rehabilitation nurses are competent to perform as well as discuss the professional organization and certification of the rehabilitation Registered Nurse.

Implications for Nursing:

The findings of this study and others indicate that non-rehabilitation nurses have very little to no knowledge about what a rehabilitation nurse does for patients and communities. This lack of knowledge leads to missed referrals to an appropriate rehab facility, missed opportunities to educate patients and their families about rehabilitation services and missed opportunities to pre-educate patients about the differences in care received on a rehab unit.

Implications for nursing education programs is focused on more clinical time in rehabilitation settings; the aging population and increased chronic illnesses dictates that rehabilitation is here for the long haul.

Implications for acute care facilities should be to ensure all nurses can recognize the potential rehab patient and how to begin the rehab process to include education patients and family, requesting rehabilitation consults if not addressed by the attending physician and comfort with preparing the patient for their transition to an inpatient rehabilitation facility.

Implications for the rehabilitation setting should be to recognize the need to educate non-rehab nurses and promote rehabilitation nursing as a profession. In addition, rehabilitation nursing staff may want to devise a brief orientation about roles of multidisciplinary team members, the rehab profession in general, as well as specific points about rehabilitation nursing for clinical nursing students' rotation to enhance their learning while rotating through rehab units.

Implications for Further Study:

There is no disputing the fact that many nurses do not have an experiential base in rehabilitation nursing and that this lack of knowledge can have a negative impact on patient outcomes. Understanding what a rehabilitation nurse does and what rehabilitation facilities have to offer will go a long way to improving continuity of care. In addition, acquiring skills to educate patients and families on rehab care and services will move the nurse along the novice to expert continuum learning and skill acquisition.

In addition to completing a post assessment evaluation for the utilization of the rehab resource tool, another implication for further study would be to focus on obtaining a baseline assessment of the non-rehab medical doctor, physician assistants and nurse practitioners to determine the need to education that particular group of practitioners about rehabilitation care and services.

References

- Alligood, M. & Tomey, A. (2006) *Nursing Theorists and Their Work*, 6th Edition, St. Louis, Missouri: Mosby, 267-290
- The American Heritage Stedman's Medical Dictionary, 2nd Edition Copyright 2004. Houghton Mifflin Company. Published by Houghton Mifflin Company, 447
- American Nurses Association & Association of Rehabilitation Nurses. (1986). *Standards of rehabilitation nursing practice*. Kansas City, MO: Author.
- American Organization of Nurse Executives (AONE) (1992) *Role and functions of the hospital nurse manager*.
- American Nurses Association (ANA) (1995) *Scope and Standards for Nurse Administrators*.
- Association Rehabilitation Nurses. <http://www.rehabnurse.org>. Accessed November 9, 2009
- Benner, P. & Benner, R. (1999). *The clinical practice development model: Making the clinical judgment, caring and collaborative work of nurses visible*. In B. Haag-Heitman (Ed.), *Clinical practice development: Using novice to expert theory* (pp. 17-42). Gaithersburg, MD: Aspen
- Bernier, F. (2002). *Relationship of a Pelvic Floor Rehabilitation Program for Urinary Incontinence to Orem's Self-Care Deficit Theory of Nursing*. *Urological Nursing*; 22:6 February 22, 2010
- Callaghan, D. (2003). *Health-Promoting Self Care Behaviors, Self-care Self-efficacy, and Self-Care agency*. *Nursing Science Quarterly*; 16:3
- Carolinas Rehabilitation. <http://www.carolinasrehabilitation.org/body>. Accessed January 17, 2009
- Centers for Disease Control and Prevention. http://cdc.gov/stroke/facts_statistics.htm. Accessed March 5,

