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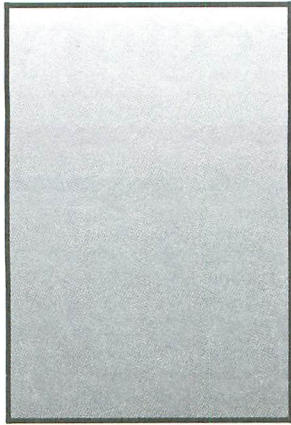
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Orthopaedic Physical Therapy Practice

TABLE OF CONTENTS

IN THIS ISSUE

- 6** **Increasing Awareness of Physical Problems Associated with String and Keyboard Musicians**
By Robert Strasser, PT and Catherine Strasser, PT
- 10** **Pain Management SIG & A Physical Therapist's Role in a Multidisciplinary Center—A Case Study**
By Gaetano G. Scotese, MPT, FAAPM
- 15** **Letter to the Editor**
- 26** **Pre-Work Screening Outcomes in Light to Medium Physical Demand Level Jobs**
By Ronald W. Adams, PT & James Herzog, MS, OTR

REGULAR FEATURES

- Orthopaedic Section Directory 2
- Editor's Note 3
- President's Report 4
- From the Section Office 5
- Abstracts 12
- Section News 16
- Platform & Poster Presentations 20
- OHPTSIG Newsletter 25
- Foot & Ankle SIG Newsletter 29

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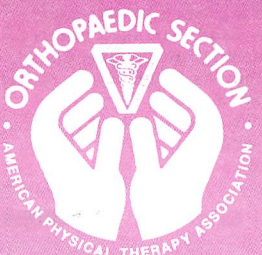
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EDITOR'S NOTE

It seems that the last two issues of *OP* generated some readership response. The Fall issue carried a letter to the Editor regarding Phil Tygiels' comments on the AHCPR guidelines, and in this issue is a letter responding to my editorial on networks. I've also been receiving phone calls, which sometimes are not friendly—it's the price I pay. When the network piece hit the stands (I love that writing lingo) a therapist from the Midwest got my colleague (and employer) on the phone first and chewed his ear pretty good. My colleague responded by handing me the phone and giving me some great advice. . . "I suggest you *listen*." And listen I did. I listened to an angry therapist for ten minutes. Then I calmly thanked him for reading *OP* and offered to print any letter to the editor that he cared to write (I never received one). What else could I do?

Soon after, a call came in from a therapist in the Northeast, thanking me for writing the same editorial and telling me how her practice had suffered through exclusion from HMO's and networks. Both callers were angry, and both were afraid. Interestingly, both described themselves as "trying to survive."

It may be getting a little scary out there. For the first time in my career, I wonder at the number of therapists still coming out of school every year. I wonder how *they* will survive, and I surprise myself with the occasional thought that these therapists will be competing with me for the same health care dollar. These are feelings that I've never

before experienced, and I am not proud of them.

I still recommend physical therapy as a great and honorable profession to interested students, but I'm reluctant to comment on our future marketability—something I would have done five years ago without hesitation. My own fears regarding the business of our profession are compounded by the growing number of educational programs and lack of qualified faculty. I can't even begin to understand the thought process that led the state of Ohio to allow four new educational programs to open within the past two years. All these negative thoughts! So unlike me, I think. Maybe I'm becoming jaded. Maybe *I'm* just trying to survive.



Jonathan M. Cooperman,
MS, PT, JD

President's Report

Battle Lines need to be Drawn

This past month has been an extremely busy one for me regarding legislative issues. I have received a number of phone calls from Section members who wished to discuss state practice act or practice infringement issues brought about by the Chiropractic profession. The same concerns were raised by therapists representing a variety of states at the recent APTA State Government Affairs Conference. My initial thought was that the Chiropractors were on the rampage. But I soon realized that no, this is a pretty typical amount of Chiropractic political activity, creating a pretty typical amount of concern on our part. In fact, the following is an excerpt from the orthopaedic physical therapy Newsletter, Summer, 1975 (our Section publication at that time); "The biggest threat of all is coming with renewed force, from one of our oldest sources. . . Chiropractic. . . we should fear the basic change in the fundamental definitions of their practice." (Stanley Paris) My guess is in the year 2015 we will have the same concerns and will be fighting the same battles.

The financial costs to our profession required to fight these fires are astronomical. To compound the problem our resources are extremely limited, putting us at a distinct disadvantage. State of Wisconsin PAC funding figures from 1993 and 1994 for the chiropractic and physical therapy associations illustrates the challenge we face. During this time, the chiropractors raised and spent \$162,000, while the physical therapists raised and spent only \$2,500. I believe this discrepancy is the rule, not the exception, in most states. Do we continue fighting every single legislative battle that erupts? Can we fight every single battle that erupts? I believe the cost to do so is prohibitive.

We must carefully and selectively choose our battles. For example, if a Chiropractic Association attempts to prevent therapists from treating patients with back pain as we have been trained to, we need to fight. Another potentially volatile issue is the protection of the terms "physical therapy, rehabilitation" or "therapy." Emotionally, I react forcibly and

proudly, stating if provision of physical therapy is advertised, then there should be a physical therapist providing the care. Yet if we consider the costs, do we gain enough by preventing the chiropractors from advertising that they provide therapy or rehabilitation in newspaper ads or in the Yellow Pages? What stops any health care provider from stating they provide therapy or rehabilitation when they are speaking to patients, legislators, third party payers or hospital administrators? How can we police this? Is it possible or necessary? Next we will be facing the athletic trainers, massage therapists, exercise physiologists or kinesiotherapists who claim they provide therapy or rehabilitation. Where do we draw the line regarding when and how we spend our valuable but limited resources? This is a difficult question. One that I personally have not completely resolved.

My sense is that the health regulatory commissions, legislators and third party payers could care less about our turf claims and battles. They want to know one thing and one thing only; who provides the best patient care regarding cost and functional outcomes. This was one of the major themes presented by all of the non-physical therapy speakers at the recent APTA State Government Affairs Conference. Mobilizing and channeling our resources into the funding of outcome research needs to be a priority of ours. If we are successful, what other professions claim they provide will be a moot point.

Jim Gould

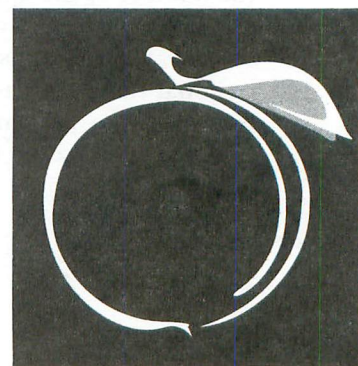
Disbelief and sadness were emotions I felt as I read the memorial tribute to Jim Gould in the last issue of *Orthopaedic Physical Therapy Practice*. The emotions were just as strong then as they were eight weeks earlier when I received the phone call bearing the news of his death. Although not one of Jim's close personal friends, I knew him professionally since 1982. He wore numerous hats during our association, including clinical preceptor, continuing education course instructor and *Journal of Orthopaedic and Sports Physical Therapy* manuscript

collaborator. Of all the attributes Jim displayed, the ones that most quickly come to my mind are dedication to the physical therapy profession, endless patience with students and an amazing level of creativity. The vision of Jim drawing the first cervical vertebra on the blackboard using his left and right hands simultaneously brings an envious smile as I envision my mangled exercising stick figures drawn for patients. We are fortunate to have had Jim as a colleague.

Donations can be made to the James A. Gould Memorial Scholarship fund. Make the check out to UW-LaCrosse Foundation and send a note telling them what fund you are contributing to. The mailing address is: UW-LaCrosse Foundation, Attention Al Trapp, 1725 State Street, LaCrosse, WI 54601.



*William Boissonnault,
MS, PT
President*



CSM96Atlanta

From The Section Office

Terri A. Pericak, Executive Director

The Section moved into its new building on November 3, 1995. At the time of this writing we are still working around the construction people to some extent and hope that by the time you are reading this issue of *OP* the workers will have completed their work. It is a beautiful building with plenty of storage and work space for all of us. An added benefit is the serene setting on the back waters of the Mississippi River.

The local grand opening for the building took place on November 14, 1995. The Chamber of Commerce was present to conduct a ribbon cutting and officially welcome the Orthopaedic Section to La Crosse, Wisconsin. We were very pleased with the attendance. Approximately 40 people from the local business community, hospitals and University stopped in. Bill Boissonnault, President of the Section, also attended.

The Fall Board of Directors meeting was held in Amelia Island, Florida, September 30-October 2, 1995. Minutes from that meeting are pub-

lished in this issue of *OP*. Our new President, Bill conducted the meeting very efficiently which resulted in our adjourning one half day ahead of schedule.

In addition to all of the excellent educational programming at CSM in Atlanta next month, the Section was approached by Bob Burles who offered to do a multi-media tribute to Jim Gould at the Section business meeting on Saturday, February 17. The presentation will be approximately 10 minutes long. We hope you will join us.

Also on Saturday during CSM we will be holding our Black Tie and Roses reception. This will be at one of the convention hotels from 7:00-10:00 PM. The Rose Excellence in Research Award winner will be honored during the reception.

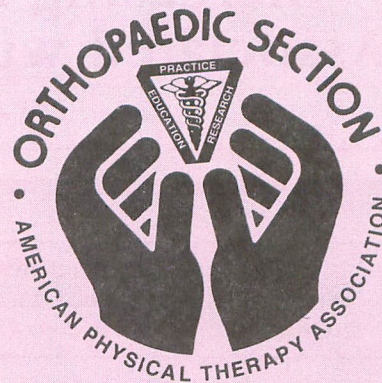
All of us at the Section office hope that your holidays were happy and safe and wish you all the best in 1996!

Congratulations

Congratulations Carol Jo Tichenor, MA, PT on being chosen to deliver the keynote address at CSM in Atlanta, Georgia. Carol Jo is a member of the Orthopaedic Section and currently holds the position of Chair for the Nominating Committee.



Congratulations Jonathan M. Cooperman, MS, PT, JD on being appointed to the Judicial Committee of APTA, an elected position held by an APTA member for a span of five years. Jonathan is a member of the Orthopaedic Section and Editor of Orthopaedic Physical Therapy Practice.



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Increasing Awareness of Physical Problems Associated with String and Keyboard Musicians

By Robert Strasser, PT and Catherine Strasser, PT

This article was submitted by the Performing Arts Special Interest Group.

Introduction

As physical therapists, we are trained to evaluate and treat musculoskeletal and neurological disorders. It was not until our two young children started their musical training that we grew to appreciate the importance of body mechanics, health, and posture in the prevention of injuries for musicians.

Both children started in music at the age of four with the Suzuki method. Our daughter played the violin and our son started on the piano. Even though they had different teachers, both children were taught the fundamentals of good posture while playing their instruments. Violin training included balanced foot placement, use of an appropriately-sized instrument, and the support of a shoulder rest. The training for young Suzuki piano students involved the use of seat cushions to elevate the elbow to the level of the keyboard, footrests to promote normal lordosis of the lumbar spine, and strict emphasis on the position of the wrist and fingers. Both children have carried these early fundamentals of posture and technique forward as they have become more involved in traditional training.

Our intention is not to advocate one method over another, but to increase the overall awareness among parents and teachers in the importance of technique and posture in the prevention of injuries. Until recently, the musician was overlooked as an occupation associated with overuse injuries because musical performance was traditionally viewed as non-exertional. A good coach will carefully watch his or her player's technique and always include a conditioning program to develop the player to their maximum potential. Just as the expense of workers compensation has forced employers to evaluate the workplace and train employees in the prevention of injuries,

the musician, whether amateur or professional, deserves the same attention, so they may enjoy and prosper from their skills.

OVERUSE INJURIES

Overuse injury may be defined as the damage that occurs when a tissue is stressed beyond its anatomic or physiologic limits, either acutely or chronically. The categories of overuse syndromes include (1) those involving bones, joints, and bursa, (2) disorders of the musculotendinous unit, (3) primary muscular pain or cramp, (4) nerve entrapment, and (5) focal motor dystonias.

