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This issue of the Journal of Acute Care Physical Therapy contains manuscripts describing interaction with other healthcare providers. David Village describes the rehab of a patient with ostitis pubis who could not get relief from surgery and medical treatments alone. Christopher Wilson, Margaret Beaumont, Katie Alberstadt, Jennifer Drake, Karen Ednalno, Meagon Thornsberry, and Sarah Zahringer describe a patient handling education program for nursing assistants. Our third original research paper by Christine Perme, Colleen Lettvin, Terry A. Throckmorton, Katy Mitchell, and Faisal Masud reports the results of their retrospective study on mobility and walking for patients with femoral arterial catheters in intensive care.

All three of these demonstrate a healthy relationship with other healthcare providers. The patient with ostitis pubes did not have a satisfactory outcome with surgery alone, medical treatment, or physical therapy interventions commonly prescribed by physicians. Instead, the author shows how taking a holistic approach to the patient via the principles of the Guide to Physical Therapist Practice was able to produce an outcome satisfactory to the patient.

Nursing assistants are frequently put at risk of musculoskeletal injury through mobilizing patients with low functional levels—the same patients for whom physical therapists in acute care facilities are often sent “orders” for “O&B” and “walk in halls TID.” Rather than complain about inappropriate patients congesting their schedules, physical therapists are often in the position to train mobility aides in transfer techniques and equipment to move patients strictly for the purpose of getting them from one place to another. This provides the opportunity for the physical therapist in an acute care setting to spend more time either improving the mobility of those with the potential for independent mobility or for training caregivers in mobilizing patients who cannot.

The retrospective study on mobilizing patients with femoral arterial catheters was a collaborative effort involving physical therapists, nurses, and physicians. Many of the restrictions placed on providing physical therapy services are based on fear of potential injury to the patient instead of science. Many of us have encountered what we consider unfounded fear of mobilizing patients, whether due to patients having certain types of equipment, being on certain types of medications, having certain lab values, or having particular types of conditions in spite of literature supporting mobilizing these patients or the lack of literature showing an undue risk of mobilizing them. We can all tell stories of certain physicians or nurses who would not allow us to mobilize a patient in spite of us already working with that patient via the principles of the Guide to Physical Therapist Practice. We must find ways to decrease the burden on those who help us. We must find ways to get physicians to seek us out as the experts on improving mobility.

The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effect of a patient mobility program was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study. The effectiveness of a patient handling education program for nursing assistants as taught by physical therapy and nursing educators was measured in a retrospective study.

Suppose we just gave into dogma and never mobilized patients with femoral arterial catheters, low platelet levels, etc. In this case, patients would be discharged at a lower level, and many would not be able to return to their life roles. In the worst case, many of these patients would never leave the ICU alive. In addition to the manuscripts, we have a transcript of the inaugural Acute Care Distinguished Lecture by James Dunleavy. Our founding president offers insights through the history of physical therapy itself, the history of the Acute Care Section, and the potential future of the practice of acute care physical therapy. Autonomy is an important theme, but we must more fully explore what autonomy means to the practice of physical therapy. To many, autonomy has meant abandoning acute care for private practice clinics. If autonomy is measured by less interference by other healthcare providers and greater income, perhaps abandoning acute care was a success. However, autonomy must be viewed as multifaceted. Autonomy in the sense of us considering the patient’s plan of care is an important theme, but autonomy also means collaborating with other professions, and it additionally asks us to consider autonomy in the sense of compensation models for providing physical therapy services. Many of us already practice in settings that demonstrate the collaboration exemplified in the manuscripts in this issue of JACPT and in Jim’s lecture. I hope that we are able to do so as well. The authors of these manuscripts and conduct research projects that will fuel quality improvement and grow the literature base of acute care physical therapy.
CASE REPORT

Physical Therapy Management of an Older Individual Following Symphysis Resection Due to Osteitis Pubis

David Village

ABSTRACT

Background and Purpose: Osteitis pubis (OP) is an inflammatory disease of the pubic symphysis most often associated with young athletes, but it can also occur in older individuals. Conservative management is usually successful, but on rare occasions surgery is required. A gap in the literature exists regarding the rehabilitation of older individuals in the acute care setting.

Case Description: This case report describes the 2-week acute and skilled nursing facility physical therapy for a 61-year-old woman who underwent pubic symphysis resection secondary to OP.

Outcomes: This patient made progress toward achieving the stated anticipated goals. Initial post-operative surgical pain slowed improvement with functional mobility activities.

Conclusion: This case report describes the elements of physical therapy management for a patient with symphysis resection due to OP. The description follows the APTA’s Guide to Physical Therapy Practice in outlining the physical therapy examination, evaluation, diagnosis, prognosis, and intervention for this patient. Physical therapists may be unfamiliar with this patient population due to the infrequency of the surgery. This highly motivated patient made significant improvement in a short amount of time in the acute care and skilled nursing facility settings receiving treatment based on conventional principles of physical therapy management.

Key Words: osteitis pubis, symphysis resection, physical therapy, acute care, geriatric.

INSTRUCTIONS FOR AUTHORS

Journal of Acute Care Physical Therapy is the journal of the Acute Care Section-APTA. The goal of the publication is to provide timely information to Section members in matters that relate to acute care physical therapy practice. We accept articles that offer a professional opinion, clinical approaches and techniques, research, literature review, and continual quality improvement information. JACPT is published four times a year and is mailed to Section members and paid subscribers. JACPT is copyrighted and registered with the Library of Congress. It is indexed in EBSCO and Gale. Articles are submitted directly to the Editor-in-Chief. At least two reviewers and an Associate Editor will review submitted articles. The Editor-in-Chief is ultimately responsible for all decisions.

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Tables and Illustrations:

Citations for illustrations as well as tables must be submitted in a separate document, i.e., list of tables and list of figures. Citations or titles may not be embedded in illustrations or tables. Placing labels within illustrations is discouraged. If text labels are included in a figure, they must be of sufficient size to be legible when the illustration is reduced to the width of one column of the publication. Authors must obtain and submit written permission to publish photographs in which patients are recognizable. Black and white photographs copy best. Electronic jpeg format is preferred and must have a minimum resolution of 150 dpi.

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Osteitis pubis (OP) is an inflammatory disease of the pubic symphysis that can be very painful. It usually involves the pubic bone, symphysis, and surrounding soft tissues. Although the etiology of osteitis pubis remains unknown, several predisposing factors have been described in the literature. These factors include pelvic surgery, specific local infections, pelvic trauma, vaginal delivery, and strenuous activities involving the lower extremities (such as in certain sports and especially ballet), and rheumatoid arthritis. In some cases, OP, none of these predisposing factors are present. Most frequently, osteitis pubis is diagnosed among male participants in sports such as soccer, football, rugby, and tennis that involve extreme forces of the pubic, lower abdominal, and hip muscles, although OP incidence is increased in female athletes. Occasionally, OP is associated with childbirth or surgery to the pubic area. Although most patients are young, it can occur in older individuals.

Individuals with OP present with a number of symptoms. The initial presentation of OP commonly includes insidious onset of adductor pain and discomfort along with pain in the pubic symphysis. OP may also present with increased hip flexion spasms, and increased pain when lying on the side, during walking, climbing stairs, and arising from a seated position. Physical examination can include tenderness to palpation of the pubic symphysis, and pain with resisted strength testing of the adductor and lower abdominal muscle groups. Additional possible signs and symptoms include an audible or palpable click over the symphysis anterior superior iliac spine, pubic abdication motion, a waddling gait, and pain over the pubis during the pelvic compression test (compression of the iliac wing with the side lying position), or the cross-leg test (contralateral iliac wing held down while the patient sits on a rolling table designed for a patient in the center region, and, on complete resection of the pubic symphysis including osteophyte formation and marked inflammation.

To resect the pubic symphysis, an anterior approach was taken utilizing a Pfannenstiel skin incision (otherwise known as a bikini cut). The rectus abdominus was incised anteriorly longitudinally, the linea alba was split, and, though both heads of the rectus were elevated from the pubic symphysis, their attachments were maintained to the anterior aspects of the superior pubic rami. Five millimeters of bone on both sides of the pubic symphysis were resected until no bone was touching the pubic symphysis region. For 15 months of declining physical activity secondary to pelvic pain and the expected temporary limitations to 15 months of declining physical activity secondary to pelvic pain and the expected temporary limitations to the expected temporary limitations to the expected temporary limitations to the expected temporary limitations to the expected temporary limitations.

Figure 1. Pre-operative anteroposterior radiograph showing the wedge resection of the pubic symphysis including osteophyte formation and marked inflammation.

Figure 2. Post-operative radiograph of pubic symphysis following wedge resection surgery.

Magnetic resonance imaging and radiographic findings demonstrated moderate to marked pubic symphysis proliferative arthritic change with juxtaarticular inflammatory changes. Orthopedic consultation resulted in a recommendation of resection of the pubic symphysis for treatment of severe osteitis pubis.

Evaluation, Diagnosis & Prognosis

This patient’s primary physical therapy diagnosis is musculoskeletal pain secondary to pelvic surgery. The patient’s motor function, muscle performance, and range of motion associated with bony or soft tissue surgery.

PROGNOSIS

This patient should achieve functional limits. Lower extremity ROM has clinical utility in the acute phase. The patient required chemotherapy and radiation, and anxiety. She was taking bupropion, and transferred from sit to stand with a transfer board. Neuromuscular: The patient was seen on POD 1. She was discharged to a skilled nursing facility on POD 1. The post-operative radiograph was taken to maintain the integrity of the patient’s deficit was related, in part, to patient safety issues. The patient was significantly limited in functional mobility, i.e. need of an assistive device, following pubic symphysis resection surgery.