- Commission on Accreditation of Rehabilitation Facilities. <http://carf.org>. Accessed March 4, 2010
- Currie, L. & Watterson, L. (2009). *Investigating the Role and impact of Expert Nurses*. British Journal of Nursing; 18: 816-824
- Cutler, C. (2003). *Assessing Patients' Perception of Self-Care Agency in Psychiatric Care*. Issues in Mental Health Nursing, 24:199-211
- Dashiff, C. (2003). *Self and Dependent Care Responsibility of Adolescents with IDDM and Their Parents*. Journal of Family Nursing; 9:166
- Good Samaritan Community Healthcare. (1993). Position summary: Job description for registered nurse. Puyallup, WA: Author. McCourt, A. (Ed). (1993). *The specialty practice of rehabilitation nursing: A core curriculum* (3rd ed.). Skokie, IL: Rehabilitation Nursing Foundation.
- The Joint Commission. <http://jointcommission.org>. Accessed March 1, 2010
- Kingnorth-Hinrichs, J. (2009). *Growing New Graduates....it takes a village*. RN; 40-44
- Kneafsey, R. & Long, A. (2002). *Multidisciplinary rehabilitation teams: the nurse's role*. British Journal of Therapy and Rehabilitation 8, 24-28
- Koplan, J., Fleming, D. (2000). Current and future public health challenges. JAMA; 284:1696-8
- Mumma, C. (Ed). (1987). *Rehabilitation nursing: Concepts and practice—A core curriculum* (2nd ed.). Evanston, IL: Rehabilitation Nursing Foundation.
- McEwen, M., & Wills, E., (2007). *Theoretical Basis for Nursing*, 2nd Edition. Philadelphia, PA: Lippincott Williams & Wilkins.
- National Institute of Disability and Rehabilitation. <http://nidrr.gov>. Accessed December 10, 2009

Priebe, M., Chiobo, A., Scelza, W., et al (2007). *Spinal cord injury medicine. long-term medical issues and health maintenance*. Archives of Physical Medicine and Rehabilitation. 88(3).

Young, J., O'Connell, B., & McGregor, S., (2000). *Day surgery patients' convalescence at home: does enhanced discharge education make a difference?* Nursing and Health Sciences, 2:29-39

Appendix A
Questionnaire

Questionnaire

Please complete and return to box as you exit the auditorium. Thanks

Discipline? (check one): RN ___ LPN ___ NA ___ MD ___

If RN; educational level? ADN ___ BSN ___ MSN ___ PhD ___

Years of healthcare experience? (check one): 0-2 yrs ___ 2-4 yrs ___ 4-6 yrs ___
6-8 yrs ___ 8-10 yrs ___ 10+ yrs ___

Years employed with CHS? 0-2 yrs ___ 2-4 yrs ___ 4-6 yrs ___ 6-8 yrs ___
8-10 yrs ___ 10+ yrs ___

Did you have a Rehabilitation clinical rotation in your educational program? (check one): Yes ___ No ___

Check those you feel is applicable to Rehabilitation Nursing (check all that apply):

- | | |
|--|---|
| <input type="checkbox"/> Physical assessments | <input type="checkbox"/> Vent care/management |
| <input type="checkbox"/> Wound Vac application and monitoring | <input type="checkbox"/> Skin care/monitoring |
| <input type="checkbox"/> Education | <input type="checkbox"/> Pre-op care |
| <input type="checkbox"/> Veni-punctures | <input type="checkbox"/> Fall Prevention Measures |
| <input type="checkbox"/> Trach care/management | <input type="checkbox"/> Dressing changes |
| <input type="checkbox"/> Bowel programs | <input type="checkbox"/> Code Blue Response |
| <input type="checkbox"/> Rectal Tubes | <input type="checkbox"/> Catheter insertion/care/management |
| <input type="checkbox"/> AM/PM care | <input type="checkbox"/> Pain Pumps |
| <input type="checkbox"/> Vital Sign monitoring | <input type="checkbox"/> Heparin drip protocol |
| <input type="checkbox"/> Bladder training | <input type="checkbox"/> Sodium Bicarb Protocol |
| <input type="checkbox"/> SCDs/TEDs | <input type="checkbox"/> Access ports |
| <input type="checkbox"/> Administration of blood products | <input type="checkbox"/> NGT/dobhoff insertion/management |
| <input type="checkbox"/> I&Os | <input type="checkbox"/> Tube Feedings |
| <input type="checkbox"/> Intravenous monitoring | <input type="checkbox"/> PICC/Central line management |
| <input type="checkbox"/> Nutritional/Dietary management | <input type="checkbox"/> PEG care/management |
| <input type="checkbox"/> Pain Management | <input type="checkbox"/> Professional Organizations |
| <input type="checkbox"/> Suctioning: Oral ___ Endotracheal ___ Nasal ___ | |
| <input type="checkbox"/> Specialty Certification | <input type="checkbox"/> Rapid Response Team |
| <input type="checkbox"/> Restraint management | |