While bones provide the greatest stability to the body, they are not static structures. Bone is susceptible to repetitive movement or prolonged static loading. Bone overgrowth from prolonged overloading may result in spur formation, while stress fractures may appear as a result of repetitive forces. Osteoarthritis, thought to occur as a result of repetitive trauma, is more often found in the right hand of pianists, particularly in the weaker ring and little fingers.

Tendonitis, the most common problem in musicians, refers to the inflammation of the tendon and is generally characterized by pain and localized tenderness over the tendon or adjacent muscle. Typically, there is increased pain on stretching the involved muscle or upon contracting it against resistance.

Acute muscular pain usually results from lengthy or intense practice sessions, or adverse conditions such as cramped space or improper height of the chair or music stand. Muscle cramps are generally transient and reversible, although sometimes an annoying recurrence, until the environment is corrected.

Nerve entrapment, such as carpal tunnel syndrome in the wrist, may be associated with or precipitated by musculotendinous injury. Repetitive movement against resistance may lead directly to compression of the nerve at specific locations. Entrapment syn-

dromes occur where the nerve passes between rigid structures such as bone, ligament, tendon, or muscle. Symptoms include pain, numbness, tingling, burning, or swelling, localized to the distribution of the nerve. Other nerve entrapment syndromes include cervical radiculopathies, and thoracic outlet syndrome.⁴

Focal motor dystonias are characterized by concurrent contraction of agonist and antagonist muscle groups producing involuntary movements or coordination difficulty. The conditions do not appear until playing is attempted. They tend to be instrument specific, involving flexion or hyperextension of a digit predominantly of the right hand. This entity has traditionally been regarded as a dysfunction of the central nervous system, but the findings that this problem developed following inflammatory episodes, raises the question of whether accommodation to inflammation can lead to focal dystonia. Of all the upper limb afflictions of musicians, the focal motor dystonias are the most frustrating to treat and carry a poor prognosis, but they are the least common problem.⁵

The location of pain is characteristic of the instrument played. Pianists tend to have pain in their right hands and arms, reflecting the increased strength necessary to play thinner treble strings or the more demanding technique required for the right hand. Among pianists, the most commonly affected muscle-tendon groups are finger flexors and wrist flexors. The most commonly affected finger is the right fourth, followed by the right fifth finger and thumb. Among string players, the left hand is predominantly affected. The most common locations are left finger flexors, finger extensors and wrist extensors, with the left fourth the most commonly affected finger.⁶ Shoulder and neck problems are often related to the prolonged unusual position of the neck and head, which support the instrument, and the constant motion of the right shoulder during bowing. Larger stringed instruments require more muscular strength

and have their own ergonomic considerations that lead to neck and back problems.

Painful disorders adversely affect the musician's ability to perform. Minute errors in finger placement cause the desired note on the violin to be out of tune, and similarly small deviations in the coordination required between the bow and finger placement cause the note to be too short, too long or imprecise. According to Lockwood, pianists have the most difficulty with trills (38%), arpeggios (32%), or octaves (30%).⁷ In both groups, even small errors in the biomechanical systems that compose the arm-hand unit, due to pain, joint stiffness, muscle weakness, altered proprioception, or any one of a multitude of other abnormalities, may have a disastrous effect on rhythm and pitch.⁸

INCIDENCE AND OCCURRENCES OF INJURIES

Requirement of rapid, controlled repetitive movement place the string and keyboard musician especially at risk for musculoskeletal injuries. Caldron et al surveyed high-level musicians ranging from advanced music students to professionals. These musicians averaged 25 playing hours weekly and had a median of 12 years of playing experience. The author's note 56.8% of musculoskeletal disorders. The survey found 36.8% sought medical attention. Females were more likely to report injuries and seek medical attention than their male counterparts. Most of the injuries resulted in loss of fine motor control or coordination and loss of power when playing. Thirty-four percent of musicians who experienced injuries reported some loss of income. Not surprising, many musicians sought "medical" advice from a colleague or teacher, and tried some unusual methods of treatment.¹

Medical problems also occur in secondary school-age musicians. A study of music students age 12-18 by Lockwood² found 51% reported no significant problems, 32% had mild problems (grade 1), and 17% had more severe problems (grades 2-4).

Grading system for severity of injury:

0 = No pain

1 = Pain at one site associated with playing but did not interfere with ability to play

2 = Pain at one or more sites associated with *tenderness*, transient weakness or loss of

control, and present during every session

3 = Pain in one or more sites which lasted an hour or more after playing stopped. Pain interfered with playing and it occurred during other uses of the hand

4 = Pain was severe enough that all common uses of the hand caused pain and playing of the instrument was out of the question

5 = Pain was so severe that the affected hand could not be used for any activity

“

Requirement of rapid, controlled repetitive movement place the string and keyboard musician especially at risk for musculoskeletal injuries.

”

The group reported playing their instrument an average of 19 hours per week. Again, problems were more common in females (68%) when compared to males (47%). Also noted was the fact that those who played the larger string instruments such as the cello or base (78%) were more likely to experience injury than those who played the violin or viola (42%) because of the longer distances that the hand must stretch. Most alarming, however, was that 79% of these young musicians believed pain was an acceptable part of practice; they believed the notion, "no pain, no gain."²

TREATMENT

All of the centers treating musicians recommend rest. Orthotics are appliances used to support, align, prevent, or correct deformities, or to improve the function of moveable parts of the body. The device should immobilize only specific areas of the skeleton while permitting uninvolved joints to move under the influence of balanced musculature.¹³ Instrumental adaptations are frequently recommended. For pianists, regulating the key action and acoustic amplification has been suggested. For string players, bridge revisions to reduce string to fingerboard

distances has proved helpful. Some cello and bass players benefit from changing from a French overhand bow to a German bow with a wide body which fits into the palm.¹⁴ All treatment plans should include posture training to improve body alignment and balance, and to increase the efficiency of movement. Two popular types of posture training include Alexander technique¹⁵ and Feldenkrais method.¹⁶

Mayo Clinic issued a report on the treatment of 100 musicians by the Departments of Hand Surgery and Physical Medicine and Rehabilitation. Of the 100 musicians treated, six required surgery and the others employed conservative measures such as splints, massage, rest, stretching, relaxation, ultrasound, strengthening exercises and heat. Treatment durations ranged from 1-6 months. By the end of the treatment period, 85% of the musicians were able to resume their previous level of performance.⁹

Likewise, a group from Cleveland Clinic reports a 72% success rate for the treatment of 52 musicians with musculoskeletal or neurologic problems of the upper extremities using rest, splinting, exercise, ice or heat, medicine, and local injections. This group additionally notes that suggestions were made regarding the amount or distribution of practice time; size, position, or type of chin or shoulder rests; and/or modifications of playing positions.¹⁰

Roos reports a 90% success rate for 2000 patients with thoracic outlet syndrome who underwent surgery when their cases were uncontrolled by conservative measures.¹¹

As physical therapists with a primarily outpatient orthopaedic caseload, we were very interested to read about the success of topical administration of anti-inflammatory medicine (Aspercreme) in a study conducted by Harvard Medical School. Their rationale was that the medical problems of many musicians are localized and close to the surface. The goal of therapy in this study was to achieve either more playing time with less pain, or constant playing time with less pain. This goal was achieved by 66% of the Aspercreme users as compared with 30% of the placebo cream users. An interesting support study was completed with dogs which revealed an accumulation of the anti-inflammatory agent, salicylate, in dog muscle which was 22 times greater with topical

cream as compared with oral administration. Conversely, blood levels of topical users were only 1% of the oral users¹² which would be expected to result in a lower incidence of gastrointestinal upset.

The University of California has some interesting and sensible treatment recommendations regarding weight loss and cessation of smoking. In one of their case studies, a violinist with carpal tunnel syndrome gained control of her symptoms by a 30 pound weight reduction in conjunction with posture training. Due to the importance of good blood flow in the healing process, this group routinely includes a test in which they manually compress the radial and ulnar arteries in the wrist, then measure the refill time with decompression. Unsatisfactory refill time is an indication for the musician to cease smoking, if s/he is a smoker, and/or to wear fingerless gloves while playing.¹⁴

In May, 1986, the University of Illinois distributed a questionnaire to the International Conference of Symphony and Opera Musicians. From 2,212 respondents, 76% reported at least one **medical problem** that was severe in terms of its effect on performance. The most prevalent of these problems was stage fright. Forty percent of the respondents had tried prescribed beta-blockers, a 92% success rate was reported. However, it should also be noted that 17% had tried aerobic exercise with a 70% success rate.¹⁷

PREVENTION

Discussion on treatment automatically leads to the topic of prevention. There are two types of factors involved in the prevention of overuse injuries: intrinsic factors, i.e. size, strength, flexibility, and muscle tone of the performer, and extrinsic factors such as the musician's *technique*.

Optimal function requires balanced musculature, full ROM, flexibility, and a stable bony architecture. Conditioning is slow and progressive overload on a system to prepare a muscle or joint for increased stress.¹²

Musical performance is a highly skilled neuromuscular activity which requires speed and endurance. Because force application is low, strength is a secondary concern. Repetitive music playing will sufficiently strengthen the distal muscles involved in playing. Many musicians would benefit from a comprehensive conditioning program

that emphasized the postural muscles. The combination of skill, speed, and endurance is best developed by steadily increasing the number of repetitions and speed of performance until the desired level are met.⁹

A survey study of 1,337 members of the Music Teachers' National Association reveals a highly significant linear relationship between the hours spent playing or teaching, and the frequency of injuries. Repetitive hand and wrist activities result in decreased forearm blood flow after 90 minutes. Blood flow is restored to normal after a 5-10 minute period of stretching exercises.⁹

One Australian practitioner recommends regular practice segments and rest periods. Increased practice before a competition, recital, or performance should be done by increasing the number of segments, rather than the length of segments, or omission of breaks.¹⁸

For artists who participate in activities for prolonged periods, muscle fatigue can be reduced by cardiovascular conditioning.⁹ Recommended activities extend the range of motion of the spine, and strengthen the muscle that stabilize and move it.¹⁷

Teaching styles should incorporate methods built on the development of relaxed posture, proper balance during performance, and playing movements which avoid extreme positions.⁹

A Norwegian music conservatory seems to be on the right track with the development of an interdisciplinary prevention program, based on the premise that prevention must become a skill of conscious awareness and habit, which requires time, practice, and constancy. The program motivates and instructs the students to monitor their own practice and playing habits. It increases their understanding of their own biology, psychology, and interaction with their musical instrument. As a part of the program, information and support are provided to the private teachers and parents.¹⁹ As physical therapists and parents, we appreciate the efforts of the Norwegian program.

SUMMARY

We found the study of treatment for musicians very encouraging. We have learned much from our research which we have been able to use both with our children and in our practice of physical therapy. Improved awareness of the medical problems which affect musicians, and successful treat-

ments and prevention techniques, can only serve to benefit us all.

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(Continued on page 13)

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Pain Management SIG & A Physical Therapist's Role in a Multidisciplinary Pain Center—A Case Study

By Gaetano G. Scotese, MPT, FAAPM

This article was submitted by the Pain Management Special Interest Group.

Pain has always been a constant companion to man and the alleviation of pain has always been one of medicine's goals. I meet and treat patients every day who express the desire "to get rid of their pain" associated with their dysfunction or injury. For that matter, all physical therapists in practice have been faced with patients who are experiencing pain, whether acute or chronic, and find it easy to communicate with their peers regarding the difficulty in dealing with this symptom and its associated psychological and physical changes that occur.

The International Association for the Study of Pain (IASP) estimates over 75 million Americans suffer from various types of chronic pain, with headaches being the foremost disorder, affecting 70-80% of the population at least once a month. Chronic low back pain affects at least 31 million and arthritis and joint pain afflicts at least 20-50 million Americans. We above all should realize the severe damage to lifestyle and health that occurs with chronic pain and the need on our part to be well trained in the current pain management practices.