This case report describes the physical therapy evaluation, diagnosis, prognosis and intervention for a patient who underwent pubic symphysis resection secondary to OP. The study protocol was approved by the Institutional Review Board of Andrews University. Reasonable measures were taken to maintain the anonymity of the patient.

History: The patient was a 61-year-old woman employed as a school speech pathologist who reported pain in the pubic symphysis region. For 15 months she underwent several conservative medical treatments including prolotherapy injections and corticosteroid injection. In addition, she participated in physical therapy using iontophoresis, electrical stimulation, core stabilization exercises, and walking training. However, none of these treatments provided relief. To the contrary, her pain level increased with exercise until she was unable to climb stairs, walk more than a few steps, or bend at the waist. Her responsibilities as a speech pathologist in an elementary school included serving children from age three to fourteen years. She was required to walk long hallways to gather children for therapy, sit in “hobble” chairs to work with the preschoolers, and occasionally sit on the floor with the three- and four-year-olds sitting leaning forward at a table designed for children. The patient’s deficit was related, in part, to patient safety issues. The patient was significantly limited in functional mobility, i.e. need of an assistive device, following pubic symphysis resection surgery.

Neuromuscular: The patient was seen on POD 1. She was discharged to a skilled nursing facility on POD 1. The post-operative radiograph was taken to maintain the integrity of the patient’s deficit was related, in part, to patient safety issues. The patient was significantly limited in functional mobility, i.e. need of an assistive device, following pubic symphysis resection surgery.
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ANTICIPATED GOALS AND EXPECTED OUTCOMES

This report covers the rehabilitation of this patient at the hospital and skilled nursing facility (SNF). The anticipated and personal goals were established during her acute care stay and the expected outcomes were determined during her SNF stay (See Table 1).

INTERVENTION

The patient received a total of 12 physical therapy sessions during acute care (5) and skilled nursing (7) stays. Physical therapy began on POD 1 at the acute care hospital and on POD 4 at the skilled nursing facility. Twice daily physical therapy sessions at the acute care hospital lasted 30 minutes and focused on functional mobility (sitting, standing). To increase weight-bearing tolerance at the surgical site, the patient received supervised bed mobility and transfer training, and gait training using a walking aid. During the daily 30-minute physical therapy sessions in the skilled nursing facility, functional mobility training was progressed to include ascending and descending stairs and exercise to help the patient achieve the ability to return home functioning safely with the highest level of independence possible. Exercises consisted of stretching for all extremities and stretching of both lower extremities. To obtain maximal functional outcomes, the use of intervention techniques that optimize muscle performance while addressing the specific demands of the task and environment is advocated.25

OUTCOMES

While in the hospital, this patient progressed from requiring minimum assistance for bed mobility, transfers, and ambulating 20 feet with a rolling walker on POD 1, to supervision with all functional mobility activities and ambulating 65 feet with a rolling walker by the time of discharge on POD 3. By the time of discharge from the skilled nursing facility, she required only supervision for bed mobility, sit to stand and car transfers, and ambulating 200 feet with a rolling walker. Stair climbing was accomplished with standby assistance. The anticipated goals and expected outcomes were only partially met by the time of discharge from the SNF (Table 1). Her lower extremity strength improved from 3- to 3+5, which is clinically significant as the limbs could then be lifted through the ROM against gravity. The reliability of manual muscle testing is high for grade 3-5 and lower because they allow for the greatest objectivity in scoring.26 Such an improvement in strength over this short time is most likely related to motor learning rather than an increase in contractile protein in the muscle.25 Another factor for her increased strength could have been a 20% decrease in reported pain, which would have made the patient more willing to move her legs against gravity. Her weight could also have been due to the nervous system protecting the injured site, and, with the repetition of action provided with exercise and functional mobility, normal function was beginning to return.27 The 8/10 groin pain reported on POD 1 decreased to 6/10, and was described as a "pulling pain" as she walked, her walking distance and standing tolerance. The patient was discharged home with temporary assistance from her home health agency.

CONCLUSION


The Effectiveness of a Patient Handling Education Program for Nursing Assistants as taught by Physical Therapy and Nursing Educators

Christopher M Wilson, Margaret M Beaumont, Katie M Alberstadt, Jennifer M Drake, Karen G Ednalino, Meagon M Thornsberry, and Sarah G Zahringer

ABSTRACT

Purpose: Nursing assistants experience a higher rate of injuries compared with other manual laborers, of which 82% are related to back pain. Limited training and inexperience can expose nursing assistants to an increased risk of injury. This retrospective analysis is designed to evaluate the short term effectiveness of a patient handling education program on nursing assistant confidence and basic knowledge.

Methods: Nursing assistants participated in an 8-hour educational program designed to teach safe patient handling and injury prevention techniques at a community hospital. Participants included 254 nursing assistants (91% female). Qualitative data on demographics and patient-handling confidence were gathered from a survey administered before and after the program. Didactic knowledge was measured using a multiple-choice content test.

Results: Overall confidence in patient-handling skills before the education session was 39± 6% and improved to 46 ± 4%. Content test results were based out of 10 possible points with a mean total pre-test 4.0 ± 2.2 and mean total post-test 7.0 ± 2.2.

Conclusion: Content test scores and confidence survey scores increased significantly for both men and women. Programs administered jointly by physical therapy and nursing may positively affect the frequency, compliance and proficiency in providing daily activity and mobility to the hospitalized patient.
Musculoskeletal injuries are among the most prevalent injuries in the healthcare workplace and back pain is described as one of the most prevalent musculoskeletal injury reasons for days away from work. The importance of educating healthcare workers in safe lifting techniques and patient handling to avoid both days away from work and worker’s compensation claims is cited in the “gaps” to current care. Reiteration has been reported between both direct patient care and injuries sustained in hospitals.

Nursing assistants and aids (NAs) are the most commonly injured health care workers during patient care activities. One aspect contributing to musculoskeletal injuries is inadequate training provided to nursing assistants on proper lifting techniques and patient handling. Limited training or education in this type of training to nursing assistants at an increased risk of injury considering part of a job description includes transferring and lifting patients. For many reasons, NAs receive patient handling training as part of entry level education, tasks such as assisting a patient in personal hygiene and everyday mobility needs are frequently delegated to nursing assistants. Nursing assistants that graduate from vocational schools receive 40 to 100 hours of supervised clinical training during their training and may not feel prepared when entering the work force. Many nursing assistants are trained on the job and many receive no formal external schooling or certification. Other factors contributing to musculoskeletal injuries are improper equipment, staffing limitations and long work hours. Contributing factors may cause fatigue and create an unsafe environment for the nursing assistant and the patient.

Despite receiving limited training on patient handling, newly trained healthcare workers are exposed often to poor patient-handling techniques. Each incorrect practice may cause fatigue and create an unsafe environment for the nursing assistant and the patient. This is a concern because of the rising costs of healthcare and the increased number of back injuries, which has been shown to be one of the most prevalent conditions seen by physical therapists. In addition to the risk of injury to the healthcare worker, improper patient handling can expose the patient to an increased risk of injuries from falls and unsafe transfers. Safe patient handling is defined as a process that provides an alternative to manual patient lifting, transferring and repositioning.

The Effectiveness of a Patient Handling Education Program for Nursing Assistants

The Effectiveness of a Patient Handling Education Program for Nursing Assistants

Back injury prevention programs in the nursing setting, in general, are focused on content regarding injuries to health care personnel and biomechanical evaluation of patient handling. Research conducted on the content of training and research is suggested to be keys to improving the quality of work and decreasing the risks of injury to nursing staff. Safe patient handling knowledge and education in lifting techniques may be a contributing factor in reducing the load on the spine and reducing the risk of injury.

The purpose of this article is to describe the implementation and development of an interdisciplinary educational session developed by physical therapists and nurses to educate nursing assistants on patient handling and injury prevention skills. A retrospective analysis of the participants’ tests and surveys was performed to determine whether completion of the patient handling educational session was associated with a change in knowledge and confidence in patient-handling skills. Nelson and Baptiste note that evidence- based patient handling “solutions must be specifically applied to address each high-risk task identified. For this reason, there is much to be reconciled. For example, therapy terminology and descriptions of gait have face validity by subjective review and are often used in the literature that adequately applied to the unique training session and provided necessary training in this article, prompting the investigators to develop the outcome tools internally.”

Methods

In 2008, the physical therapy and nursing departments at Beaumont Hospital in Troy, Michigan developed a quality improvement program entitled “Back Injury Prevention” (BIP). Nurse managers interviewed and observational workflow analysis demonstrated, however, that nurse education was inadequate. In addition, the NAs cited concerns regarding mobilizing obese patients and those with multiple medical problems. Some nursing assistants also noted that they did not have the time and that they did not assist patients with mobility. Nurse manager interviews and observational workflow analysis demonstrated, however, that nurse education was inadequate. In addition, the NAs cited concerns regarding mobilizing obese patients and those with multiple medical problems.


didactic knowledge was assessed using a ten-question multiple-choice test with one correct answer per item (Appendix 2). Although the questions for the test had been used previously in the entry-level physical therapy educational curriculum at Oakland University in Rochester, Michigan, pre-test results were not tested for validity in this particular educational program prior to data analysis. Both the content test and confidence survey were believed to have face validity by subjective review of institutional experts at Oakland University and Beaumont Hospital, Troy.