Would you like to be more knowledgeable about Rehabilitation Nursing? (check one) Yes ___ No ___

Appendix B

Rehabilitation Resource Tool



Closing the Gap on Rehab Nursing.....

Basic Need To Know Info

Introduction

Rehabilitation nurses provide holistic care to all patients served using the 'Self-Care Deficit Nursing Theory' developed by Dorothea Orem.

Rehabilitation nurses must have a strong knowledge base in the care of medical-surgical patients, patients with orthopedic and neuro-traumatic injuries and deficits as well as patients with oncological diagnoses.

A rehabilitation nurse manages the following patient populations:

- Brain Injuries (traumatic and non-traumatic)
- Spinal Cord Injuries
- Orthopedic Injuries & Amputees
- Strokes
- Cancer
- General medical-surgical patients with declining functioning status

Services Provided During Rehab Stay

Medication management
education

Family

Management of chronic illnesses

Ongoing bedside education

Services of Social Worker
management

Case Management services
services

Physical therapy

Discharge planning

Pet therapy if desired

Dietary

Sunday Church

Beauty/Barber Shop

Speech therapy if applicable Scheduling of outpatient care if
needed

Occupational Therapy

Recreational therapy

Weekly group education classes by diagnosis

Roles of Multidisciplinary Team Members

Physiatrist: A physiatrist is a medical doctor that specializes in physical medicine and rehabilitation. Physiatrists specialize in restoring optimal function to people with injuries to the muscles, bones, tissues, and nervous system.

Registered Nurses (RN): The role of the Rehabilitation Registered Nurse is essential in the continuum of care for persons with disabilities or chronic illnesses. Our RNs serve in many capacities to ensure our patients receive quality, safe evidenced based care.....

- *Rehabilitation RN managers have primary responsibility for implementing the mission, vision, policies, goals, and objectives of the organization and the nursing/clinical services within our specialty. Nurse Managers serve as liaisons between rehabilitation nursing, other disciplines, and administration. In the liaison role, rehabilitation nurse managers promote the philosophy and goals of the organization, the development of team relationships, and congruent rehabilitation practices. In addition, Nurse Managers allocate available resources for the efficient delivery of rehabilitation care and participate in executive decision making related to departmental functions.*
- *Rehabilitation RN admissions liaison nurses are responsible for activities and duties related to recruitment of patients, in-service education of patients and their loved ones, as well as staff and the general public. In addition, the admission liaison nurse performs preadmission evaluations, and admission of clients to services along the rehabilitation continuum of care.*

- Rehabilitation RN case managers are charged with ensuring the patient receive quality, cost-effective healthcare services. The rehabilitation nurse case manager meets these charges by organizing rehabilitation healthcare services. They work closely with the medical team, facility, patient/family and third party payors to promote optimal level of health.
- Rehabilitation RN educators assesses initial and ongoing learning needs, plans and implements programs to meet these needs, and evaluates the outcomes of plans on the learner, the organization, and patient care. The rehabilitation nurse educator serves as a role model by demonstrating how to apply theory and incorporate research findings into clinical practice. The rehabilitation nurse educator collaborates with staff nurses, managers and others on the multi-disciplinary team to accomplish the educational goals.
- Rehabilitation RN researchers develop and maintain the knowledge base for nurses who care for individuals/families and groups with physical disability and chronic illness. Generally, a rehabilitation nurse researcher analyze and synthesize research to develop evidence-based practice relevant to rehabilitation nursing, develop clinical interventions to support implementation of research into

practice and evaluates the impact of research utilization on clinical practice.