A review of our professional literature over the last 15 years shows very little in the way of evaluation, documentation, and treatment of pain and its associated side effects. A study of orthopaedic physical therapists revealed that very few felt prepared in dealing with pain management and chronic pain patients; yet we see these individuals on a daily basis as do physical therapists practicing in other specialty areas. (Chronic Pain Assessment of Orthopaedic Physical Therapists' Knowledge and Attitudes. *Physical Therapy* 71(3):207-214, March 1991) The realization of this lack of knowledge about current pain management techniques and the need for active participation

of physical therapists in this area formed the impetus to establish the special interest group on pain within the Orthopaedic Section.

This Special Interest Group (SIG) on pain was formed with the intent that we would: (1) be a focal point for channeling the latest practices in the field of pain management throughout the APTA, (2) provide a liaison with any national or international pain management organization with the concurrence of the APTA, (3) provide a dialogue with all APTA sections in promoting speakers, courses, and resources in the area of pain management, (4) provide a group for anyone interested in pain management, no matter what specialty, to join in furthering this area of practice within our profession, and (5) would remain a SIG under the Orthopaedic Section and not become a separate section. It was a firm belief that forming a separate section would only increase cost for all and not allow for the interaction with other established sections.

““

Pain has always been a constant companion to man and the alleviation of pain has always been one of medicine's goals.

To date, the SIG on pain management has: sponsored speakers at the last two combined section meetings; helped the APTA establish formal liaison with National Pain Management Organizations; and provided expertise in the area of pain management to the APTA and sections when needed. This next CSM in Atlanta we will be sponsoring two speakers on pain management and having a business meeting with an election for officers.

Editor's Note: Any Orthopaedic Section member can join the SIG

without cost by calling the Orthopaedic Section at 1-800-444-3982 and giving them your name, address, and telephone number. You will then be eligible to vote in February for new officers.

A Physical Therapist's Role in a Multidisciplinary Center—A Case Study

A 38 year old male underwent a lumbar laminectomy on L4-5 on the right side in February of 1992. Immediately after surgery, he noticed back pain with right lower extremity radicular symptoms. No physical therapy or psychological intervention was given prior to or after surgery. A postoperative MRI revealed epidural scarring and arachnoiditis around the L-5 nerve root.

The patient presented to the multidisciplinary clinic one year after surgery. He described a persistent, severe burning pain in his low back radiating into his right leg and reported that the initial injury occurred while lifting a box at work. He expressed frustration that despite prompt surgical intervention his low back pain had not improved. The patient history stated that back and leg pain was increased with activity and was especially severe in the morning, decreasing as the day progressed; the pain was exacerbated by increasing activity no matter what time of day or night it was. He reported he could only walk about 10 minutes before pain was so severe he would have to rest and take some pain medicine and he could not play golf or run as he did prior to his injury. The patient stated that he slept only 6 hours per night, but denied difficulty attaining or maintaining sleep.

The patient underwent consecutive evaluations by psychology, anesthesiology, and physical therapy. At the team meeting the following observations were reported: the psychology evaluation revealed no mental disorder; the Borg Pain Scale revealed the patient was reporting his back pain as 8/10, his right anterior thigh pain as 5/10, and his lower right extremity

pain overall being 8/10; the result of his Beck Depression Questionnaire was 4, and his McGill Pain Questionnaire Score was 17. Subjective Pain Tolerances indicated severe to moderate impairment of activities of daily living secondary to pain.

The physical therapist performed a musculoskeletal examination, using an osteopathic model, which revealed an anteriorly rotated right ilium resulting in an elevated right posterior superior iliac spine and ischial tuberosity. The right sacral sulcus was depressed and the inferior left lateral angle (ILA) was posterior and inferior. The L-4, L-5 vertebrae bodies were found to be flexed, rotated, and side-bent to the left. The patient also presented with a type one dysfunctional group from T-6 through L-2 with apexes located at T-8 and L-1 with a cross over occurring at T-10. Dural signs and muscle strength were normal.

Isokinetic testing was performed utilizing a Ken-Com 500H with the Lumbar Motion Monitor (computerized isokinetic device with an exoskeletal attachment manufactured by Chattanooga Group) to measure range of motion (side-bending, flexion/extension, and rotation), velocity, acceleration and deceleration. The patient exhibited severe restriction in rotation to the right. Sidebending right was unattainable and velocity was poor outside the normal flexion-extension pattern. This data was combined with goniometric measurement of range of motion which supported the findings that there was functional range of motion excluding rotation to the right or sidebending to the right. On further functional testing the patient was unable to perform more than four repetitions with either lower extremity when tested on the eight inch step-up and step-down tests secondary to severe pain. Functional balance assessment utilizing testing in the Ayer's position, revealed the patient's balance scores to be less than the 50 percentile.

Team recommendations were initial-ly for; exploratory biofeedback at the beginning of the program, caudal epidural steroid blocks and intensive manual therapy techniques of strain-counter strain, muscle energy techniques, manipulation and back stabilization activities for approximately 4-6 treatments. This was then followed up with intensive closed kinetic chain, and functional activities utilizing Unloading Principles™, as described by Kelsey.

The patient underwent a caudal epidural steroid block five days after his initial evaluation. He also received intensive physical therapy on a 3-5 time per week basis for the first two and a half weeks of his treatment. Reevaluation after the first eight visits of physical therapy (approximately two and a half weeks after his initial evaluation) demonstrated increased rotation and flexibility as measured by isokinetic testing. Manual therapy evaluation revealed normal segmental movement within the thoraco-lumbar spine and the pelvis to be properly aligned. Pain levels utilizing both the Borg numerical and linear scale revealed the patient reading his back pain as 3/10, his right anterior thigh pain as 3/30, and his lower right lower extremity pain overall being 3/10. His Beck Depression Questionnaire was 4, and his McGill Pain Questionnaire Score was 15. Patient was walking pain free at 3 mph utilizing the ZUNI Incremental Weight System™ by SOMA for 20 minutes unloaded 22 lbs—during his initial treatment session he had to be unloaded 45 lbs., to walk at 1.8 mph for 7 minutes without pain.

Following his 16th physical therapy visit, his musculoskeletal exam was normal. Pain ratings, utilizing Borg scales revealed 2/10 back pain, 2/10 anterior thigh and overall right lower extremity pain 1/10. Isokinetic testing revealed full movement and normal velocity and acceleration. The patient was running on the treadmill, unloaded at 15 lbs., 5.5 mph for 40 minutes without pain. He was also performing UBE activities 10 minutes at 60 rpm and Schwinn Air-Dyne activities for 20 minutes to tolerance. Initially all these activities were performed unloaded. The team, utilizing critical pathways for chronic pain, recommended continuation in the program. No further psychological or anesthesiological intervention was recommended but physical therapy was to continue for another four weeks in a work conditioning program after which the team would re-evaluate the progress.

A Functional Capacity Exam was performed at the three month mark, which revealed the patient was capable of performing at the light physical demand level of work. His previous work level required the medium level. He was found to have good overall mobility and was able to kneel, crouch, squat, bend, climb, and reach without difficulty. He was started on a work hardening program over 4

weeks, at which time he was re-evaluated and returned to his previous employment with a lifting restriction of 30-35 lbs. Further follow up 6 months later revealed that the patient required no further lifting restrictions. He was also running 3 miles per day and golfing twice per week.

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Abstracts

Effectiveness of Treatment with a Brace in Girls Who Have Adolescent Idiopathic Scoliosis. Nachemson AL and Peterson LE: *JBJs* (American Volume) 77-A: 815-822, 1995. (Departments of Orthopaedics and Statistics, Goteborg University, Goteborg, Sweden).

The Scoliosis Research Society represented by physicians and centers throughout the United Kingdom, Canada, Sweden and the United States conducted a nine year study of 286 girls with adolescent idiopathic scoliosis, a thoracic or thoracolumbar single curve of 25 to 35 degrees and a skeletal age of ten to fifteen years. The purpose of this multicenter, multinational study was to develop a large grouping of similar patients with similar curves and follow until skeletal maturity to determine if treatment with a brace could prevent an increase in the curve. This prospective study emphasized that the methodology include randomization to three different treatment groups: Observation only, Milwaukee or Underarm bracing or Electrical stimulation with the results based on a predefined end point with a six degree worsening of the curve by roentgenogram constituting failure.

There were nineteen physicians and ten centers participating in the study. Patients were grouped into their treatment regimens based on the treatment philosophy of their particular physician. Once in a category, their treatment was not altered. The bracing patients were expected to wear the brace sixteen of twenty-four hours. Compliance with electrical stimulation was monitored with an electrical device. Patients were followed every four to six months until skeletal maturity.

Survivorship curves were constructed for the three treatment groups. A log-rank test was used to test differences between groups. At three years, treatment with a brace was associated with an 80 percent success rate; observation only with a 46 percent success rate and electrical stimulation with a 39 percent success rate. The outcomes changed somewhat at four years and treatment with a brace met with a 74 percent success rate, observation with

34 percent and electrical stimulation with a 33 percent success rate.

The concluding discussion indicated that use of a brace for a right thoracic curve was 40 percent more effective than observation alone or with surface electrical stimulation. The authors recommended that immature adolescents with a 25 degree curve and Risser sign of 0 should be managed by bracing at initial visit rather than waiting until documentation of curve progression.

Although this was a large research study sponsored by the Scoliosis Research Society, as a Physical Therapist it is a concern that there was no reference to exercise as a treatment option or as a component of any of the treatment regimens. Perhaps future physical therapy researchers could develop a study that would network with the Scoliosis Research Society to investigate outcomes of bracing in conjunction with exercise as a treatment option for idiopathic adolescent scoliosis.

Edie Knowlton Benner, PT, MA, OCS

Achilles Tendon Rupture: A New Method of Repair, Early Range of Motion and Functional Rehabilitation. Bert R Mandelbaum, MD, Mark S. Myerson, MD, Robert Forster, RPT, *The American Journal of Sports Medicine*, Vol. 23, No. 4, 1994. (Santa Monica Orthopaedic & Sports, Santa Monica, CA; Union Memorial Hospital, Baltimore, MD).

This article discusses the advantages of a non-absorbable polyfilament suture technique over other previous methods for reparation of Achilles tendon rupture.

The Krackow suture allows early range of motion and functional training because of its rigid and stable fixation. Aggressive motion and weight-bearing will give the necessary loading on collagen tissue to enhance faster polymerization, orientation and organization of fibers and improves the strength of the tendon. Previous methods all have required a cast for immobilization and have consequently resulted in more postsurgical com-

plications such as atrophy, weakness, cartilage deterioration and increased risk for venous thrombosis.

In the Krackow postsurgical protocol a posterior splint is applied allowing the patient to take it off for active range of motion after 48 hours. Weightbearing is started after 10 days with a hinged orthosis allowing limited dorsal flexion. After six weeks full weightbearing is assumed and more aggressive functional exercises started.

At three months' follow up, isokinetic testing with Cybex dynamometer showed the mean functional deficits were 36% and 35% of the opposite leg at 60 and 120 deg/sec. The same deficits dropped down to 2.9% and 2.3% by six months. All patients (n=29) returned to preinjury activity levels at a mean of 4 months after repair. By 12 months, range of motion and function was equal to the uninjured side. Ninety three percent of the subjects had full return to sport activities after 6 months, 100% after 12 months. The overall results of the study shows 2-3% power and strength deficits with the Krackow method compared to 10-15% cumulative deficits in other methods where longer immobilization was required.

The conclusion of the study is that early mobilization and functional training are key to an optimal recovery. Although the study was limited to only 29 patients it shows that the Krackow sutures allow more aggressive approach and improves functional outcome. It is another step towards early interventions with physical therapy and it shows how important our role is in helping to avoid complications of prolonged immobilization.

Fred J. Smit, PT

Trial Into the Effects of Repeated Neck Retractions in Normal Subjects. Pearson MD, Walmsley RP, *Spine* 1995; 20: 1245-1251. (School of Rehabilitation, Queens University, Kingston, Ontario, Canada).

This study was performed to investigate the effect of repeated neck retractions in two samples of normal subjects. This would then establish

baseline gross kinematic data related to neck retraction movements.

Neck retraction movement was performed by two groups of 15 normal women with the age range of 20-29 years and 50-59 years. Each individual performed three sets of ten repetitions which were measured using the three Isotrak System. To measure digitally head and neck position, markers were placed over the tragus of the ear and the spinous processes of several vertebrae. The digitalizations performed provided data of head and neck position before and after performance of ten, twenty and thirty repeated neck movements.