Educational Program

In 2008, a total of 23 classes were held with an average attendance of 12 participants per class. Nineteen eight-hour classes were held during the day and four night classes were divided into 2 four-hour parts and held from 7-11 pm (Table 1). This program was taught by two of four health care professionals who were considered to be institutional clinical experts on this topic. The instructors included the authors CMW and MMB as well as a physical therapist with over 25 years of experience and a physical therapist assistant with over 8 years of experience. One physical therapist professional and one nurse educator alternated speaking at each class. Generally, the therapy professional would speak to the technical aspects of patient handling (gait, hand placement, adjusting assistive devices) and the nurse educator would speak about the medical issues related to mobility and the practical aspects (job expectations, nursing policies, teamwork, time management, accountability and documentation). Prior to the program, the authors CMW and MMB completed a five-question demographic survey as well as a ten-question survey regarding confidence level and comfort in handling patient mobility and transfers (Appendix 1). During design of the educational program, no survey to assess caregiver confidence with patient handling skills could be located. Therefore, a survey was developed internally; these questions were not validated beforehand due to the retrospective nature of the study. In the survey, subjects rated confidence level or confidence with specific aspects of patient handling on a 1-5 scale (1 = Strongly Disagree, 5 = Strongly Agree).

Didactic knowledge was assessed using a ten-question multiple-choice test with one correct answer per item (Appendix 2). Although the questions for the test had been used previously in the entry-level physical therapy educational curriculum at Oakland University in Rochester, Michigan, pre-test results were not tested for validity in this particular educational program prior to data analysis. Both the content test and confidence survey were believed to have face validity by subjective review of institutional experts at Oakland University and Beaumont Hospital, Troy.
After completion of the educational program, the participants were administered the same confidence survey and knowledge test to reassess comfort level and basic knowledge performing patient handling tasks. Blinded data collection was completed in conjunction with the educational seminar by the instructors who taught that particular class session. To avoid data interpretation error, investigators decided upon how to interpret potentially ambiguous answers. The SAS System for Windows, version 9.2, was used to interpret and analyze inferential statistics.

Data analysis
An overall score was created to serve as a summary score for the survey. Although the total score has no real numeric interpretation, we feel that a higher score indicates more confidence so we have included the total survey score along with the change in the total survey score.

The changes for each of the continuous scores from pre to post were examined using paired t-tests for patients overall and within groups. When comparing male to female or injured to non-injured the continuous score test, post and the changes from pre to post were examined using Wilcoxon rank tests. The effect of age and experience on confidence levels was explored using the Spearman correlation for the changes in both total scores.

RESULTS

Demographic data
Two hundred and seventy-five individuals participated in the educational program. Twenty-one elected not to have their data analyzed, resulting in data for 254 subjects (220 female, 21 male, and 13 missing responses). The ages reported ranged from 18 to 61 years. The most frequently reported age range was 18-25 with 101 responses. Table 2 presents the results of the confidence survey. The overall confidence score increased from 39 ± 6% to 46 ± 4% (p < 0.0001), indicating a statistically significant change in confidence levels immediately following the implementation of the educational program. The difference in the confidence survey before and after the educational session was calculated for each of the ten questions separately. Figure 1 depicts the percentage breakdown of responses for the pretest confidence survey. Figure 2 depicts the percentage breakdown of the responses after the educational program. The changes for each of the continuous scores from pre to post were examined using paired t-tests for patients overall and within groups. When comparing male to female or injured to non-injured the continuous score test, post and the changes from pre to post were examined using Wilcoxon rank tests. The effect of age and experience on confidence levels was explored using the Spearman correlation for the changes in both total scores.

Confidence increased in both men and women, but no difference was found between them. No statistically significant difference could be found in confidence levels related to age or experience of the nursing assistant. No statistically significant difference was found in participant confidence levels between those who have reported injury versus no injury, but within each group the scores increased significantly.

For the multiple choice content test, a positive value indicated an increase in score and a negative value indicated a decrease in score. Scores increased significantly from 4.0 ± 2.2 to 7.0 ± 2.2 (p < 0.0001) immediately following the educational program (Figure 3). Table 4 depicts the statistical examination of the content tests. Both men and women improved, but no difference was found between male and female subjects. The only statistically significant correlation was for age and the total post-knowledge score. As age increased, the four response post-test score decreased; however, the correlation coefficient was very small (r = -0.15) and the p-value (0.02) is not very strong. No statistically significant difference was found between those who reported injury and those who reported no injury. Table 5 depicts the statistical examination of the content tests.
The Effectiveness of a Patient Handling Education Program for Nursing Assistants

Table 3. Confidence Survey Results

<table>
<thead>
<tr>
<th>Confidence Survey Results</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Strongly Disagree</th>
<th>Value Missing</th>
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<tr>
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<td>107</td>
<td>123</td>
<td>14</td>
<td>3</td>
<td>0</td>
</tr>
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<td>“Comfort moving an average pt” Post</td>
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<td>89</td>
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<td>1</td>
<td>0</td>
</tr>
<tr>
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<td>40</td>
<td>105</td>
<td>72</td>
<td>22</td>
<td>8</td>
</tr>
<tr>
<td>“Comfort moving an obese pt”</td>
<td>101</td>
<td>124</td>
<td>15</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Question 3</td>
<td>54</td>
<td>121</td>
<td>52</td>
<td>17</td>
<td>2</td>
</tr>
<tr>
<td>“I have tools to help my pts move” Post</td>
<td>127</td>
<td>104</td>
<td>11</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Question 4</td>
<td>74</td>
<td>124</td>
<td>39</td>
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<tr>
<td>“Confident to do a 2-3 person TF” Post</td>
<td>128</td>
<td>108</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
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<td>Question 5</td>
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<td>111</td>
<td>38</td>
<td>16</td>
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<td>“Know difference between PT/OT” Post</td>
<td>146</td>
<td>89</td>
<td>4</td>
<td>3</td>
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<td>49</td>
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<td>69</td>
<td>41</td>
<td>4</td>
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<td>“Confidence fitting assistive devices” Post</td>
<td>149</td>
<td>59</td>
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<td>2</td>
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<td>134</td>
<td>30</td>
<td>13</td>
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<tr>
<td>“Able to minimize injury during transfers”</td>
<td>131</td>
<td>80</td>
<td>3</td>
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<td>0</td>
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<tr>
<td>Question 8</td>
<td>45</td>
<td>95</td>
<td>68</td>
<td>26</td>
<td>3</td>
</tr>
<tr>
<td>“Able to correct pts walker technique”</td>
<td>134</td>
<td>76</td>
<td>2</td>
<td>1</td>
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<td>Question 9</td>
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<td>108</td>
<td>35</td>
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<td>Understand preventative positioning and ROM</td>
<td>140</td>
<td>70</td>
<td>4</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Question 10</td>
<td>85</td>
<td>115</td>
<td>30</td>
<td>6</td>
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</tr>
<tr>
<td>“Confident in medical reasons not to get out of bed” Post</td>
<td>139</td>
<td>73</td>
<td>1</td>
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<td>0</td>
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<td>447</td>
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<td>Question Number</td>
<td>1344</td>
<td>872</td>
<td>53</td>
<td>10</td>
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</table>

Potential implications of this study

The results of this study suggest several implications that may positively impact patients/clients, nurses and nursing assistants, and physical therapy professionals. After the implementation of the safe patient-handling program, a significant increase in nursing assistants’ confidence in performing this aspect of their job duties and an increase in understanding of the concepts used when performing their job occurred. An onsite safe patient handling educational program can provide a hospital with the opportunity to train a nursing assistant on policies and procedures for patient handling in a consistent manner.

The clinical implications of this research may affect clinical practice of both physical therapists and nurses. First, implementing a program such as the one described in this study could potentially increase the overall quality of care received by the patient and frequency and consistency of patient mobility during the hospital stay. This has the potential to increase both the patients’ safety and the safety of the nursing assistant. Hospitals may see a decrease in costs from patient complaints and litigation, length of stay due to iatrogenic falls and injuries, and worker’s compensation costs. Second, job satisfaction may be improved leading to a possible decrease in nursing assistant turnover rates. Having a high level of job satisfaction could translate into a less stressful and more productive experience for the patient and the nursing assistant. Third, increasing nursing assistants’ confidence in their skills, knowledge and performance may positively affect the frequency, compliance and proficiency in providing daily activity and mobility to the hospitalized patient, thereby assisting in avoiding medical sequelae of bedrest and immobilization and subsequent increased demands on acute care physical therapists.

The findings of this study have implications that relate to the physical therapy profession. It is a profession centered on teamwork and part of a physical therapists’ job is to educate patients and co-workers on body mechanics and safe movement. Physical therapists are highly qualified to implement and lead such educational programs at hospital systems where they are employed and leadership in these programs can have intangible benefits beyond patient care productivity. By providing education on body mechanics and proper patient handling, physical therapists are setting a positive example and maintaining a higher standard of care. One of the philosophies used in physical therapy is that the patient plays an active role in rehabilitation. When using safe patient-handling techniques, patients take a more active role during transfers and mobility tasks. This encourages patients to be accountable for their own care and well-being as well as preparing them to be more independent in their home environments.

The risk-benefit ratio of patient handling and assistance with mobility is being re-evaluated with the recent emergence of the no-lift environment, which attempts to eliminate or dramatically reduce the physical assistance provided to patients by healthcare workers.13,19 This has prompted hospital administrators to consider reducing or replacing current patient-handling training with technology-related dependent lifting concepts. The negative effects to the human body with regard to hospitalization and immobilization are well known in the literature.

