

Bedside Physical Therapy Project to Prevent Deconditioning in Hospitalized Patients With Cancer

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The hematology-oncology unit at Christiana Care Health System has 51 beds, including a 6-bed bone marrow transplant unit. Patients are older than 18 years and usually are admitted to receive chemotherapy or to address complications related to their disease. Lengths of stay range from a few days to several months, depending on each patient's condition. Nursing staff on the unit noticed that patients with longer hospitalizations often experienced physical deconditioning, which resulted in longer hospitalizations, more falls, decreased patient satisfaction, and escalating costs for patients and the healthcare facility.

Deconditioning in patients with cancer is a common issue related to the disease itself, side effects of treatment, or comorbid conditions (Cheville, 2005; Evans & Lambert, 2007; Fouladi et al., 2005; Guise, 2006; Hartvig, Aulin, Wallenberg, & Wagenius, 2006). To prevent deconditioning, oncology inpatients should receive physical therapy (PT) during their hospital stays if possible (Hartvig et al.; Kirshbaum, 2007; Lynch, Schertzer, & Ryall, 2007; Movsas et al., 2003; Stricker, Drake, Hoyer, & Mock, 2004; Trojjan, Mody, & Chain, 2007; Young-McCaughan, 2006).

Oncologists caring for patients at Christiana Care Health Services, Inc., in Newark, DE, routinely ordered PT for their patients

to prevent deconditioning. The physicians became increasingly frustrated when patients were not able to receive the therapy, primarily because of transport issues. Several other reasons for not receiving PT were noted as well. For example, staff on the unit reported that some patients refused to go to PT. The hematology-oncology unit is located on the sixth floor of the hospital, and the PT department is located on the first floor. Patients often did not feel well during chemotherapy treatment and did not want to travel to PT. For patients, the trip to the PT department was exhausting, before a therapy session even started. Other reasons patients missed PT included pain, nausea, diarrhea, discomfort during transport, and fear of being away from their hospital rooms. As a result, only 30% of patients received PT or occupational therapy (OT) during their hospital stays in 2004. Timely PT evaluations were needed for physicians and case managers to make appropriate plans for patient discharge, and preventing deconditioning was an important goal. Patients' refusals to attend PT sessions often led to delays in discharge planning. In addition, family members, caregivers, and physicians expressed concerns regarding the patients' deconditioning while in the hospital and the resultant delays in discharges.

In 2004, the average length of stay on the hematology-oncology unit exceeded the

hospital's average length of stay by four days. The fall rate on the unit also was above the hospital average. The oncology staff believed that the findings were related, in part, to deconditioning of patients caused by a lack of timely PT and OT intervention during hospitalization. Physicians also expressed concern that length of stay was prolonged because of a lag time in completing initial PT evaluations, leading to delays in arrangements for home PT. Satisfaction surveys, completed after discharge from the unit, indicated that patients were frustrated by their lack of readiness for discharge.

Addressing the Issue

The nurse manager of the hematology-oncology unit met with the physician unit director to discuss how to remedy the situation. They decided that a broader approach was needed to address the issue. Therefore, a multidisciplinary team was convened to discuss ways to prevent deconditioning and to improve outcomes for patients with cancer who were admitted to the unit. The team included two physicians who specialized in physical medicine and rehabilitation, the nurse manager of the unit, representatives from PT and OT, and nursing staff members. The team met approximately 10 times over the course of the following year to map out a plan of action. As a result of the meetings, a new system was designed and implemented to facilitate initial patient evaluations at the bedside by the PT and OT departments. Under the new system, a physical or occupational therapist would complete an initial assessment of a patient within 48 hours of admission to the unit. During the

Leadership & Professional Development

This feature provides a platform for oncology nurses to illustrate the many ways that leadership may be realized and professional practice may transform cancer care. Possible submissions include but are not limited to overviews of projects, accounts of the application of leadership principles or theories to practice, and interviews with nurse leaders. Descriptions of activities, projects, or action plans that are ongoing or completed are

welcome. Manuscripts should clearly link the content to the impact on cancer care. Manuscripts should be six to eight double-spaced pages, exclusive of references and tables, and accompanied by a cover letter requesting consideration for this feature. For more information, contact Associate Editor Paula Klemm, PhD, RN, OCN®, at klemmpa@udel.edu or Associate Editor Judith K. Payne, PhD, RN, AOCN®, at payne031@mc.duke.edu.