Results of this study indicated no significant difference in the mean retracted position for the total pool of data across repeated movements. A significant change was found in the repeated movements in a neutral position. When the data was pooled across four repeated measurements of marker position, a difference was found between the two age groups. The younger group was found to move farther into retraction. Neither group was found to have a statistically significant change in retracted position across the sets of repeated neck retraction.

The study concludes that because no change was found in neck range of motion after repeated sets, that in a patient population, if a change is noted, this may be due to a pathological process. Also, after repeated sets of neck retractions, a change was noted in neck posture, therefore, this maneuver in a patient population may be beneficial for those attempting a more retracted position. The greater range of motion found in the younger group supports the concept of decreasing range of motion with age. However, the authors explained that this may have been influenced by the restraints placed on the subjects for thoracic and lumbar mobility.

Jennifer Ryan, MS, PT, OCS

Human Trunk Strength Profile in Flexion and Extension. Kumar, Shrewan, PhD, Dufresne, Ronald M, Van Schoort, Tindle (University of Alberta, Edmonton, Alberta, Canada, Canadian National Rail, Montreal, Canada and Workers Compensation Board, Toronto, Ontario, Canada), Spine. 1995; 20:160-168.

This study was designed to assess iso-

metric and isokinetic trunk flexion-extension strength at neutral and at various degrees of trunk flexion. Seventy three healthy control subjects and ten patients with lumbar strain ≥ 3 months duration following injury were involved in the study. The primary testing equipment included the Flexion, Extension, and Lateral Flexion Tester (FELT) to stabilize the hips in the seated position and the Static Dynamic Strength Tester (SDST) to assist in the strength measurements. Just before testing, subjects participated in a typical 5 minute stretching and warm-up session and were allowed to perform a few submaximal trials.

Both groups performed isokinetic trunk flexion-extension, starting at neutral for trunk flexion, and 60 degrees flexion for trunk extension. The control group performed isometric trunk flexion-extension at neutral, 20, 40, and 60 degrees trunk flexion, whereas the patient group performed resistance only in neutral.

Results of the study indicated significant differences between control group and patient group with regard to direction of trunk movement, type of resistance, and the varying angles measured. Values recorded in isometric/isokinetic flexion-extension comparison generally indicated greater strength at all angles for extension in the control group. In the male patient group, there was a noted decrease in flexion/extension strength as compared to the control group. In addition, the patients were comparatively stronger in flexion as a result of weakened extensors in both isometric and isokinetic trials. Isometric and isokinetic strength generally decreased from 0 to 60 degrees of trunk flexion in both study groups.

The study concludes that it is beneficial to measure static/dynamic trunk strength in varying postures that typically reproduce functional daily activities, and thus allows the proper rehabilitation to follow.

Cory B. Tovin, PT

Increasing Awareness of Physical Problems Associated with String and Keyboard Musicians

(Continued from page 6)

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Open House Highlights



Bill accepting plaque from Chamber of Commerce.



Official Ribbon Cutting by President, Bill Boissonnault.

A Winner Has Been Chosen for the 1996 Student Guest Program

The winner of the third annual Student Guest Program was drawn from a pool of 39 students whose names were submitted by their schools. The winner, *Melissa Higgins*, is a physical therapy student at Southwest Texas State University, San Marcos, Texas.

Please join the Orthopaedic Section in welcoming Melissa Higgins at CSM in Atlanta.

The Student Guest Program presents an excellent opportunity to foster the interest of a promising physical therapy student in the field of orthopaedics.

This program, sponsored by the Orthopaedic Section, is open to all accredited entry-level physical therapy schools in the United States and Puerto Rico. Each eligible school is invited to submit the name of one student for inclusion in a random drawing that will be held at the Section office. The winner of the drawing will receive funding from the Orthopaedic Section to attend the 1996 Combined Sections Meeting (CSM).

Eligible students are those members of the senior class who have demonstrated an interest in orthopaedic physical therapy, who exhibit professionalism, and who are able to attend the entire conference. The winner of the drawing is expected to attend the Orthopaedic Section Business Meeting and Issues Forum during CSM, assist with audiovisuals at an orthopaedic research session during CSM, and make an oral presentation to his/her class upon returning from CSM.

The following is an alphabetical list of the students whose names were submitted for this year's drawing:

Jim Bottoms, University of Utah, Salt Lake City, UT
Ian Brooks, Duke University, Durham, NC
Renae Buime, University of Texas Health Science Center, San Antonio, TX
Patricia Caffrey, University of Massachusetts—Lowell, Lowell, MA
Chad Clark, University of Indianapolis, Indianapolis, IN
Amy Cohen, University of Miami, Coral Gables, FL
Bridget Conway, University of Nebraska Medical Center, Omaha, NE
Theresa Davanzo, University of Central Florida, Orlando, FL
Paul Felteau, University of New England, Biddeford, ME
Craig Goldstein, Thomas Jefferson University, Philadelphia, PA
Elizabeth Gross, Philadelphia College of Pharmacy & Science, Philadelphia, PA
Rose Heeg, University of Montana, Missoula, MT
Edward Jellen, California State University—Fresno, Fresno, CA
Shannon Johnson, Louisiana State University Medical Center—Shreveport, Shreveport, LA
Susan Keung, New York University, New York, NY
John Kostak, University of Pittsburgh, Monroeville, PA
Katie Kostbade, University of Evansville, Evansville, IN

Kevin Kozlowski, Cleveland State University, Cleveland, OH

Traci Moniz, University of California—San Francisco, San Francisco, CA

Lisa Nelson, University of Iowa, Iowa City, IA

Alma Ortiz, University of Puerto Rico, San Juan, Puerto Rico

Alison Peltz, University of the Pacific, Stockton, CA

Michelle Quirk, Springfield College, Springfield, MA

Derek Rhodes, Medical College of Georgia, Augusta, GA

Sandra Ribeiro, Hunter College, Pleasantville, NY

Audrey Roberts, Samuel Merritt College, San Francisco, CA

Anthony Roberts, Medical College of Pennsylvania & Hahnemann University, Philadelphia, PA

Jon Robinson, The University of Tennessee at Chattanooga, Chattanooga, TN

Brian Smith, The University of Tennessee—Memphis, Memphis, TN

Alli Soowal, Rutgers/The State University of New Jersey/University of Medicine & Dentistry of New Jersey, Camden, NJ

Rick Stauffer, University of Texas Southwestern Medical Center, Dallas, TX

Mark Suter, Medical College of Ohio, Toledo, OH

Chad Towner, Finch University of Health Sciences/Chicago Medical School, North Chicago, IL

Lisa Van Denend, University of Osteopathic Medicine and Health Sciences, Des Moines, IA

Charles Wabbersen, University of Florida, Gainesville, FL

Rick Wahlgren, Mayo School of Health Related Sciences, Rochester, MN

Melissa Walters, University of Maryland Eastern Shore, Princess Anne, MD

Daniel Weaver, The College of St. Scholastica, Duluth, MN

Lori Wiggins, Old Dominion University, Norfolk, VA



Geor - gia, Geor - gia, the whole day through, just an



old sweet song keeps Geor - gia on my mind.

Keep CSM on your mind.



February 14-18, 1996

APTA Combined Sections Meeting

Letter to the Editor

After some personal debate, I felt compelled to write to you concerning your recent editorial in *Orthopaedic Practice*. When I read your editorial, I did not know whether I should be amused or angered. You see, I happen to be a partner in a Network located in the same state where you practice. The Network I am associated with happens to be a competitor of the organization that contacted you. Although you did not comment specifically on our Network, I felt that many of your comments and insinuations were inappropriate and should be addressed.

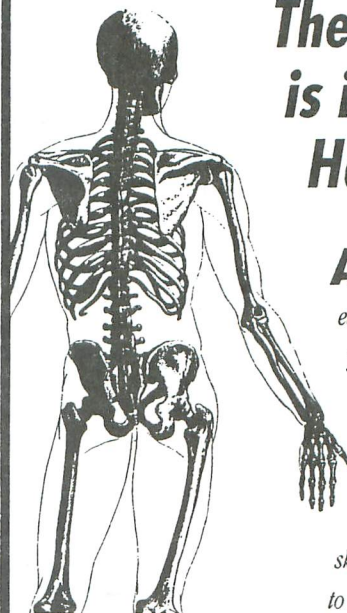
First of all, owners of networks are not control freaks or leg breakers. My associates and I simply organized our Network in an effort to deal with the challenges we were facing and to provide us with an opportunity to survive. Apparently, unlike the author's employer, our organizations were arbitrarily being excluded from provider panels and we were losing patients because we were not on the preferred provider lists of some insurance carriers. Organizing as a Network and pooling our resources seemed like a good business and marketing strategy.

Mr. Cooperman expresses many concerns about investments, fees and profits. The first thing one should realize is that for a Network to be successful it needs to be set up and operate like a business. As anyone who has started a new business knows, it takes money. Investors are needed to provide that money. Because a Network is not sophisticated in recruiting investors (i.e., lacking a formal prospectus or marketing brochures) does not mean it is a bad Network. Investment requirements, annual provider fees and discounts will vary from Network to Network depending upon the type, size, scope, and primary focus of the organization. Regardless of the fee structure, the Network will only survive if it helps its members become or remain successful.

One of the most troubling aspects of this editorial was the comments relating Networks to the mob extorting protection money from small business owners to avoid being "hit." I would like to inform anyone reading this letter that the partners in our Network have never used fear to entice new members, extorted money, offered protection in return for money, threatened to break any legs, nor do we have any connections with organized crime. We are simply hard working, conscientious, physical therapists trying to help our profession survive in this ever changing and challenging world.

*Michael Jaworski, MBA, MHS, PT
Jaworski Physical Therapy, Inc.
Ohio Physical Therapy Network, Inc.*

San Francisco Bay Area
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For further information contact:

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Section News

Education Program Report

Plans for the 1996 Combined Sections Meeting in Atlanta are finalized. The conference begins with a one and a half day pre-conference course entitled, "Pharmacology, Radiology, and Laboratory Values for the Physical Therapist." Highlights of the Orthopaedic Section programming include a full day of "Functional Orthopaedic Approach to Lumbosacral Dysfunction" presented by Greg and Vicky Johnson, and half day special interest programming by our Foot and Ankle, Pain Management, Performing Arts, and Occupational Health Special Interest Groups and Manual Therapy Roundtable. Research platform presentations are expanded from one day to one and a half days to accommodate the increased volume of abstracts received by the Research Committee.

The Education Program Committee is pleased to announce the offering of two Home Study Course series in 1996. The first is on the cervical spine and the second is entitled, "Orthopaedic Physical Therapy Assessment." Both feature an outstanding selection of topics and authors. Look for information on these courses in this issue.

The Review for the Advanced Orthopaedic Competencies course is being offered in a new format. The title of the course is, "Current Concepts: A Review of Advanced Orthopaedic Clinical Practice." The course is now being offered in two parts.

Part I consists of a review of the cervical and upper thoracic spine, temporomandibular joint, shoulder, elbow, wrist and hand, and Part II consists of a review of the lower thoracic and lumbar spine, sacroiliac, hip, knee, foot and ankle. Part I will be offered in Boston in July and Part II in Orlando in November. Two parts are offered to allow more indepth coverage of each area of the body.

The Education Program Committee is interested in co-sponsoring educational programs with other Section, State, and study groups. Please contact

Tara at the Section office if you are interested in co-sponsoring a course with us.

*Lola S. Rosenbaum, PT, OCS
Chair, Education Program Committee*

Research Report

We have developed a Clinical Research Grant Task Force consisting of myself, Mary Milidonis and Kelly Fitzgerald and have proposed an Orthopaedic Section Clinical Research Grant Program. This program was accepted by the Board of Directors at the Fall Meeting. Complete information will be forthcoming in the May issue of *OP*.