Table 4. Knowledge Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number (N)</th>
<th>25th Percentile</th>
<th>Median</th>
<th>75th Percentile</th>
<th>Mean Score</th>
<th>Standard Deviation</th>
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<tbody>
<tr>
<td>Pre-Test Score</td>
<td>254</td>
<td>2.0</td>
<td>4.0</td>
<td>6.0</td>
<td>4.0</td>
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<td>Post-Test Score</td>
<td>254</td>
<td>6.0</td>
<td>7.5</td>
<td>9.0</td>
<td>7.0</td>
<td>2.2</td>
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</table>
The Effectiveness of a Patient Handling Education Program for Nursing Assistants

Table 5. Group Analysis of Tests and Surveys

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>P value</th>
<th>No previous injury</th>
<th>Previous injury</th>
<th>0-10 yrs experience</th>
<th>11+ yrs experience</th>
<th>P value</th>
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<tbody>
<tr>
<td>Mean/SD</td>
<td>N=228</td>
<td>N=220</td>
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<td>N=220</td>
<td>N=220</td>
<td>N=205</td>
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<tr>
<td>Content scores</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>before class</td>
<td>4.5±4.5</td>
<td>4.2±4.0</td>
<td>0.072</td>
<td>4.3±4.1</td>
<td>4.3±4.1</td>
<td>0.072</td>
<td>4.4±3.7</td>
<td>0.17</td>
</tr>
<tr>
<td>after class</td>
<td>6.5±4.9</td>
<td>5.5±5.1</td>
<td>0.0001</td>
<td>6.2±4.9</td>
<td>6.6±4.9</td>
<td>0.0001</td>
<td>6.8±4.9</td>
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<tr>
<td>Difference in content scores</td>
<td>2.0±2.3</td>
<td>1.3±1.1</td>
<td>0.0001</td>
<td>1.9±2.0</td>
<td>2.3±2.0</td>
<td>0.0001</td>
<td>2.4±2.2</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Survey values</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>before class</td>
<td>5.0±6.0</td>
<td>4.0±6.0</td>
<td>0.0001</td>
<td>5.0±6.0</td>
<td>5.0±6.0</td>
<td>0.0001</td>
<td>5.0±6.0</td>
<td>0.0001</td>
</tr>
<tr>
<td>after class</td>
<td>7.0±7.0</td>
<td>6.0±7.0</td>
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<td>7.0±7.0</td>
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<td>2.0±1.0</td>
<td>2.0±1.0</td>
<td>0.0001</td>
<td>2.0±1.0</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

Suggestions for improving an educational program such as the one described would be to add an initial manual competency examination to assist in determining whether motor skills were carried over to clinical care and determine whether the nursing assistant was proficient from a psychomotor perspective. Also, standardized testing instructions would be valuable to maintain the consistency of the assessments. Annual competency checks would be beneficial for retention of skills and knowledge gained from the program. These concepts were suggested to hospital administration but these were not deemed to be feasible as the resources and time available to this learning endeavor were limited due to economic and patient care demands on participants and instructors. Importantly, we must consider that in the era of healthcare reform, hospital systems may continue to have limited resources while still striving to enhance patient care and safety programs. In addition, prospectively analyzing the costs versus the workforce’s compensation claims, and patient fall rates would help us determine the effect of a similar educational program on these items. Future outcomes to be studied include perceived quality of care by patients, fiscal analysis of worker injury compensation, and injury and fall rates after implementing a no-lift policy similar to the one described. Comparing statistics of DVT occurrence, pressure ulcer incidence, nursing assistant injury rates, workers compensations costs, and patient fall incidence between hospitals that implement a safe patient handling program, a no-lift policy would help determine whether no-lift policies produce negative patient outcomes. Finally, if a prospective study is conducted, valid and reliable data collection measures should be used.

CONCLUSION

The purpose of this retrospective analysis was to determine whether staff confidence and comfort regarding mobility procedures increased and to determine whether knowledge of patient handling techniques improved after an educational program administered jointly by physical therapy and nursing. The results of this study demonstrated that scores increased significantly with regard to nursing assistants’ confidence and knowledge after a standardized nurse-physician patient handling program. This study suggests that further exploration of an educational program on general mobility basics and the implementation of the training in this population is warranted.

Acknowledgements: The authors would like to thank Sherry Wiggins-Baker, PT, Thomas Voce, PTA, for data collection and participating in the educational program, Judith Bouma MS for data analysis and statistical support, Victoria Lucia, PhD for outcomes guidance, and Reya Colombo PT, MA, Debra Guido-Alleen, RN, MBA, BSN, Janet Wiesche Seidl PT, MPT and Michael Khoury, MD for program support and logistics.

The results of this study are potentially valuable for academic institutions in determining which areas of a no-lift approach would be most beneficial to their facilities.

especially in the elderly. Because of the value of patient-assisted mobility to prevent the sequelae of patient immobilization, the impact of replacing a patient’s assisted mobility by devices that dependently immobilize the patient is a no-lift approach would be most beneficial to their facilities.

In addition, implementation of an integrated no-lift environment has been cited as being cost-prohibitive to many institutions. Study limitations

Due to the retrospective nature of the study, randomization and a control group could not be used. Also, because the outcome measures used were developed internally and are unique, validity could not be determined beforehand. Although a slide presentation provided a consistent standard for the delivery of the information, four different clinicians with individual teaching styles instructed the program. The individuality of teaching style may potentially have led to variation in outcomes between different classes of nursing assistants. A standard protocol for completing the test was not given to the nursing assistants, potentially contributing to missing answers and the usability to use data. During data analyses, aberrance appeared which could indicate possible group collaboration during exams. Lastly, hospital policies played a role in limiting this study because the nursing assistants were required to participate in the educational program as part of their job performance expectations with little other positive incentives to perform well.

Suggestions for future research Further research is needed regarding the effect of an educational session and its translation to direct patient care procedures and whether long-term retention of knowledge confidence occurred after this intervention.

REFERENCES


INTRODUCTION

Jim Smith, President Acute Care Section, February 11, 2011

I

It is now my privilege to introduce the First Acute Care Section Lecture. This lecture was developed to acknowledge and honor a member of the Acute Care Section for excellence and leadership in acute care physical therapy practice and for distinguished contributions to the Section; to provide the recipient with an opportunity to share his or her achievements and ideas with the Section’s members through a lecture presented here, at the Combined Sections Meeting; and to provide a touchstone for the profession in celebrating the role and value of acute care physical therapy.

We are honored today to have Jim Dunleavy present the first Acute Care Section Lecture. Jim Dunleavy has been a physical therapist since 1977 after graduating from the physical therapist certificate program at Columbia University College of Physicians and Surgeons. Jim practiced in numerous acute care facilities as a staff physical therapist before earning his Masters degree in physical therapy and Staff Safe. AACN Adv Crit Care. 2009; 20: 267-276.

(Appendices on pages 35-36)

Acute Care Section Lecture:
Acute Care - Our Profession’s Foundation and Its Future

James Dunleavy, PT, MS

In 1990 he began, with his colleague Marca Pearl, on a 2-year journey that resulted in the House of Delegates approving the creation of the Acute Care Section. Jim shepherd the Section as its president for our first 5 years. As described by one of his nominators: “In creating the Acute Care Section, Jim gave a voice to a large percentage of our professional members who understand, quite clearly, that this type of clinical practice requires the highest level of application of both foundational sciences and clinical decision-making skills. The creation of this section, and his early leadership in bringing it along, has given rise to a whole legion of professionals who continue to carry this message forward through written words, actions, and deeds.”

After that, Jim ran for the APTA’s Board of Directors in 1997, and then he was successful and was elected to the Board in 1998. He was re-elected for his second 3 year term in 2001.

After completing his 2 terms on the APTA’s Board, he was asked to return to the NY chapter where he was elected Treasurer for a third time, but after 1 year, Jim was elected President of the NY Chapter in 2006. He considers himself the luckiest chapter president ever, as, after only 2 months in office, the 25 years of hard work of so many Chapter members paid off with the adoption of direct access in New York. In addition, the chapter was able to achieve mandatory continuing education requirements and revamped the legislative agenda to move forward on issues related to high co-payments, workers compensation reform, and other improvements to the practice act.

Jim is currently a member of the APTA’s Committee on Chapters and Sections and he is a member of the Acute Care Section’s Nominating Committee. Jim has completed two years on that committee, which means that effective with his installation at our Business Meeting later this evening, Jim will become the Chair of the Nominating Committee and return to a position on the Acute Care Section’s Board of Directors.

I would like to share with you the words of one of his nominators, who wrote that “As the Section’s first President, and the nameake of the Section’s Distinguished Service Award, he was one of the first physical therapists to stand up and ensure acute care practice was recognized and had a seat at the larger table of physical therapy practice. His tenure on the APTA’s Board of Directors continued to put acute care practice on the radar and return to a position on the Acute Care Section’s Board of Directors.

I agree with that analysis and emphasize that each of his nominators identified
that Jim’s greatest contribution to our profession has been as a mentor. He has been a mentor to me, and I am confident that he has been a mentor to so many in this room who are in leadership positions in the Acute Care Section or in the APTA. Jim has been a role model for the physical therapists and physical therapist assistants who have benefited from your wisdom and mentoring. I thank you.

Jim’s extraordinary service to our profession has resulted in numerous awards, including the Acute Care Section’s Distinguished Service Award, which has since been re-named in his honor as “The James Dunleavy Distinguished Service Award;” the New York Chapter’s Clinical Service to Chapter Award; and the APTA’s Lucy Blair Service Award.

Currently, Jim is the Administrative Director of Rehabilitation Services at Trinitas Regional Medical Center in Elizabeth, New Jersey and serves as an adjunct professor in a number of physical therapy education programs in the state. Jim is married to his wife of 27 years, Mary, also a physical therapist. They have two daughters, Meghan and Tara.