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Digital Object Identifier: 10.1188/08.ONF.343-345

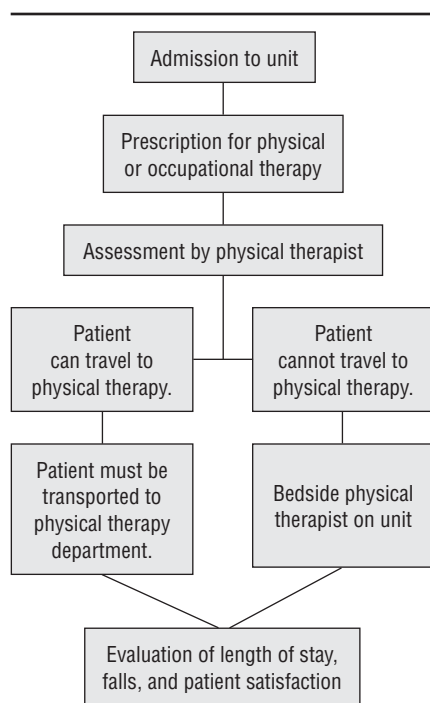


Figure 1. Bedside Physical Therapy Decision Tree

assessment, the therapist would determine whether the patient was able to travel to the PT department for therapy or should undergo a bedside program of therapy (see Figure 1). A physical or occupational therapist set goals for mobility and activities of daily living after the initial evaluation and documented the information on the patient's interdisciplinary plan of care, which was available to all members of the patient's healthcare team.

Prior to implementing the new system, the staff development specialist and nurse manager conducted an inservice class about the changes for the nursing staff on the unit. All patient caregivers on the unit were encouraged and expected to promote the continuation of patient progress toward therapy goals during all shifts, not just when a therapist was at the bedside. Additional exercise and mobility equipment (e.g., walkers, exercise bands) was housed on the unit. Patients were able to use the equipment with physical and occupational therapists during treatment, but it also was available around the clock so that patients could exercise under the supervision of nursing staff.

Distance markers were displayed on the floor of the unit to increase patient and staff awareness of ambulation endurance and to promote patient involvement in achieving individual goals. The distance markers were placed around the central information desk of the unit and at five-foot increments so that patients could keep track of the distances they walked.

In addition, multidisciplinary rounds were conducted weekly on the unit with members of the original formation team to monitor progress of the new approach. Nursing staff monitored the length of time between initial orders for therapy by physicians and actual evaluations by the PT and OT departments.

Results

The new plan was implemented in February 2005. Performance-improvement staff members reviewed 250 patient charts between February and April of 2005. The data indicated that 50% of the patients had a written prescription for therapy, and 82% of those patients were assessed by a physical or occupational therapist within 48 hours and received services during their hospitalization. Sixty-nine percent received therapy services at the bedside. Eighteen percent of patients who were prescribed PT or OT did not receive it. The reasons varied: condition change, refusal, nausea, discharge prior to evaluation by a therapist, and diagnostic tests scheduled at the same time.

The effect of the new program was determined through a chart review that compared baseline data collected between February and April of 2004 to data collected between February and April of 2005. Areas that were measured included the timing of the initial PT or OT evaluation, patient fall rate on the unit, length of stay, percentage of patients receiving bedside therapy, and patient satisfaction. Initial data from February through April of 2004 revealed that 51% (PT = 28%, OT = 23%) of patients received an initial PT or OT assessment within 48 hours of it being prescribed by a physician. After the implementation of the new program, 77% (PT = 40%, OT = 37%) of patients received an initial PT or OT evaluation within two days of the prescribed evaluation, a 26% increase. Length of stay on the oncology unit dropped by 14% as compared to before the program was initiated, and the fall rate decreased to mirror that of the hospital in general.

Discussion

The new system for receiving PT or OT was received favorably based on feedback from staff and patients. Staff members liked the fact that their patients were getting the therapy needed to prevent deconditioning and increase overall strength. In addition, the health and safety of patients not able to travel to PT were not compromised because they received therapy on the unit. Patients, families, and physicians expressed verbal satisfaction with the bedside therapy program and the outcomes for patients. Ensuring that therapy goals continued to be included in the plan of care for every shift took some adjustment by staff, but all were eventually receptive to the change. The fact that the project provided a direct benefit to patients was the key to facilitating its success. Evaluation of the

program is ongoing, with the ultimate goal to achieve 100% of PT and OT evaluations within two days of prescription. To achieve the goal, a physical therapist is assigned to the unit Monday through Friday. The therapist makes rounds on patients who have been prescribed PT or OT and asks each patient's nurse about ambulation issues as appropriate. The nurses actively seek the therapist on the unit when an order has been written for a consultation. Length of stay on the unit is evaluated periodically and compared to the rest of the hospital.

Barriers to Success

The primary barrier to success was staff resistance to the change in procedure, even though it enabled patients to receive PT and OT at the bedside versus being transported. When nurses, therapists, and physicians began to see the results of the new approach (e.g., fewer falls, decreased length of stay), their reluctance vanished.

Facilitators to Success

The most important factor that expedited the success of the project was that it was designed solely to benefit patients with cancer. The unit had an overall sense of accomplishment because patients were able to remain mobile during their hospital stays. The physical therapist assigned to the hematology-oncology unit is dedicated to that mission and continues to be a great motivator to the patients. Another facilitator of the success of the program was the multidisciplinary approach in planning the program. Nurses, physical and occupational therapists, and physicians all had input into setting up the new program.

Implications for Oncology Nurses

A very simple change can make a big difference in patient outcomes. Something as simple as bringing PT and OT to the bedside of patients has led to improved physical conditioning, fewer falls, decreased length of stay, and improved patient and staff satisfaction.

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