*Dan Riddle, MS, PT
Chair, Research Committee*

Public Relations Report

The Public Relations Committee is in the process of developing a Media Strike Force. Over the past several months a search has been on to identify spokespersons for the top 100 media markets in the nation. These individuals will serve as media contacts in their area, representing the Section when there is a need. Our goal is to have a list of confirmed spokespersons by the Board meeting at CSM. If you are interested in serving the Section in this capacity, and have not been contacted, please get in touch with either the Section Office or me.

*Mari Bosworth, PT
Chair, Public Relations Committee*

Practice Report

The Orthopaedic Section has participated in discussions regarding chiropractors' complaints of California physical therapists performing manipulations. The chiropractors' complaint regarded interpretations from two California attorney generals who opined that physical therapists may not perform spinal manipulation. These opinions were offered many years ago.

The chiropractic community sought to be included as providers within

managed care organizations. An article was published in *Dynamic Chiropractic* which described intervention by the Health Care Finance Administration (HCFA). Chiropractors viewed the HCFA position as favorable to their plea for inclusion within managed care organizations in California.

The American Physical Therapy Association has participated in several meetings with HCFA personnel in an attempt to clarify the issue. The outcome of those meetings, simply stated, is that HCFA has used state practice acts to determine which practitioners may provide covered services within the HCFA managed care division. When a practitioner is authorized by state statute to provide a service, that practitioner is authorized to provide the service *within a managed care organization recognized for medicare beneficiaries*. The HCFA managed care division establishes guidelines for services provided only within managed care organizations.

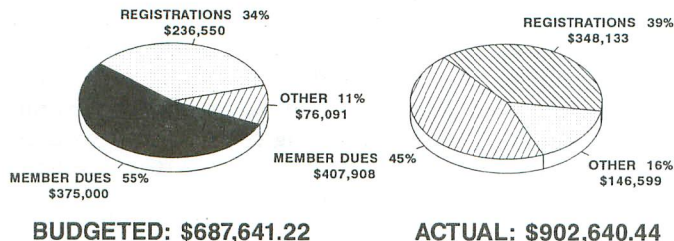
HCFA's determination is applicable only to California "managed care" providers and is specific to spinal *manipulation*. California physical therapists have the physical therapy practice act to determine their appropriate scope of practice.

Please address questions regarding this report to:

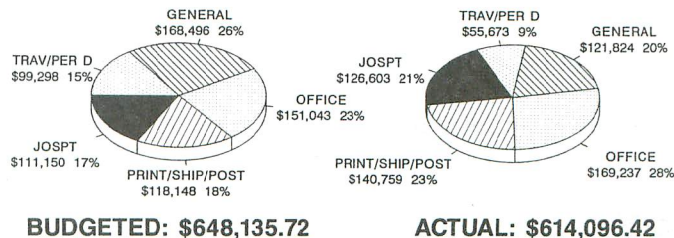
Scott Stephens, MS, PT
1316 South Jefferson Street
Roanoke, VA 24016
540/982-3689
FAX 540/342-3506
e-mail SSTEPHENS@APTA.ORG

*Scott Stephens, MS, PT
Chair, Practice Committee*

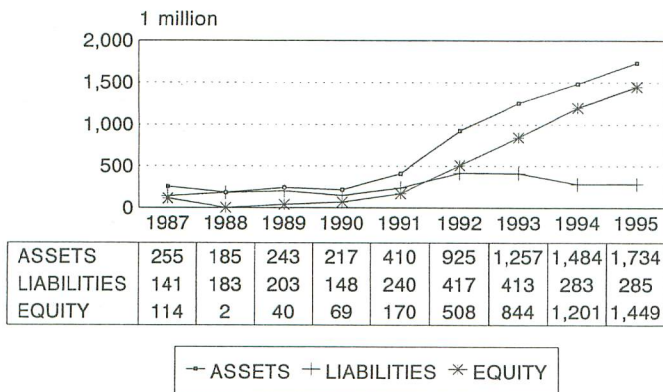
**1995 BUDGET TO ACTUAL
INCOME: BREAKDOWN - Sept. 30, 1995
(+31.3% over our expected budget)**



**1995 YTD BUDGET TO ACTUAL
EXPENSE: BREAKDOWN - Sept. 30, 1995
(-5.3% under our expected budget)**

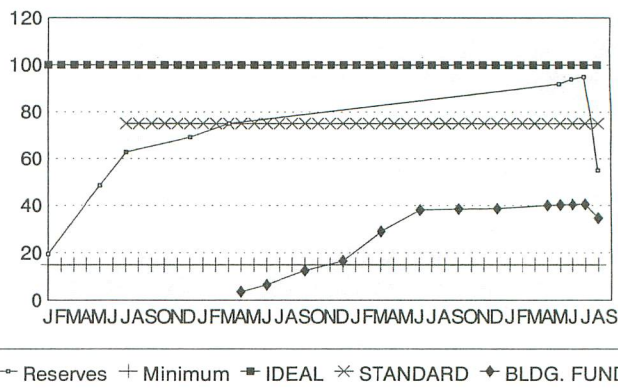


**YEAR END FISCAL TRENDS
1987-1995 (1995 data is as of Sept. 30, 1995)**



To nearest thousand

**RESERVE FUND
January 1, 1992 to Sept. 30, 1995**



Call for Nominations for Orthopaedic Specialty Council Member

The Orthopaedic Section needs your input for qualified candidates to be appointed as a member of the Orthopaedic Specialty Council. To serve is exciting and an honor! If you would like the opportunity to serve the Section or know of qualified members who would, please fill in the requested information and send or FAX it to the Section office, along with the candidate's curriculum vitae no later than **April 1, 1996**.

Print full name of nominee _____

Address _____

City _____

State _____ Zip _____

Work Telephone (_____) _____

Home Telephone (_____) _____

Qualifications for Specialty Council Member:

- 1) Must be willing to serve for a four (4) year term beginning July 1, 1996
- 2) **Must be an Orthopaedic Certified specialist (OCS)**

PLEASE RETURN BY APRIL 1, 1996 TO:
Orthopaedic Section
2920 East Avenue South
La Crosse, WI 54601
FAX NUMBER (608) 788-3965

Nominator: _____

Address: _____

Telephone: _____

Meeting Minutes

FALL

BOARD OF DIRECTORS MEETING SEPTEMBER 30—OCTOBER 2, 1995 AMELIA ISLAND, FLORIDA

The Fall Board of Directors meeting was called to order in Amelia Island, Florida at 8:00 AM on Thursday, September 30, 1995 by President Bill Boissonnault.

ROLL CALL:

Present:

Bill Boissonnault, President
Jonathan Cooperman, *OP* Editor
Dorothy Santi, Treasurer
Mary Ann Sweeney, Specialty Council Member
Michael Cibulka, Director
Nancy Krueger, Finance Committee Member
Elaine Rosen, Director
Scott Stephens, Practice Chair
Lola Rosenbaum, Education Chair
Mari Bosworth, Public Relations Chair
Dan Riddle, Research Chair
Carol Jo Tichenor, Nominating Committee Chair
Annette Iglarsh, Immediate Past President
Karen Piegorsch, OHSIG Vice President
Terri Pericak, Executive Director
Sam Brown, APTA Board Liaison

Absent:

Nancy White, Vice President

MEETING SUMMARY:

The minutes from the June 26, 1995, Board of Directors meeting in Washington D.C. were approved by the Board as printed. The pre-Fall Board meeting conference call minutes from August 1, 1995 were approved by the Board as printed.

The agenda for the Fall Board of Director meeting on September 30, 1995 was approved as printed.

The elected officers will be the only ones eligible to vote on motions. This is in accordance with our bylaws.

=MOTION 1= The Section contribute \$1,000 to the J. A. Gould Memorial Garden *Fund at the University of La Crosse* for Jim Gould. =PASSED=

=MOTION 2= The Orthopaedic Section fund the previous board members to attend the Section National Grand Opening in La Crosse September, 1996. =PASSED=

The following past officers should be included: John Medeiros, Annette Iglarsh, John Wadsworth and Stanley Paris.

=MOTION 3= The conference room within the Orthopaedic Section headquarters be named for James Gould. The room should be marked with an appropriate brass plaque. =PASSED=
Financial Implication: \$150

=MOTION 4= To amend motion #1 passed on June 28, 1995 to read: The Section will contribute \$75 or 50%, whichever is higher, per employee towards health and accident insurance and 2% of each employee's salary toward a "Flex Plan" and 7% of each employee's salary towards a SEP for 1996. =PASSED=

=MOTION 5= The Orthopaedic Section pledge the \$280,000 for The

Foundation's Low Back Pain Clinical Research Center (CRC). \$50,000 would be donated in 1996, \$100,000 in 1997 and \$130,000 in 1998. These figures are contingent upon The Foundation meeting the terms of the contract. =PASSED= Elaine Rosen, Director, abstained.

Fiscal Implications: \$280,000.

=RECOMMENDATION 1=

That the Orthopaedic Section approve AAOMPT for SIG membership provided that they comply with the requirements of APTA and the Section.

=MOTION 6= The Orthopaedic Section will sign up with the APTA Internet. =PASSED=

=MOTION 7= Approve the Finance Committee Meeting Minutes, June 25, 1995 in Washington, D.C. and the August 25-26, 1995 meeting minutes in La Crosse, WI. =PASSED=

Adjournment

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1996 CSM PROGRAM

TUESDAY, FEBRUARY 13

Pre-Conference Course
12:30—4:30 PM
Pharmacology, Radiology and Laboratory Values for the Physical Therapist
Speakers:
Richard Brown, Pharm D
Donald H. Rosenbaum, DO
Michael B. Koopmeiners, MD

5:30—7:30 PM
Program Chairs Meeting

WEDNESDAY, FEBRUARY 14

8:00 AM—4:30 PM
Pre-Conference Course (Continued)

7:00 PM
CSM Opening Ceremonies

THURSDAY, FEBRUARY 15

8:00 AM—Noon
Fitness for the 90's (MULTI-SECTION PROGRAM)
Speaker:
Kenneth Cooper, MD

1:00—4:30 PM
Differential Diagnosis in Orthopaedics
Speaker:
Michael B. Koopmeiners, MD

Interfacing clinical research and practice: Low Back Assessment
Speakers:
Paul Beattie, PhD, PT, OCS
Anthony Delitto, PhD, PT
Jill Binkley, MClSc, PT, COMP

2:00—4:00 PM
Research Platform Presentations (Concurrent Sessions)

4:30—6:30 PM
EXHIBIT HALL BREAK

FRIDAY, FEBRUARY 16

8:00 AM—Noon
Orthopaedic Section Board of Directors Meeting

8:00—10:00 AM
Functional Orthopaedic Approach to Lumbosacral Dysfunction
Speakers:
Vicky Johnson, PT
Greg Johnson, PT
Cheryl Wardlaw, MS, PT

Research Focus on Repetitive Use and Static Postures
(see Hand Section)

8:00—10:00 AM
Research Platform Presentations (Concurrent Sessions)

8:00—10:00 AM
Pain Management and Lumbar Dysfunction
Speaker:
Doug Kelsey, PT
Gaetano Scotese, MPT, FAAPM

10:00—11:00 AM
EXHIBIT HALL BREAK

11:00 AM—Noon
Functional Orthopaedics (Continued)

Research Focus on Repetitive Use & Static Postures (Continued)

Management of Bone Tumors in Children—Benign & Malignant
(see Pediatrics)

Pain Management Business Meeting

Research Platform Presentations (Concurrent Sessions)

11:00 AM—12:30 PM
Occupational Health SIG Program
Industrial On-site Physical Therapy and Ergonomics
Speakers:
Roberta Kayser, PT
Suzanne Patenaude, MA, PT

12:30—2:30 PM
JOSPT Advisory Council Meeting

12:30—2:30 PM
Research Issues Forum (Outcomes)
(see Research Section)

1:00—2:00 PM
Laser Therapy in Pain Treatment
Speaker:
Tom Watson, MEd, PT, FAAPM

1:00—2:30 PM
Functional Orthopaedic (Continued)

2:30—3:30 PM
EXHIBIT HALL BREAK

3:30—5:30 PM
Performing Arts SIG Programming

Treatment of the Dancer
3:30—4:00 PM
Alternative Functional Passive Range of Motion Technique for the Lower Extremity
Speaker:
Mimi Zlatkowski, PT