It find fitting that Jim is the Section’s first lecturer, as he has been the first and leading acute care physical therapist in many ways. I met Jim many years ago at a Coughtered Sections Meeting, when he convened physical therapists and physical therapist assistants to discuss the idea of an Acute Care Section of the APTA. As we can see, that idea had traction. His influence on our Section remains deep as we prepare to celebrate our 20th anniversary this year.

It has been my privilege to introduce this celebration of our profession and now I turn this podium over to the honorable Jim Dunleavy for his presentation “Acute Care Physical Therapy: Our Profession’s Foundation and Future.”

Lecture

Good evening everyone, thank you for coming. I want to begin by first thanking the Acute Care Section’s Awards Committee and the Section’s Board of Directors for selecting me to be the inaugural Acute Care lecturer. I have been awarded a number of honors during my career, but to be recognized in this manner by one’s peers is the highest honor an individual can be given. I also want to thank my family, my daughters Meghan and Tara and especially my wife, Mary, who is with me this evening. They have always been a source of strength and support, and always help to keep me grounded.

Last year, when it was announced at Combined Sections Meeting (CSM) that I was to be this year’s lecturer, I said that I hoped the talk would be one that would inspire some, make others think about new perspectives on the issues that face us and that some would disagree or even might be mad at what I was going to say. I have worked hard over the past year to achieve all these goals and now is the time to see if I have achieved those goals.

Last year I also indicated that, in part, the focus was going to be on the future, a future that extends past our 2020 vision. I feel this was important because as healthcare has changed acute physical therapy will need to embrace challenges and take actions that, perhaps in the past we didn’t or were slow to respond to, but we will have to anticipate and respond proactively going forward if we are to continue to control our practice and direct our future on our own terms in acute care.

So as I began to undertake the writing this lecture, it was then that I realized just how big the challenge was. To make it even more daunting, the charges brought on with the passage of healthcare reform over the past year, sometimes, upped the ante for the profession and the acute care setting in particular. In acute care, our current role in the healthcare system is to be a resource for the patient, to provide access of stay, increased numbers of patients per bed per year, the unprecedent budgetary restraints we have and the additional but at times vague new roles we are being asked to fill. This situation is analogous to trying to cross a stream when all the rocks are moving! But as Martin Luther King Jr. said, it is the challenging times that will truly test our worth.

So … what I will try to do tonight is to highlight what I feel are the key events that brought us to where we are today, how we are handling the current status of acute care practice, and what I see occurring in the coming years.

I believe we are entering one of the most challenging times not only for acute care but for the entire profession. What I also want to stress though here is that well is our need in acute care, as well as in the other settings we find ourselves in, to have our practice be driven by the societal needs for services that we supply, and that those services are deemed by society to be important.

So, let’s see where we have been …

Our earliest beginnings were driven by the onslaught of polio in the general population in the late 1800’s, reaching far into the middle of the 20th century and especially in the military after World War I. This was the first war where levels of medical care had risen to the point where soldiers who previously would have died from their wounds were now surviving, but with varied and complex disabilities. Given the nature of these postwar disabilities, along with the level of experience of postwar veterans at the time, both these patient populations were considered in various states of “acute” medical conditions.

While I could spend most of my time here this evening on our profession’s history and how its beginnings were rooted in acute care and rehabilitation, I will limit my discussion to the law in 1967. This was the time in history where millions of people over the age of 65, many of whom were retired and not covered under employer based insurance, had coverage. During this time period, the majority of physical therapy services were still being provided in hospitals and rehabilitation facilities with the majority of the physical therapists that were providing this care being under the direction of a physician prescription.

The healthcare system at this time was giving little thought to its costs, and even less thought to the efficacy in the delivery of acute care services, including physical therapy. In acute care physical therapy, patients were primarily driven to the facility was not only a result of their medical status, but also by their functional status, and in some cases, their personal desire to stay in the facility or to go home. Physical therapy here would be driven by physicians’ order and in many instances, an additional physician, the physiatrist, who was heading up rehabilitation medicine departments, especially in large urban centers.

During these years, up to the mid 1980’s, physical therapy was considered very good bang for the buck services for acute care hospital. With virtually all services being paid for in acute care on a cost plus basis, which meant every time a physical therapist saw a patient in the hospital, the hospital could charge and... get paid for those services. For our newest colleagues here this evening, that maybe there were few fee schedules, no DRGs, no per diem rates. Everything that was done was determined as “necessary” by the physician, and paid for, and paid for at a price set by the facility. Needless to say, things were very good. Patients stayed in their acute care bed for weeks, with post-acute care options being a remote home care service, rehabilitation or nursing home. There were few or no sub-acute options available at the time.

During this time, the majority of services were profit, were being made, and patients were cared for by caregivers that had more time to spend with every patient referred to them.

Physical therapy though was still not seen as a key decision-making service, rather it was a reactive, procedure driven, revenue-generating service, under orders from a physician.

While this was occurring in acute care, physical therapy was progressing in the legislative arena. Between 1957, when Medicare was passed, and the Hill Burton Act legislation and 1984, when the start of the use of DRGs under Medicare, only 6 states had direct access. However, between 1984 and 1990 an additional 18 states achieved some form of direct access, as it became the number one priority for our profession. While this began to change, there was no instance that I am aware of, were state hospital regulations being reviewed or changed being proposed to align practice in acute care and other facility-based practice settings with this profession’s main objective of direct access “for all.”

What’s more, direct access was being “valued” by the profession, not society, as the only true “autonomous” practice. Why was acute care not invited to the party? I believe our profession made a classic mistake. Through a combination of our own internal shift of values, a desire for greater recognition and professional status, we began moving outside of facility-based practice into other settings and more lucrative reimbursement structures while unconsciously jettisoning the profession’s value placed on the main practice setting for our profession’s practice and clinical training. Without planning we began to walk away from facility-based practice into these other settings.

But... we forgot to tell the healthcare system and the patients in facilities around the country. It appears to me that we began to regain our values...
in a way that were not, for the first time, driven by the needs of all patients in all levels of infinity. Our professional association had also moved itself in this direction through its policy, position statements, and actions. What we did was take control of the system and then leverage the changes to see where we could witness a meaningful change. The 1960s also brought about the introduction of the Emergency Room, the first major change in emergency services. It was a time when we could start to see the cost of care and provide services that were more effective, not just based on traditional accounting practices. The 1960s also brought about a new era of accountability, which was essential for the development of the current care delivery system.

The 1970s were a time of significant change in healthcare delivery. The introduction of the Diagnostic Related Group (DRG) was a major development in this period. DRGs were created to ensure that hospitals had a clear understanding of the costs associated with treating patients. This was a major step towards the development of a more efficient and effective healthcare delivery system.

The 1980s were a time of significant change in healthcare delivery. The introduction of the Electronic Health Record (EHR) was a major development in this period. EHRs were developed to provide healthcare providers with a more comprehensive view of a patient's health, which was essential for the development of a more efficient and effective healthcare delivery system.

The 1990s were a time of significant change in healthcare delivery. The introduction of the Internet and the World Wide Web was a major development in this period. This was a major step towards the development of a more efficient and effective healthcare delivery system.

The 2000s were a time of significant change in healthcare delivery. The introduction of the Patient-Centered Medical Home (PCMH) was a major development in this period. PCMHs were developed to provide healthcare providers with a more comprehensive view of a patient's health, which was essential for the development of a more efficient and effective healthcare delivery system.

The 2010s were a time of significant change in healthcare delivery. The introduction of the Value-Based Payment System (VBPS) was a major development in this period. VBPS were developed to provide healthcare providers with a more comprehensive view of a patient's health, which was essential for the development of a more efficient and effective healthcare delivery system.

The 2020s are a time of significant change in healthcare delivery. The introduction of the Patient-Centered Health Record (PCHR) was a major development in this period. PCHRs were developed to provide healthcare providers with a more comprehensive view of a patient's health, which was essential for the development of a more efficient and effective healthcare delivery system.
be in a position to be a major player in forging new interdependent structures in healthcare and rehabilitation—if we take care to avoid the pitfalls.

I believe we are now at a crossroads in acute care practice. There are pressures for increased efficiencies, need for faster discharges, higher acuity levels of patients, but with fewer colleagues to meet the acute care delivery needs. Estimates of vacancies of acute care physical therapy positions are as high as 30% in some areas. In New Jersey alone it is almost 21%. As I have mentioned earlier, we have seen growth in other practice settings, certainly an increase in earning potential being part of the equation. My concern is that as a group we must avoid the trap of the position that we just assume that we will always have acute care physical therapy, or worse, if we do not have it... well that’s ok as well. Others are also under the misconception that: “Hey why worry, it’s mandated to have PT in hospitals right?” I am afraid that this is not an exact science as it is a non passive approach to being involved in the political processes of our states.

This was brought into focus to me last year when I was president of the NY Chapter. I was asked by a member for the citations, regulations etc. that mandate physical therapy be available to acute care patients. The non existence of regulations, Medicare, state hospital regulations etc. it was clear that there really was no legal/regulatory sources that stated we must exist in the acute care setting. Now, what is more frightening was the reason why this member was asking. Their hospital administration was asking them what is the reason why this member was asking. I bring it up to strike fear into the acute care community. I bring it up to strike fear into the acute care world. I believe it should not be so ironclad. Now I do not bring this up to try to scare the acute care world. What if new delivery models for acute care physical therapy, the profession, etc. it was clear that there really was no legal/regulatory sources that stated we must exist in the acute care setting. Now, what is more frightening was the reason why this member was asking. I bring it up to strike fear into the acute care community. Their hospital administration was asking them what is the reason why this member was asking. I bring it up to strike fear into the acute care world. I believe it should not be so ironclad. Now I do not bring this up to try to scare the acute care world.