- Rehabilitation staff RN assist patients with adapting to an altered lifestyle, while providing a therapeutic environment for clients and their families' development. The rehabilitation staff nurse develops, implements and oversees treatment strategies that are based on scientific nursing theory related to self-care with the goal of promoting physical, psychosocial, and spiritual health.

Licensed Practical Nurses (LPN): The role of the LPN is to support the physician and registered nurse by performing tasks related to the care plan, assessing and reporting outcomes related to tasks performed and maintaining a therapeutic environment for the patients and their loved ones.

Unlicensed Assistant Personnel (UAP): UAPs consist of Certified Nursing Assistants I & II; provides basic direct nursing care under the direction of a licensed nurse, Unit Secretaries; provides clerical support to the nursing team by performing order entry, customer service and many other support services, Service Aides; provides support by performing duties as patient transport, customer service rounding, delivery and pick up of meal trays, sitter/safety duties and many other tasks that support nursing.



Pre-Rehab Dos.....

Inform referred patients of the following:

➤ *Items to bring to Rehab:*

- *Regular street clothes; preferably button shirts & pull on pants (sweats)*
- *Shoes with non-slip soles (sneakers)*
- *Toiletries*



- Family photos/personal items that comfort & motivate
 - Dentures & Glasses
 - Assistive devices used at home (walker, wheelchair, cane, etc)
- Rehab visiting hours: Monday-Friday 1600-2100; Saturday & Sunday 0900-2100
- 24 hour nursing care/management provided as well as three hours of therapy daily after initial therapeutic evaluation; participation required
- Family encouraged to participate in discharge planning and management of chronic conditions
- Social Work and Clinical Case Management involved in treatment & discharge plans



Pre-Rehab Don'ts.....

Please do not promise patients the following:

- *Private rooms (limited; thus based on medical necessity)*
- *Guest trays (Rehab does not provide them)*
- *Sitter services (must be provided by family if desired)*
- *Housing accommodations for family*
- *Specified lengths of stay*
- *They will continue to be followed by their surgeon or MD from acute care services*

Rehab Nursing Competencies (Not all inclusive)



ventilated patients

feeding tubes

code blue response

venipunctures & access ports

RRT

pain pumps

pre & postop care

pain management

skin and wound care

trach care & suctioning

heparin & sodium bicarb protocols

tube feedings/PEG care

bowel & bladder programs

PICC & central line management

Rehab Nursing Report Needs

In an effort to provide continuity of care, please be prepared to provide the following patient information when giving admission report.....

Name DOB Age Gender Orientation status

Diagnosis Medical history Allergies Diet

Code Status Last BM & void

Anticoagulant therapy & last dose

Continence status (bowel & bladder) Pain medication & last dose

IV access & fluids Skin/Wound condition

Transfer/Weight bearing status

Last set of vital signs Name of surgeon and/or consulted

specialists

Blood sugars; how often & last result Precautions

Rehab Nursing Requests

We appreciate your efforts to accommodate the following requests....

Do not discontinue PICC line prior to transfer

(Patient's have PICC lines due to inability to obtain peripheral access otherwise; all new admissions needs blood work. We will discontinue after lab work and review from MD)

Do not discontinue foley catheter prior to transfer

(We will discontinue foley within 24 hours after admission; this allows us to adequately monitor bladder function)

Medicate for pain prior to transfer

(The rehab admission process takes 2-3 hours thus the patient will be in pain until orders are written and processed)

Provide breakfast, lunch or dinner prior to transfer

(The rehab process takes 2-3 hours thus the patient will be hungry until orders are written and processed)



Notes