4:00—4:30 PM
Spine Stabilization of the Dancer
Speaker:
Andrea DiStefano, PT, BFA

4:30—5:00 PM
Functional Rotation Training For Dancers
Speaker:
Marika Molnar, PT

5:00—5:30 PM
Panel Discussion

3:00—5:00 PM
Orthopaedic Section Board of Directors Meeting (Continued)

3:30—5:00 PM
Functional Orthopaedics (Continued)

SATURDAY, FEBRUARY 17

8:00—10:00 AM
Orthopaedic Section Business Meeting

9:00 AM—5:00 PM
Focus on Wrist Pathology - Part 1

10:00—11:00 AM
EXHIBIT HALL BREAK

11:00 AM—Noon
Manual Therapy Business Meeting

11:00 AM—12:30 PM
OHSIG Business Meeting

9:00 AM—5:00 PM
Focus on the Wrist

12:30—1:30 PM
Foot and Ankle SIG Business Meeting

1:00—2:30 PM
Manual Therapy Programming
Manual Therapy...and Beyond!
Speakers:
Ann Porter-Hoke, PT, OCS, COMP, FAAOMPT
Paul Feuerborn, PT
Patricia King Baker, MA, PT
Tim McGonigle, PT

1:30—5:30 PM
Foot and Ankle Programming

1:30—2:30
The Inverted Orthotic Technique
Speaker:
Stephen Baitch, PT

3:30—4:30
Tibialis Posterior as a Culprit of Heel Pain
Speaker:
Catherine Patla, MMSc, MTC, PT, OCS

4:30—5:30
Biomechanical Constraints of the Foot and Ankle Contributing to Abnormal Patterns of Movement
Speaker:
Beth Fisher, MS, PT, NCS

1:30—2:30 PM
Performing Arts Business Meeting

Research Platform Presentations (Concurrent Sessions)

2:30—3:30 PM
EXHIBIT HALL BREAK

3:30—5:30 PM
Performing Arts SIG Programming
Treatment of the Musician

3:30—4:00 PM
Factors Causing a Musician to Become Strung Out
Speaker:
Sharon Leilich, MPT

4:00—4:30 PM
Physical Therapy Management of the Musician
Speaker:
Jeffrey T. Stenback, PT, OCS

4:30—5:00 PM
Neuromuscular Retraining of Upper Extremity Function in Musicians
Speaker:
Lynn Medoff, MPT, MA

5:00—5:30 PM
Panel Discussion

3:30—4:30 PM
Manual Therapy Programming (Continued)

3:30—5:30 PM
Research Platform Presentations (Concurrent Sessions)

7:00—10:00 PM
Black Tie and Roses

SUNDAY, FEBRUARY 18

7:00—8:00 AM
Program Chair Meeting

8:00 AM—Noon
Physical Therapy Education for Health Action
(see Education Section)

Management of the Child with Congenital & Acquired Limb Deficiencies
(see Pediatric Section)

Beyond conventional exercise: Integrated Feldenkrais Approach to Orthopaedics
Speaker:
Ilana Parker, PT, CFP

Focus on the Wrist
(Continued)

Platform and Poster Presentations

PLATFORM

Thursday, February 15, 1996
2:00pm to 4:00pm (Session A)

2:00 to 2:20
BIOMECHANICAL COMPENSATIONS FOR LEG LENGTH DISCREPANCY IN A BALLET DANCER. *Christopher Werner*. Westside Dance Physical Therapy, P.C. (2109 Broadway, Suite 204, New York, NY 10023). (Special Interest)

2:20 to 2:40
THE ROLE OF PHYSICAL THERAPISTS IN TREATING INJURED ARTISTS AT THE JUILLIARD SCHOOL. *Zappile Michele*, Gallagher Sean, Reiger Christine, Weiss David. The Juilliard School, supervised by Performing Arts Physical Therapy. (2230 S. Carlisle Street, Philadelphia, PA 19145). (Special Interest)

2:40 to 3:00
MUSIC TEACHERS' BELIEFS AND OPINIONS ON EFFECTIVE TREATMENT OF MUSIC-RELATED INJURIES. *Nicholas Quarrier*, Department of Physical Therapy, (Ithaca College, Ithaca, NY 14850). (Research)

3:00 to 3:20
PROFILE OF DANCE INJURIES IN A BROADWAY SHOW: A DISCUSSION OF ISSUES IN DANCE MEDICINE EPIDEMIOLOGY. *Shaw Bronner*, Bruce Brownstein, SOAT: Sports Orthopedic and Athletic Rehabilitation. (18 East 50th St., New York, NY 10022). (Special Interest)

3:20 to 3:40
CORRELATION BETWEEN UPPER EXTREMITY INJURIES AND ADVERSE NEURAL TENSION SIGNS IN ELITE MUSICIANS. *Anderson B.D.*, Weaver L., Salzburg, Austria. (2212 K. Street, Suite 100, Sacramento, CA 95816). (Special Interest)

3:40 to 4:00
HIP PAIN ASSOCIATED WITH SUPERIOR GLUTEAL NERVE IMPINGEMENT. *Robert R. Turner*. Westside Dance Physical Therapy, 2109 Broadway Suite 204, New York, NY 10023. (211 E. 18th St. #3K New York, NY 10003 (212) 979-1880). (Special Interest)

THURSDAY

2:00pm to 4:00pm (Session B)

2:00 to 2:20
AN ACCELEROMETER BASED SYSTEM FOR ASSESSING FUNCTIONAL DYNAMIC POSTURAL STABILITY IN THE ELDERLY. *Schieb, D.A.*, Chen, F.C., Protas, E.J., Hasson, S.M. Texas Woman's University, (School of Physical Therapy, TWU, 1130 M.D. Anderson Blvd., Houston, TX 77030). Partial support provided by a NIH Post-Doctoral Training Grant 1080061. (Research)

2:20 to 2:40
THE EFFECTS OF A PREOPERATIVE EDUCATIONAL AND EXERCISE PROGRAM ON POSTOPERATIVE MOBILITY IN TOTAL HIP ARTHROPLASTY PATIENTS. *Gatti LA*, Bourbon B, Scott CM; Philadelphia College of Pharmacy and Science/Pennsylvania Hospital. (217 Buckner Avenue, Haddonfield, NJ 08033). (Research)

2:40 to 3:00
EFFECT OF VERTICAL GROUND REACTION FORCES ON PEAK PLANTAR PRESSURES IN DIABETIC INDIVIDUALS WITH LIMITED JOINT MOBILITY AND PERIPHERAL NEUROPATHY. *Gamboa, Jennifer M.*, Sims Jr., DS, Brownell, SD, Lazo, AF, Shah, NP, Williams, JC; Shenandoah University-Winchester Medical Center Program in Physical Therapy, Winchester, VA. (301 Davis Avenue, SW, Leesburg, VA 22075). (Research)

3:00 to 3:20
THE RATIONALE AND RELIABILITY OF THREE FUNCTIONAL PERFORMANCE TESTS IN THE ASSESSMENT OF LOWER EXTREMITY FUNCTION. *Greenberger Hillary*, Sperling L., Frankford G. Ithaca College. (Department of Physical Therapy, Ithaca, New York 14850). (Research)

3:20 to 3:40
THE EFFECT OF POST-SURGICAL EDEMA OF THE KNEE JOINT ON REFLEX INHIBITION OF THE QUADRICEPS FEMORIS—A CASE STUDY. *Andrew L. McDonough*, Joseph P. Weir, Applied Physiology Laboratory,

Department of Movement Sciences & Education, Teachers College, Columbia University, New York, NY 10027. (112 Central Avenue, Old Tappan, NJ 07675-7340). (Research)

3:40 to 4:00
COMPARISON OF ELECTROMYOGRAPHIC ACTIVITY OF THE QUADRICEPS DURING TWO KNEE EXTENSION MOVEMENT PATTERNS. *Pedersen AM, Hasson SM*. Texas Woman's University. (School of Physical Therapy, TWU, 1130 M. D. Anderson Blvd., Houston, TX 77030). (Research)

Friday

February 16, 1996
8:00am to 10:00am (Session A)

8:00 to 8:20
RELIABILITY AND VALIDITY OF A SHOULDER OUTCOME SCORING SYSTEM. *Brian G. Leggin*, Ramona M. Neuman, Michael A. Shaffer, Joseph P. Lannotti, Gerald R. Williams Jr, Susan K. Brenneman. Hospital of the University of Pennsylvania (Outpatient Physical Therapy, First Floor, Ravdin Building, 3400 Spruce Street, Philadelphia, PA 19104). (Research)

8:20 to 8:40
JOINT MOBILIZATION: STRETCH SPECIFICITY USING A DISTRACTION. *Michael Zito*. (University of Connecticut, School of Allied Health Professions, 358 Mansfield Rd., Koons Hall U-101, Storrs CT 06269). (Special Interest)

8:40 to 9:00
IMPROVEMENTS IN PAIN, DISABILITY, AND GRIP STRENGTH FOLLOWING A SERIES OF CRANIOSACRAL TREATMENTS: A CASE STUDY. *Matthew Cook*. The Chambersburg Hospital, 112 North Seventh St., P.O. Box 6005, (745 Meadowbrook Lane, Chambersburg, PA 17201). (Special Interest)

9:00 to 9:20
FIRBOMYALGIA (FMS): A 6 STEP PHYSICAL THERAPY TREATMENT PROGRAM. *Daniel Danish*. CORE Physical Therapy, 3201 Highfield Drive, Bethlehem, PA 18017. (Special Interest)

9:20 to 9:40

OUTCOMES MANAGEMENT- A COMPREHENSIVE APPROACH. *Margaret A. Greco*. Caremark Orthopedic Services, Inc., 900 N. National Parkway, Suite 300, Schaumburg, IL 60173. (Special Interest)

9:40 to 10:00

THE INCIDENCE OF NON-TRAUMATIC MUSCULOSKELETAL INJURY IN WHITE WATER RIVER GUIDES. *Tom Martin*, Mark W. Cornwall. Department of Physical Therapy, Northern Arizona University, Flagstaff, AZ, (Department of Physical Therapy, PO Box 15105, Flagstaff, AZ 86011). (Research)

Friday

8:00am to 10:00am (Session B)

8:00 to 8:20

RADIOGRAPHIC ASSESSMENT AND RELIABILITY STUDY OF THE CRANIOVERTEBRAL SIDEBENDING TEST. *Kenneth A. Olson*, Stanley V. Paris, Clifford Spohr, Gerard Gorniak. Work completed at Institute of Physical Therapy, St. Augustine, Florida. (525 Edward Street, Sycamore, IL 60178). (Research)

8:20 to 8:40

OUTCOME FOLLOWING ANTERIOR CERVICAL DISCECTOMY WITHOUT FUSION. *John G. Johnson*, Philip McClure, Elisabeth M. Post. Medical College of Pennsylvania-Hahnemann University, Philadelphia, PA. (124 Swedes Run Dr., Delran, NJ 08075). (Research)

8:40 to 9:00

CORRELATION OF POSTURAL DEVIATIONS AND TEMPOROMANDIBULAR JOINT DYSFUNCTION. *Sylvia McCandless*. McCandless Physical Therapy, 305 Keyway, Building B, Suite D, Jackson, MS 39208. Grant #1R43DE09768-01 NIH-Division of Dental Research. (Research)

9:00 to 9:20

SCAPULAR KINEMATICS DURING ARM ELEVATION IN HEALTHY SUBJECTS AND PATIENTS WITH SHOULDER IMPINGEMENT SYNDROME. *Amy Cole*, Philip McClure, Neal Pratt. Medical College of Pennsylvania-Hahnemann University, Philadelphia, PA (Dept. of Physical Therapy, Medical College of Pennsylvania and Hahnemann University, MS 502, Broad and Vine St., Philadelphia, PA 19102). (Research)

9:20 to 9:40

USE OF THE FLEXIBLE RULER TO ASSESS THE RELATIONSHIP AMONG LUMBAR, THORACIC, AND CERVICAL SPINE CURVES. *Ikeda ER*, Christian DM, Drake JJ; Department of Physical Therapy, The University of Montana, Missoula, MT 59812, USA. (Research)