We have to be open to new business relationships in acute care and other facility-based settings. I believe that as the healthcare system changes, so will our business relationships with facilities at which we are currently in employed relationships. I want to now turn for a moment and talk a bit about acute care’s current role in clinical education.

With the decreased numbers of therapists, and the time pressures placed on us in acute care, the training of our colleagues has been affected. What we face now is a profession that has more and more of its newest members never having seen an acute ill person, much less obtaining the foundation to be able to identify and know what to do if they have a patient experiencing an acute medical episode in an outpatient or other setting. How can we talk about wanting to be considered primary care practitioners and at the same time not meet our responsibility to society to provide practitioners that have a well rounded clinical experience? This must change.

So, I have spoken so far on where we came from and where we are now. I believe that the profession’s position right now absolutely is screaming at us collectively to stop and smell the coffee and look for new ways, new paradigms of care. There is so much we need to do — so what does the future hold?

We are about to experience some major changes in our healthcare delivery system, with the advent of health care reform that was passed last year. Although it has come under fire recently, with some state courts having ruled it unconstitutional, or all of the law unconstitutional, while some others have ruled it legal, or the whole of the law unconstitutional, while some courts have ruled it to be well within the constitution’s tenets, only time will tell what will happen, but one thing is sure, change has already started. Much is being thrown around as to what will be the impact on Medicare/Medicaid and the ACOs. These performance benchmarks will be clinically based in the areas of cardiac, pulmonary, diabetes and other more common diseases. It will also look to control the costs of care for the time period 30 days before and 30 days after their acute care episode as well. These ACO models will be able to come into play with Medicare as of October 2011 for a 3-year period. While these will be considered demonstration projects, it is clear by the activity of the healthcare provider community that they perceive these structures as the best way to maximize reimbursement, coordinate care thus decreasing costs, and enhancing patient outcomes going forward. Demonstration projects are being set up and others are underway to explore different scenarios for the payment of services to these new entities as well.

As I mentioned, these structural changes will take many different forms. The new laws does not dictate the type of structure nor is it expected that the regulations, when completed, will severely box in facilities and providers into single structure relationships. Some may see the physicians as employees of the facilities especially primary care physicians, while others will create different types of relationships between the hospitals and the physicians. A telling statistic—today, in the US, one out of every four primary care physicians. But with the emphasis on primary care, the number of physicians needed may not meet the demand as recent data suggests that only 1% of the doctors were interested in primary care. I know in speaking with our residents it appears that as many as 80% of them want to go into clinical practice also say they do not, and from a discussion I had with a faculty member of a local medical school in my area was surprised to hear that today’s MD degree is being looked at some in corporate America as the new MBA, with some with new MD degrees looking to cash-in in the corporate world. But even with these projected structural changes and physician perspectives on their role, the question remains as to which these changes will occur will be based, at least in part, on the local healthcare providers themselves, and what they will want to do and how much risk they want to take. I can see a myriad of organizational structures and relationships being explored and all of them being designed to decrease cost while standardizing care and applying best practice principles.

As so all this change and gearing up for this new system begins, the following question needs to be raised—have we in physical therapy looked at what is coming, and, as an APTA, how will we impact us? As of this writing, our colleagues in private practice have been actively looking at accountable care organizations (ACOs) impact on their access to patients. Right now they have a real issue because physical therapy is not mentioned in the health reform law as a profession required to be part of an ACO and hopefully they will come forward and consider though, that when we are included, just what the possibilities are.

Let’s ask ourselves the following questions:

• What if Exploration of alternative collaborative relationships with facilities and physical therapy results in more cost-effective care while increasing the coordination of care across the pre-, intra- and post-acute care hospital segments of a patient’s episode of care?

• What if delivery models can be developed with physicians and facilities, if we choose to take an active role? What if delivery models are present and become the new payment structures probably in more cost-effective care while increasing the coordination of care across the pre-, intra- and post-acute care hospital segments of a patient’s episode of care?

• What if new delivery models for acute care physical therapy are created that the credit the profession for meeting various facility and provider pay for performance, or to be responsible for? A system of delivery that is driven by patient need and cost accountability, not professional control!

• What if new delivery models for acute care physical therapy are created that the credit the profession for meeting various facility and provider pay for performance, or to be responsible for? A system of delivery that is driven by patient need and cost accountability, not professional control!

But again we must make this new progress and development in the section and the profession quickly, otherwise, we might lose a great opportunity for practice expansion, standardization of the association. Acute Care Section membership and the profession as a whole will be looking to the APTA for this type of leadership. I believe the Acute Care Section can be an important leader here.

In acute care practice, we are still growing up as a profession and trying to define ourselves and our own unique roles. While the new payment structures probably will not change the terms of payment for physical therapy in acute care, it brings us the opportunity to look at different financial relationships with facilities, if we choose to take an active role and some risk. I am aware that the APTA is working hard on how to include us as one of the providers that can be part of an ACO and hopefully they will be given the opportunity to consider this, though, that when we are included, just what the possibilities are.

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Our role in the acute care environment has changed in terms of emphasis. While we continue to treat and provide direct patient care, we also manage care on the basis of our patients that determines their future through the process of triage. What are the best practices based upon? How do we determine, from a functional standpoint which patients should go to acute or sub-acute care, rehab, home care, palliative care for each patient if this concept can be melded into these new structures.

In order to achieve these opportunities I believe strongly that our profession needs a vibrant, progressive, politically and financially savvy acute care practice setting to meet the professional’s goals. Not only will the clinical practice meet the changing structure of care but the professional’s goals in the areas of education, practice and research related to what we want the physical therapy practitioner to look like in 2020 and beyond.

Nowhere else in acute care can our profession develop better its role as a valuable member of the healthcare team. Those of us in acute care must be active participants outside our departments, not behave as technical services and “just staff” waiting to be told what to do. Each one of us, along with our physical therapy colleagues in all other settings, need to be active participants in the clinical direction of our profession in these new models of care. I believe there are other things that could be done to assist our colleagues to explore possible alternatives in care delivery and, equally importantly, redefine our role in clinical practice.

I would like now to delineate some of the things I feel we need to do to position ourselves for the future. One that can be very bright for us and that will reach way past 2020, but we have to act now.

I have mentioned previously broad areas of our profession, namely practice, education and research. Let us now look at one of these areas: education and training opportunities for each area of acute care, and what I feel needs to be done.

Now, as part of this concept of an acute care clinical research agenda, we need to look at how we utilize the full range of decision making processes, not just for a professional, but adapt them for use at the bedside. As pain level has become a vital sign, we have many tools that can be used to reduce pain that can decrease the use of more expensive and functionally degrading medications. Many of these are as simple as not utilizing manual therapies at all. Unfortunately, many of these decisions are based on tradition or based solely on the sociobiology of the patient. We need to do better here. I call upon the section to develop research questions surrounding these clinical decisions and support the development of the research fund within the scope of this section for this purpose. The just published new research agenda for the profession has many elements that focus activity in the area of studying our decision making process. These decisions that we make every day about people’s future need to be based on researched decision-making algorithms, not tradition.

Other areas of research, such as in the treatment of specific patient populations including patients in intensive care units and other specialty units need to be supported and expanded. These are the most costly and resource intensive areas of a hospital. If we can impact the cost of care while assisting in moving patients to a less costly level of care faster, we will provide a needed service to patients while providing tremendous value to the healthcare system.

To do this I would also support the Acute Care Section partner with our colleagues in the Research Section and others to undertake these new and important research questions for our profession. I think that the American Hospital Association along with state hospital groups would also be very interested in partnering in these research activities that would lower the costs for its member facilities.

As I mentioned earlier, our new health care system may bring opportunities for us. To help facilitate our capturing of these opportunities, the Acute Care Section to be the catalyst for interprofessional and interdisciplinary discussion through sponsoring multi- section/professional meetings and chapters and individual members to participate to be able to share and update information on acute care in multiple practice settings as these changes occur. Imagine also a presentation here at CSM where we take one patient past the initial stage of best practice principles and focus on teaching the continuum of physical therapy through the patient’s life span. The opportunities are essential if we are to be prepared to meet the changing structures that are coming in the near future. I am confident that physical therapy can be an invaluable asset to these new opportunities if we can take the lead in educating ourselves and others through using these educational opportunities to better the lives that we serve because we must pursue the concept that the most cost-effective care meets the patient’s reasonable goals and uses resources at the intensity needed to meet these goals.

Now I want to talk a bit about another aspect of education, and more specifically what I am most concerned about—clinical education. The variability of the clinical education experiences that our newest members of our profession receive is unacceptable. I see a pivotal role for the acute care section here as well. We need to set a goal of having the clinical education facility criteria developed by the Clinical Instructor Education Board many years ago, criteria that are currently voluntary become mandatory. Can acute care environments partner with schools and hold themselves to these standards? I see no reason from the acute care side of the equation why we cannot. How can we face society and say we are turning out a uniform product of a profession that meets uniform performance criteria when the system we train them in has no consistency in it at all? We owe this to our newest colleagues and society. I hope that acute care leadership will take a lead in moving towards establishing these criteria as a mandatory item for all settings that take students.

Now there is something else that I would like to see in order to reach this clinical education goal. As I believe that the APTA must be the only provider of a re-declaration of the acute care practice setting to high quality clinical education that we should abandon of the old “clinical instructor” model that meets uniform performance criteria and replace this with a “clinical instructor” model of clinical education. It is inefficient, costly and does not ensure a better educational experience. I would also ask our colleagues to look at their tables of organization and explore paid clinical experiences with their local DPT programs. Sometimes, we cannot expect the government to begin to subsidize clinical education for physical therapy. We have to figure out ways to do it ourselves. Acute care can be, and should be, the center of the clinical education experience for our profession. This will also help students to offset their just ridiculously high debt load for their physical therapy training by paying these students a meaningful wage for what a full time “attending” physical therapist would be paid. Acute care needs to do whatever it can to lower the debt load of our newest members.

Another area of topical concern is the APTA’s Governance Review currently underway. I believe it holds our future as a force of the healthcare system. Section and sections as a whole. In the recently released recommendations I
Early Mobility and Walking for Patients with Femoral Arterial Catheters in Intensive Care Unit: a Case Series

Christiane Perme, Colleen Lettvin, Terry A. Throckmorton, Katy Mitchell, Faisal Masud

ABSTRACT
Background: Patients with femoral arterial catheters for hemodynamic monitoring are sometimes placed on bed rest because of the anatomical location and perceived risk of catheter-related complications associated with mobility. This practice subjects these patients to the well-known adverse effects of inactivity on functional mobility and functional outcomes. Because of limited evidence to link mobility with femoral artery displacement or damage, this practice may be unwarranted and may add to the treatment burden of the patient in the intensive care unit.

Objective: The purpose of this study was to explore whether physical therapy-directed mobilization of patients with femoral arterial catheters resulted in adverse events.

Methods: A retrospective case series was undertaken on patients in a 40-bed cardiovascular and thoracic intensive care unit. The list of potential catheter-related adverse events investigated included bleeding at the femoral arterial catheter site, accidental catheter dislodgement and/or removal, non-functioning catheter after activity event, and acute limb ischemia within 24 hours.

Results: The 30 patients identified for the study underwent 47 physical therapy sessions with a total of 156 activity events including sitting on the side of the bed, standing at bedside, transfers to a regular chair or a stretcher chair, and walking. No femoral arterial catheter-related adverse events that could be attributed to participation in physical therapy were documented in either the nursing or physical therapy notes.

Conclusion: The data from this single center retrospective case series suggest that early mobility and walking activities do not affect femoral arterial catheters used for hemodynamic monitoring and orders for bed rest may unnecessarily add to symptom burden faced by these patients.
Indwelling arterial catheters are used to continuously monitor blood pressure, to titrate vasoactive agents, and to obtain blood gases or other laboratory specimens in critically ill patients. Femoral arterial catheters are the most commonly used site for monitoring arterial pressure. The radial artery is used in 52 percent of patients in the surgical intensive care unit (SICU) and 11.5 percent of patients in the medical intensive care unit (MICU). The radial arterial line was used in 52 percent of patients in the MICU and 78 percent of patients in the SICU.3

Informal discussions with critical care nurses, physician and physical therapists indicated that placing patients with femoral arterial catheters on bed rest appears to be common practice in the intensive care unit (ICU). The radial arterial line is the most commonly used location after the radial artery. The radial arterial line is selected over the femoral arterial site, particularly in identifying and recognizing the consequences of any published studies within the fields of adult cardiovascular and thoracic surgery.4

Recent literature has described early mobilization of patients with femoral arterial lines.5 Although some conservative physicians prefer not to have their patients sit with femoral arterial lines, Ciesla et al. state that patients with femoral arterial catheters who tolerate getting out of bed should be allowed to sit in a chair as long as the waveform on the monitor is maintained. Other recommendations include allowing patients to turn onto the side that does not have the femoral line and to transfer to the upright position for ambulation with minimal hip flexion as long as the arterial lines are sutured in place.6 The lack of literature citing this practice in the nursing literature has some physical therapy literature has been strongly linked to the culture of a medical institution or that of a particular ICU within the institution.

Background and Purpose

Although not directly related to patient mobilization, a number of studies have been published related to the risks of femoral arterial catheter–related infections and complications.7,8 A large meta-analysis covering 78 studies from 1978 to 2001 and a total of 19,617 radial, 3,889 femoral, and 1,989 auxiliary arterial cannulations found that the rates of major complications were similar for all three locations and occurred in less than 1% of the cases.9 The complications reported included accidental catheter removal, vascular insufficiency,10 infection,11,12,13,14 circulatory impairment,15 bleeding at the arterial catheter site,16 arterial occlusion,16 neurological impairment,16,17 vessel perforation,18 local infection,19,20 and clot formation in the catheter.21

Bed rest is often perceived as an intervention that can reduce these risks. However, prolonged bed rest results in disuse atrophy, increases in inflammatory markers, insulin resistance, microvascular dysfunction, fluid losses that contribute to postural hypotension, tachycardia, decreased stroke volume, decreased peak oxygen uptake and decreased cardiac output.22 Recent literature has described early mobilization in the ICU as essential to minimize functional decline and decrease the length of hospital and ICU stay.23,24 Other anticipated outcomes of early mobilization include improved attitude towards recovery, improved cardiopulmonary and neuromuscular function, increased level of arousal, maximized independence, and facilitation of ventilator weaning.25 Large studies of patients with respiratory failure requiring mechanical ventilation have concluded that early activity is safe and should be utilized as adjunctive therapy to prevent or treat complications of critical illness.11,23 Although Pohman et al also included information about mobilization of patients with arterial catheters, the location of the catheters was not specified. Collaboration is particularly important in identifying barriers and outcomes for progressive mobility in addition to making a cultural change to make early mobility a priority in avoiding the adverse effects of immobility on long-term outcomes.26

Although the importance of early mobilization is well supported, the fear of injury due to femoral arterial catheter complications during mobilization may outweigh the benefits in some ICU cultures. Recommendations such as strict bed rest with the cannulated lower extremity straight for patients with a femoral arterial catheter in place have been placed in textbooks without any rationale.23 Our review of available literature has yet to find any published studies within the fields of critical care medicine, nursing, or physical therapy that address safety guidelines or adverse outcomes related to mobility in patients with femoral arterial catheters for hemodynamic monitoring in the ICU. The purpose of this study was to determine the rates of major complications found in patients with femoral arterial catheters for hemodynamic monitoring in a cardiovascular ICU (CVICU) and compare these results to findings in the literature.23,24 The potential complications included any arterial-related complications using a retrospective review of the medical records.

METHODS

A retrospective, single-center case series study was conducted in a 40-bed CVICU at a large metropolitan 900-bed teaching hospital from June 1, 2005 to December 31, 2005. The study was approved by The Methodist Hospital Research Institute’s Institutional Review Board.

Inclusion criteria were individuals 18 years old and older who received physical therapy and had a femoral arterial catheter for the purpose of hemodynamic monitoring. The electronic medical record system identified 30 patients who met the inclusion criteria during this six-month period. The CVICU has a mixed population of adult cardiovascular and thoracic surgical patients. Patients in this study underwent coronary artery bypass, aortic valve replacement, mitral valve replacement, heart transplant, lobectomy, and a variety of other cardiothoracic surgical procedures that were performed in the CVICU. The femoral arterial catheter insertion technique was consistent and standardized among the surgeons by use of an indwelling catheter via the modified Seldinger approach.27

During the chart review process, a standardized data entry form was used for each patient. Once the date and time of a physical therapy evaluation were identified, the nursing documentation was reviewed for the presence of any femoral arterial catheter at the time of initial physical therapy evaluation. Then, for each selected patient, the dates and times of daily physical therapy sessions were obtained. The nurse’s notes were reviewed during the review process after the physical therapy sessions were completed. The nurse’s notes included information about the arterial line site, activity waveform and any documented catheter-related adverse events. The potential catheter-related adverse events examined in this study included bleeding at the catheter site, accidental catheter dislodgement and/or removal, non-functioning catheter after activity events, and acute limb ischemia within 24 hours of activity events supervised by physical therapy.

The data collected from the physical therapy documentation included the frequency of activity events and any documentation of catheter-related complications during physical therapy interventions while the patient had a femoral arterial catheter in place. Activity events for the purpose of this study included sitting on the bed, standing at bedside, transfers to a stretcher chair or a regular chair, and walking of any distance. The stretcher was used in patients who were considered deconditioned and/or fragile and safety takes steps to a regular chair. Any activities performed

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CABG: Coronary Artery Bypass Graft; MVR: Mitral valve replacement; AAA: Ascending Aortic Aneurysm; CEA: Carotid Endarterectomy; TKR: Total knee replacement; AVR: Aortic valve replacement.
during physical therapy sessions prior to femoral catheter insertion and after catheter removal were not included. All subjects participated in at least one activity event during physical therapy sessions and each activity was recorded as a separate event. The electronic medical record system did not allow us to determine the duration of specific activity events.

During the activity events, no restrictions were placed on the degree of hip flexion on the side with the arterial catheter. The only restriction enforced was for excessive repetitive hip flexion that would typically occur during activities such as cycling.

RESULTS
The 30 patients identified for the study underwent 47 physical therapy (PT) sessions with a total of 156 activity events. Of the 30 patients, 18 (60%) were male and 12 (40%) were female and the mean age was 65.1 ± 12.37 years. The number of PT sessions each patient received varied from 1 to 4 sessions with a mean of 1.56 ± 0.86 sessions. The mean number of days with the femoral arterial catheter in place varied from 1 to 25 days with a mean of 7.9 ± 5.6 days. The frequency of activity events that occurred in relation to the number of PT sessions (47) was sitting on the side of bed 47 times (100%), which means that patients sat on the side of bed once every PT session. Standing at the bedside occurred 38 times (81%), transfers to bedside chair, 30 (64%), transfers to a stretcher chair, 16 (34%) and ambulation, 25 (53%). The distance walked was between 30 and 100 feet (mean distance of 182 ± 129 feet). In 8 sessions, patients were able to walk equal or less than 100 feet and in 17 sessions patients were able to walk more than 100 feet. No femoral arterial catheter-related adverse events that could be attributed to participation in physical therapy were documented either in the nursing or physical therapy notes. See Tables 1 and 2 for detailed results.