9:40 to 10:00

THE RELIABILITY AND VALIDITY OF A NEW OCCUPATIONAL OUTCOMES MEASUREMENT SCALE. *Edward A. Dobrzykowski*, Formations in Health Care, Inc. and University of Illinois, Chicago, Illinois. (Formations in Health Care, 155 N. Wacker Dr., Suite 725, Chicago, IL 60606). The scale development was funded by the American Occupational Therapy Foundation. (Research)

Friday

11:00am to 12 Noon (Session A)

11:00 to 11:20

EFFECT OF LOWER EXTREMITY POSITION AND STRETCHING ON HAMSTRING MUSCLE FLEXIBILITY. *Michael Ross*. 74th Medical Group, Wright-Patterson Air Force Base, Ohio; (39th MDG USAF, PSC 94 Box 379, APO AE 09824). (Research)

11:20 to 11:40

QUANTIFICATION OF PATELLAR TRACKING USING DYNAMIC RESONANCE IMAGING: IMPLICATIONS FOR RESEARCH AND CLINICAL ASSESSMENT. *Christopher M. Powers*, University of Southern California, Dept. of Biokinesiology. (1540 E. Alcazar St., CHP 155, Los Angeles, CA 90033). Supported by a grant from the Foundation for Physical Therapy Inc. (Special Interest)

11:40 to 12:00

EFFECT OF PATELLAR TAPING AND BRACING ON PATELLAR POSITION AS DETERMINED BY MRI IN PATIENTS WITH ANTERIOR KNEE PAIN. *Teddy W. Worrell*, Christopher Ingersoll, Kelly Brockrath, Paul Minus, University of Indianapolis, Krannert School of Physical Therapy, (1400 E. Hanna Ave. Indianapolis, IN 46227-3697), St. Francis Hospital, Beech Grove, IN provided MRI support for this research project. (Research)

Friday

11:00am to 12 Noon (Session B)

11:00 to 11:20

MUSCLE DYSFUNCTION: A COMPARISON OF SYMPTOMATIC PATIENTS AND CONTROLS. *Barbara J. Headley*. Movement Assessment, Research & Education Center, PO Box 3192, Boulder, CO. (Research)

11:20 to 11:40

INTRAEXAMINER RELIABILITY, INTEREXAMINER RELIABILITY, AND NORMAL VALUES FOR NINE LOWER EXTREMITY SKELETAL MEASURES. *Scott R. Jonson*, Michael T. Gross. Division of Physical Therapy, University of North Carolina at Chapel Hill. (Physical Therapy Department, Naval Hospital Great Lakes, Great Lakes, IL 60088-5230). (Research)

11:40 to 12:00

MUSCLE RECRUITMENT CHANGES SECONDARY TO MYOFASCIAL TRIGGER POINTS. AN APPROACH TO STUDYING SOFT TISSUE DYSFUNCTION. *Barbara Headley*. Movement Assessment, Research & Education Center, PO Box 3192, Boulder, CO. (Research)

Saturday, February 17, 1996

1:00pm to 2:30pm (Session A)

1:00 to 1:20

INTERTESTER RELIABILITY BETWEEN NOVICE AND EXPERIENCED KT 1000 USERS. *Turenne JK*, Kramer KA, Binkley JM, Hunter S, Binkley GA, Brown HK. North Georgia College, Dahlonega, GA. (3520 Lester Ct., Lilburn, GA 30247). (Research)

1:20 to 1:40

EVALUATION AND TREATMENT OF A SAMPLE OF PEDIATRIC PATIENTS COMPLAINING OF MEDIAL TIBIAL AND MEDIAL ANKLE PAIN: A CASE SERIES. *Michael J. Kelo*, Virginia Rehab- (804 Moorefield Park Drive, Suite 100, Richmond, VA 23236). (Special Interest)

1:40 to 2:00

A MANAGED CARE APPROACH TO A.C.L. RECONSTRUCTION. *Michelle Wellen*, Kristin Dymek, Beth Bylund: FALLON CLINIC (Fallon Medical Center, 135 Goldstar Blvd., Worcester, MA 01606). (Special Interest)

2:00 to 2:20

A PROSPECTIVE OUTCOME STUDY OF HOME REHABILITATION PROGRAMS FOLLOWING ACL RECONSTRUCTION. *Blaschak MJ*, Holmes CE, Lance ED, Turturro TC, Schenck RC. The University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Dr., San Antonio, TX 78284-7774. (Northern Illinois University, 202 Williston Hall, DeKalb, IL 60115). Funded through a grant from the Arthroscopy Association of North America. (Research)

Saturday

1:00pm to 2:30pm (Session B)

1:00 to 1:20

THE RELIABILITY AND VALIDITY OF A NEW ORTHOPEDIC OUTCOMES MEASUREMENT SCALE. *Edward A. Dobrzykowski*. Formations in Health Care, Inc. and the Rehabilitation Corporation. (Formations in Health Care, 155 N. Wacker Dr., Suite 725, Chicago, IL 60606). The research was funded by the Rehabilitation Corporation, Brentwood, TN. (Research)

1:20 to 1:40

INCORPORATING BACK CARE EDUCATION IN A VOCATIONAL SCHOOL CURRICULUM. *Michael Randolph Sheldon*, Lawrence Risigo, India Broyles, Cynthia Cartwright. University of New England. (Department of Physical Therapy, Biddeford, ME). Grant funding through the Maine Department of Labor. (Special Interest)

1:40 to 2:00

INVESTIGATION OF THE RELATIONSHIP BETWEEN PELVIC TILT AND UNILATERAL SACROILIAC PAIN. *Beth-Anne M. Jones*. Work completed at: Old Dominion University, 1994. (The Institute of Physical Therapy, 1690 US 1 South, St. Augustine, FL 32086). (Research)

2:00 to 2:20

INTERTESTER AND INTRATESTER RELIABILITY OF THE PELVIC METER FOR MEASUREMENT OF PELVIC POSITION. *Laura Horvath Jimenez*, Cynthia M. Chiarello. Program in Physical Therapy, Columbia University, New York, NY. (702 Monterey Parkway, Atlanta, GA 30350). (Research)

Saturday

3:30pm to 5:30pm (Session A)

3:30 to 3:50

SIDEBENDING WITH THE BACK RANGE OF MOTION DEVICE. *Ambra, Leia N.*, Ostarello, John; California State University, Hayward, CA 94542, USA (Box 11593 Piedmont, CA 94611-1193). (Research)

3:50 to 4:10

KINEMATIC ANALYSIS OF LUMBAR AND HIP MOTION WHILE RISING FROM A FORWARD FLEXED POSITION IN SUBJECTS WITH AND WITHOUT A HISTORY OF LOW BACK PAIN. Philip W. McClure, Marcia Esola, *Rachel Schreiber*, Sorin Siegler. Drexel-Hahnemann Biomechanics Research Laboratory, Philadelphia, PA (Department of Physical Therapy, Medical College of Pennsylvania and Hahnemann University, MS 502, Broad and Vine St., Philadelphia, PA 19102). (Research)

4:10 to 4:30

DIFFERENCES IN ISOMETRIC AND ISOKINETIC TORQUE FOR TRUNK FLEXION AND EXTENSION. *Debbie Sternen*, Fredrick F. Andres, Mark D. Grabiner, Michael G. Flynn, John N. Drowatzky. The University of Toledo (8291 Cloveridge Road, Chagrin Falls, OH 44022). (Research)

4:30 to 4:50

THE EFFECT OF A SCAPULAR RETRACTION EXERCISE PROGRAM ON SCAPULAR POSITION AND SCAPULAR MUSCLE FORCE. *Kathy Baker-Sawyer*, Philip McClure, Kelley Fitzgerald. Medical College of Pennsylvania-Hahnemann University, Philadelphia, PA (46-333 Ikiiki St., Kaneohe, HI 96744). (Research)

4:50 to 5:10

DEFINING THE MINIMAL CLINICALLY IMPORTANT DIFFERENCE WHEN THE ROLAND-MORRIS DISABILITY QUESTIONNAIRE IS USED TO ASSESS CHANGE IN PATIENTS WITH LOW BACK PAIN. *Paul Stratford*, Jill Binkley, Hamilton ON, Dahlonga, GA. (School of Occupational & Physiotherapy Building T-16, McMaster University, 1280 Main St. West, Hamilton, Ontario, Canada, L8S 4K1). (Research)

5:10 to 5:30

Rose Excellence In Research Award Winner (Research)

Saturday

3:30pm to 5:30pm (Session B)

3:30 to 3:50

THE EFFECT OF A LATERAL STEP-UP EXERCISE PROTOCOL ON ISOKINETIC AND FUNCTIONAL MEASURES. *Gaetano Lombardo*. The Mount Sinai Medical Center, NY. (5 East 98th Street, Box 1240, New York, NY 10029). (Research)

3:50 to 4:10

INTRATER RELIABILITY OF FUNCTIONAL EXCURSION TESTS. *Robert D Leighton*, Krista Bossie, Lori Currier, Bonnie Good, Robin McCormick. The University of New England. (Department of Physical Therapy, 11 Hills Beach Road, Biddeford, ME 04005). (Research)

4:10 to 4:30

THE EFFECTS OF JOINT ANGLE ON ELECTROMYOGRAPHIC INDICES OF FATIGUE. *Weir JP, McDonough Andrew L*, Hill VJ. Applied Physiology Laboratory, Department of Movement Sciences & Education, Teachers College, Columbia University, New York, NY 10027, USA. (Research)

4:30 to 4:50

THE MUSCULAR CONSEQUENCES OF REPETITIVE DYNAMIC LIFTING. *Mercer Susan R.*, Rudy T.E., & Boston, J.R. Depts of Anesthesiology, Biostatistics, and Electrical Engineering, University of Pittsburgh. (Dept. Physical Therapy, Duquesne University, Pittsburgh, PA 15282). Supported by grant 2R01 AR38698 from the U.S. National Institute of Arthritis and Musculoskeletal and Skin Diseases. (Research)

POSTER

1. UTILIZATION OF GROUP TREATMENT IN ORTHOPEDIC POPULATIONS IN THE ACUTE REHABILITATION SETTING.

Fortin S

Fairlawn Rehabilitation Hospital
Worcester, MA 01602

2. EFFECTIVENESS OF TWO BACK MODALITIES IN ENHANCING CERVICAL, THORACIC, AND LUMBOSACRAL RANGE OF MOTION IN HEALTHY FEMALES.