DISCUSSION
This case series examined the incidence of catheter-related complications associated with mobilizing patients with femoral arterial catheters for hemodynamic monitoring in ICU. Because of the intrinsic limitations and decline in functional mobility associated with prolonged bed rest, investigating strategies to provide early mobility interventions and to confirm their feasibility is vital. The data from this case series suggest that early mobility and walking in the CVICU are safe for patients with femoral arterial catheters as no catheter-related complications were found in either the physical therapy or nursing documentation. Potential limitations of this case series include a single center retrospective study, the small number of patients (n=30) and one physical therapist was primarily providing care to all patients referred to physical therapy. The limited number of subjects may not be sufficient to argue against the clinical theory that participating in functional mobility could make a femoral arterial catheter unstable and result in serious injury. Physiotherapists with less experience mobilizing patients with femoral arterial catheters might also be at greater risk of encountering complications. Because the data in this case series were collected retrospectively, the investigators had no control over what data were available for interpretation; some adverse events may have occurred that were not documented in the medical records. Additionally, findings specific for patients in the CVICU may not be generalized to other ICU patient populations, including infants or children.

CONCLUSION
The data from this single center retrospective case series suggest that early mobility and walking activities appear to be safe and do not affect femoral arterial catheters used for hemodynamic monitoring. Further investigation with larger samples, more institutions and therapists, and different ICU settings is crucial to evaluate the safety and feasibility of such practice. The authors are currently working on a funded prospective study to potentially confirm the aforementioned findings and assist in the development of treatment guidelines for the practice of physical therapy in critical care. Acknowledgement: We thank Ricardo Kenji Nawa for his assistance with the statistical analysis and critical review of the manuscript.

REFERENCES
Appendix 1 – Confidence Survey

Start From the Heart

Patient Safety Program
Survey Posttest

Number: _______________________
Date: ___________________________
Unit: ___________

All responses are anonymous. Please circle the one answer that fits best.

1. I feel that I have the skills to assist an average patient with their daily mobility needs.
   A. Strongly Agree
   B. Agree
   C. Neutral
   D. Disagree
   E. Strongly Disagree

2. I feel that I have the skills to assist an obese patient with their daily mobility needs.
   A. Strongly Agree
   B. Agree
   C. Neutral
   D. Disagree
   E. Strongly Disagree

3. Beaumont provides me the tools to assist my patients with their mobility needs.
   A. Strongly Agree
   B. Agree
   C. Neutral
   D. Disagree
   E. Strongly Disagree

4. I feel confident to plan and coordinate a patient transfer that requires 2-3 people.
   A. Strongly Agree
   B. Agree
   C. Neutral
   D. Disagree
   E. Strongly Disagree

5. I have a good understanding of what the difference is between Physical and Occupational Therapy.
   A. Strongly Agree
   B. Agree
   C. Neutral
   D. Disagree
   E. Strongly Disagree

6. I am confident in my ability to make sure a walker or crutches fit my patient.
   A. Strongly Agree
   B. Agree
   C. Neutral
   D. Disagree
   E. Strongly Disagree

7. I have a good understanding of how to minimize injury during lifting and transfers.
   A. Strongly Agree
   B. Agree
   C. Neutral
   D. Disagree
   E. Strongly Disagree

8. I am confident in instructing and correcting my patient’s technique in using a walker.
   A. Strongly Agree
   B. Agree
   C. Neutral
   D. Disagree
   E. Strongly Disagree

9. I understand the benefits of preventative positioning and range of motion.
   A. Strongly Agree
   B. Agree
   C. Neutral
   D. Disagree
   E. Strongly Disagree

10. I am confident in my understanding of the reasons that a patient should not be ambulated or get out of bed.
    A. Strongly Agree
    B. Agree
    C. Neutral
    D. Disagree
    E. Strongly Disagree

Appendix 2 – Knowledge Test

Start From the Heart

Patient Safety Program
Content Pretest

Number: _______________________
Date: ___________________________
Unit: ___________

1. Your patient Ms. Peterson requires a walker. The purpose of a walker is to:
   A. Relieve WB through the UE; provide lateral stability
   B. Relieve WB through the UE; provide lateral and anterior stability
   C. Relieve WB through the UE; provide anterior and posterior stability
   D. Relieve WB through the UE

2. You are documenting the physical assistance needed to t/f your patient w/c -> mat. Your patient performed 75% of the work. This patient needed ________ assistance.
   A. Maximal
   B. Moderate
   C. Minimal
   D. Standby

3. PROM is indicated for a patient when:
   A. Passive stretching is required
   B. You want to improve strength
   C. When the patient cannot actively move a body segment
   D. All of the above

4. Which of the following is NOT a common location for pressure sores:
   A. The heels of the feet
   B. Behind the knees
   C. The tailbone
   D. The back

5. The physician has indicated that your patient Ms. Klein can put as much weight on her legs as she can tolerate. She is ________ on the bilateral lower extremities.
   A. NWB
   B. 20% PWB
   C. TTBW
   D. WBAT

6. Mr. Box is a patient who has been bedridden for several days. The first time you stand him up to walk he complains of nausea and light headedness. This most likely indicates:
   A. Increased blood pressure
   B. Orthostatic hypotension
   C. DVT in his legs
   D. He does not feel like getting up

7. You are helping Mr. Peters walk to the bathroom with bilateral axillary crutches. Mr. Peters is PWB 50% on the right LE. Which sequence is most appropriate when walking with crutches?
   A. Crutches, left leg, left leg
   B. Crutches, right leg, right leg
   C. Left leg, crutches, right leg
   D. Right leg, crutches, left leg

8. The type of ROM in which assistance is provided by a caregiver because muscles need assistance to complete the motion is:
   A. ROM
   B. AROM
   C. APROM
   D. AAROM

9. Movement within the unrestricted range of motion for a segment that is produced by the patient’s own muscles is:
   A. PROM
   B. AROM
   C. APROM
   D. AAROM

10. Which of the following is a common precaution for preventing dislocation for a THA?
    A. No sitting longer than 30 minutes
    B. No weight bearing through surgical leg for 2 months
    C. No hip flexion past 90°
    D. Wear immobilizer when in bed
TREASURER'S REPORTS

**ACS BUDGET 2010**

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Allowing patients to have direct access to physical therapist services in hospital-based outpatient settings has become a priority for many physical therapists. The process for implementing this change is specific to each setting, but often depends upon the relationships between the physical therapist and both the hospital administration and the medical community. Additionally, there are specific Medicare regulations that dictate how orders for rehabilitation must be handled in hospitals that participate in the Medicare program. These regulations apply to all patients receiving rehabilitation services in hospitals, including non-Medicare beneficiaries. A resource is available on the APTA website (see Advocacy) which provides an explanation of this regulation and suggestions for compliance. Additional resources are being developed to help physical therapists network on this important issue.
New Physical Fitness For Special Populations (PFSP) Pocket Guides

Two new pocket guides providing instructions about how to assist patients in being physically active are planned to be released by the end of the year. The new pocket guides will address physical activity for individuals with pulmonary pathology and spinal cord injury. The current pocket guides are available on the PFSP website (www.apta.org → Home → Areas of Interest → Practice → Clinical Practice Resources → Physical Fitness for Special Populations).

Guide To Physical Therapist Practice Revision

We have received member expert feedback on the new Peripheral Arterial Disease and Chronic Venous Disease practice patterns as well as comments on the ICF changes to the Guide for the first 3 Chapters. In addition, comments on Chapters 2 and 3 relating to content changes/additions were received from the chapters and sections. Staff members will be compiling the feedback and making changes in a draft format. The Guide to Physical Therapist Practice in its current format (ie, 2003 revision) is now posted and replaces the Guide CD format. This resource is now free to all APTA members (http://guidetoptpractice.apta.org).

Registration & information for these Acute Care courses at APTA’s Learning Center can be found at http://learningcenter.apta.org
FURTHERING ACUTE CARE PHYSICAL THERAPY.
ADVANCING CAREERS.

Dedicated to the profession and community, the ACUTEPT Career Center is a valuable search and recruitment resource for acute care physical therapists and employers. The ACUTEPT Career Center offers simple and easy-to-use tools to make searching for career opportunities and finding qualified professionals fast, efficient and successful.

Tools for Job Seekers
The ACUTEPT Career Center gives job seekers access to inside opportunities available only through the association and provides the tools needed to quickly find and apply for jobs.

Advanced Job Search
Find the most relevant physical therapy jobs from top employers.

Customized Job Alerts
Stay up-to-date on the latest opportunities by receiving automated notifications.

Apply for Jobs
Create an anonymous profile and resume to quickly apply for jobs and have employers come to you.

Advantages for Employers
Employers can fill positions faster and at a lower cost than other job websites by reaching a highly qualified and targeted audience of acute care physical therapists.

Recruit Top Talent
Target ACUTEPT members and job seekers committed to the advancement of acute care physical therapy.

Low-Cost Posting Packages
Reduce recruitment costs with flexible, affordable posting options.

Proactive and Direct Recruitment
Take advantage of search, email and online advertising options to recruit candidates.

Visit the ACUTEPT Career Center
Discover the difference the ACUTEPT Career Center can make for you. To search jobs, post jobs or learn more, visit www.AcutePT.org/jobs.

www.AcutePT.org/jobs