Graetzer DG, Kovacich JM, Richter ST
The University of Montana
Missoula, MT 59812

3. ASSESSMENT OF MINOR MUSCLE LESIONS: THE ACCURACY OF CYRIAX'S DIAGNOSIS BY SELECTIVE TENSION PARDIGM.
Franklin ME, Conner-Kerr T
East Carolina Physical Therapy Program
Greenville, NC 27858
4. EFFICACY OF UTILIZING PHONOPHORESIS FOR THE DELIVERY OF DEXAMETHASONE TO HUMAN TRANSDERMAL TISSUES.
Conner-Kerr TA, Franklin ME, Smith S, Kerr JE
East Carolina Physical Therapy Program
Greenville, NC 27858
5. USE OF EMG BIOFEEDBACK TO RE-EDUCATE THE ROTATOR CUFF IN A CASE OF SHOULDER IMPINGEMENT.
Howard PD
Thomas Jefferson University,
Department of Physical Therapy
Philadelphia, PA 19107
6. ATTITUDES OF PHYSICAL THERAPY STUDENTS TOWARD PRIMARY PREVENTION.
Anderson SP, Neish CN, Hopp JW, Lee JW
Loma Linda University
Redlands, CA 92373
7. APPLICATION OF THE PRECEDE/PROCEED MODEL TO AN ACL REHABILITATION PROGRAM.
Pedersen LM, Gale JR, Majerus JJ
Creighton University, Department of Physical Therapy
Omaha, NE 68178
8. KEY DRIVERS OF PATIENT SATISFACTION IN AN OUTPATIENT ORTHOPEDIC SETTING.
Pothast L
Caremark Orthopedic Services, Inc
Schaumburg, IL 60173
9. VARIATIONS IN RECRUITMENT PATTERNS OF THE UPPER AND LOWER TRAPEZIUS MUSCLES IN ADULTS WITH AND WITHOUT NECK PAIN.
Mimm JW, Zecher SW, Zimmerman GJ
Loma Linda University
Loma Linda, CA 92350
10. RELIABILITY OF A LOW BACK PAIN CLASSIFICATION SYSTEM
Heckard D, Thompson E, McClure P, Brenneman SK
University of Pennsylvania Medical Center, Dept. of Physical Therapy
Philadelphia, PA 19104
11. SURFACE ELECTROMYOGRAPHIC REFERENCE VALUES IN NORMALS AGES 30-55 FOR MUSCLES OF MASTICATION.
Showler ML
Loma Linda University
Loma Linda, CA 92350
12. UPPER QUARTER POSTURE IN SUBJECTS WITH SHOULDER OVERUSE INJURY AND HEALTHY SUBJECTS.
Greenfield B, Catlin PA, Dormaracki S, Goodman H, Miles-Wehrli T, Mueller S
Emory University
Atlanta, GA
13. THE EFFECTS OF PLYOMETRIC TRAINING VS. INDIVIDUALIZED, DYNAMIC, VARIABLE RESISTANCE TRAINING IN HEALTHY HIGH SCHOOL BASEBALL PLAYERS.
Greenfield B, Catlin PA, Foltz M, Lawrence M, Luyk A, Mitchell A
Emory University
Atlanta, GA
14. JOINT RANGE OF MOTION IN CHILDREN WITH WILLIAMS SYNDROME.
Richards K, Shea A, McCarthy C
Children's Hospital
Boston, MA 02115
15. THE POSITION OF THE INSTANTANEOUS AXIS OF ROTATION OF THE KNEE WITH DIFFERENTIAL HAMSTRING LOADS AND ANTERIOR CRUCIATE LIGAMENT SECTION.
Mancinelli CA, Blaha JD, Simons WH, Kish V, Koper M
West Virginia University
Morgantown, WV 26056-9226
16. EFFECTS OF HEEL LIFTS AND BIOMECHANICAL ORTHOSES ON REARFOOT PRONATION IN SUBJECTS WITH FOREFOOT VARUS AND LIMITED ANKLE DORSIFLEXION.
Johanson MA, Catlin PA, Cate M, McCrary L, Rice R
Emory University and Physiotherapy Associates
Atlanta, GA
(Financial support by equipment donation was provided by Orthofeet, Inc and Nike, Inc.)
17. RESPONSIVENESS OF AN OUTCOME SCORING SYSTEM FOR THE SHOULDER: A CASE REPORT.
Leggin BG
Hospital of the University of Pennsylvania
Philadelphia, PA 19104
18. MANAGEMENT OF SHOULDER DYSFUNCTION WITH AN ALTERNATIVE MODEL OF ORTHOPEDIC PHYSICAL THERAPY INTERVENTION.
Holmes CF, Blaschak MJ, Fletcher JP, Howard-Koop N, Banner V, Schenck RC
University of Central Arkansas
Conway, AR 72035
19. THE EFFECT OF NEUROMUSCULAR ELECTRICAL STIMULATION ON SENSORY-IMPAIRED DIGITAL NERVES IN MIDDLE AND DISTAL PHALANX FRACTURES.
Coon B, Hart A
University of Kentucky
Lexington, KY 40503
20. THE PLANTER PRESSURE PATTERN OF ELDERS DURING SELF-SELECTED PACE WALKING.
Chen FC, Schieb DA, Protas EJ
Texas Woman's University
Houston, TX 77030
(Partially supported by NIH Post-Doctoral Training Grant #1080061)
21. A CASE STUDY: DIAGNOSTICALLY CONFIRMED SACROILIAC JOINT INSTABILITY.
Neville CE, Graham-Smith A, Patla Paris C
Comprehensive Women's Therapy Services, an affiliate of
Comprehensive Physical Therapy
Jacksonville, FL 32257
22. THE EFFECT OF THREE DIFFERENT HEAD POSITIONS ON VERTICAL MANDIBULAR OPENING.
Siedel DL, Cummings GS, Higbie EJ, Taylor LF
Georgia State University
Atlanta, GA 30202
23. EFFECT OF UPPER EXTREMITY POSITION ON GRIP STRENGTH.
Smith J, Chaffin E, Malin E, Mawdsley R
University of Massachusetts Lowell and College Misericordia
Dallas, PA 18612-1098

ORTHOPAEDIC PHYSICAL THERAPY HOME STUDY COURSE 96-1

Topic: The Cervical Spine

Course Length: 6 Sessions January - June 1996

PROPOSED AUTHORS AND TOPICS

- ✗ Neal Pratt, PhD, PT
Anatomy of the Cervical Spine
- ✗ Susan Mercer, MS, PT
Biomechanics of the Cervical Spine
- ✗ Demetra John, MS, PT
Painful Disorders of the Cervical Spine
- ✗ Robert Reif, MS, PT, OCS
Evaluation and Differential Diagnosis
- ✗ Richard Bowling, MS, PT
Treatment of the Painful Cervical Spine Using Exercise
- ✗ Richard Erhard, DC, PT
Treatment of the Painful Cervical Spine Using Manual Techniques

Contained within this course is information relating to:

Basic Science	Issues of Clinical Decision Making
Pathology	Case Studies

THE EDITOR

Paul Beattie, PhD, PT, OCS
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Newsletter

WINTER 1995

VOLUME 3, NUMBER 1

PRESIDENT'S MESSAGE

By Dennis Isernhagen, PT

"MANAGED CARE," is it the solution to workers' compensation problems of today? Many politicians and insurance companies claim increased savings with managed care, especially in healthcare costs. Has it really reduced the overall costs of workers' compensation? There has not been a definitive answer to this question.

The total cost of worker's compensation in the United States in 1993 was \$115.9 billion. Healthcare costs have been estimated at 18% of these costs, management approximately 14%, and loss days worked and productivity losses accounted for 68%. Managed care is only focusing on the 18%, while little focus is placed on the larger dollars. A study published by the California Workers' Compensation Institute indicated that HMOs, PPOs, MCOs have demonstrated a decrease in costs associated with healthcare, however it takes these managed care entities 43% longer to bring case closure than the traditional workers' compensation model. Something appears very wrong with this picture. The overall costs continue to rise. Employers in the United States have seen their workers' compensation premiums raise over 900% in 20 years, with a 73% raise in the last three years alone.

The major costs to employers are short term/long term disability and the loss in productivity. Focusing only on the healthcare side of the problem has not shown any reduction in the major part of the problem. I will be one of the first ones to state that we in healthcare have been a part of the problem. We are usually the ones who have held a person back from work and prolonged their time away from their job thus causing

the major part of the problem. We have done this without any real objective information to base our decision on. We have used "pain" as the primary reason that a person should not return to work. We have made our decisions from our clinic setting without any real knowledge of the physical requirements of the person's job and without knowing if they could do the job safely. When we have returned an individual to work we most often do so without much knowledge about the job or knowledge about what caused the injury. We have not attempted to reduce the potential of re-injury, which is most often more costly than the initial injury.

The future of physical therapy in occupational health will not be in our clinics. Managed care will continue to reduce the dollars spent on healthcare. The opportunities are at the worksite where we focus our therapy on function rather than on symptoms. Repetitive strain injuries account for approximately 60+% of all reported work injuries, 73% in manufacturing. These are soft tissue injuries which represent the primary type of client that physical therapists have treated. These are also the types of injuries that account for the higher healthcare costs. The majority of repetitive strain injuries can be prevented (ergonomics) and when injuries do occur, they can be treated conservatively (non-surgical). They are also injuries that an individual can continue to work with as long as the injured part is protected and allowed to heal. We do not have to remove the entire person from work to restore function to the injured body part. This is the area where physical therapists can make the largest con-

tribution to reducing the costs of workers' compensation.

The workers' compensation system is disability driven. You cannot measure disability objectively. You can however measure a person's ability. Employers will be more receptive of returning an individual to work if they know what he or she can do, not what the individual's restrictions are.

I feel that we, as physical therapists, have an obligation to our clients to not only "treat" them but to help them learn to take care of themselves, to be independent of us rather than dependent on us. This will require us to be function focused rather than pain focused. It will require us to get out of our clinics, visit the worksite, and learn more about ergonomics. In addition, we need to produce more research to demonstrate the effectiveness of the physical therapy interventions that we believe are beneficial. The AHCPR Guidelines should be a wake-up call to us; we need more "real world" research.

CONTENTS

President's Message	25
Pre-Work Screening Outcomes	26
Secretary's Corner	27
Legal Beagle	27
OHGSIG Election Results	28

DISCLAIMER

The summaries of articles and the opinions expressed by authors are provided for information only and do not necessarily reflect the views of the authors, OHPTSIG or the Orthopaedic Section of the APTA.

PRE-WORK SCREENING OUTCOMES IN LIGHT TO MEDIUM PHYSICAL DEMAND LEVEL JOBS

The concept of screening employees for their physical capabilities has been around for many years. Many employers have begun screening their production workers for their physical abilities based on the actual demands of the specific job they have been hired to do. The assumption is made by employers that screening for potential physical limitations will minimize or avoid potential Worker's Compensation liability by placing new employees in positions they are best able to physically perform. It is believed that this will enhance employee safety and positively influence production. Work Injury Recovery Center (WIRC) has provided pre-work screens to several area manufacturers and analyzed the long term outcomes of those individuals who were screened under our protocol.

SUBJECTS We screened 45 employees, newly hired by three local manufacturers. The group consisted of men (29) and women (16). A distinction was made between those who were hired into medium physical demand level work (22), and light physical demand level work (23).

The minimum length of time between the pre-work screen and the follow-up was 90 days, with an average of 161 days on the job since the pre-work screen.

SCREENING PROTOCOL Development

A pre-work screen was developed by the WIRC staff therapists based on each company's existing job descriptions and on-site visits to accurately determine the essential physical demands of the jobs involved. Appropriate evaluation tools and techniques were utilized to evaluate static and dynamic strength, static posture tolerance, and performance of essential work tasks.

Description

The employee completed a baseline health risk assessment questionnaire (Fig.1) to help determine pre-existing cardiovascular or musculoskeletal risk factors prior to testing. Following this, the employee is evaluated by the therapist who performs a baseline musculoskeletal evaluation. Appropriate range of motion and functional mobility is assessed and relates to the job the individual has applied for. Functional testing activities are then performed utilizing the standards available from the job descriptions and analyses. The follow-

ing is a list of the functional tests performed by the employers:

- Lifting:** Dynamic lifting tasks based on the job description provided by the employer, or as measured by on-site evaluation.
- Carrying:** Carrying load based upon the job description provided by the employer or as measured by on-site evaluation.
- Pushing/Pulling:** Static and or dynamic strength testing, determined by job description or measurement.
- Sit/Stand/Walk:** Capacity determined through observation of performance throughout the evaluation.
- Stoop/Squat/Kneel:** Capacity tested using methods-time-measurements (MTM) standards.
- Reaching:** Capacity determined using MTM standards, and through observation during testing.
- Climbing:** Climbing a 10 foot tall step ladder 5 times in 2 minutes.

During the functional portion of the screen, the evaluator observes and monitors the employee's posturing and safety relative to proper body mechanics. The evaluator may coach the employee in the use of proper body mechanics, and may instruct him/her in safer material handling techniques. The evaluator then com-

WIRC PRE-WORK SCREEN Health Risk Appraisal	
NAME: _____	DATE: _____
COMPANY: _____	
POSITION: _____	
FAMILY HISTORY:	
Has anyone in your family ever had any of the following? (check all that apply)	
<input type="checkbox"/> High Blood Pressure	<input type="checkbox"/> Heart Disease
<input type="checkbox"/> Stroke	<input type="checkbox"/> Diabetes
<input type="checkbox"/> Cancer	<input type="checkbox"/> Substance Abuse
<input type="checkbox"/> Mental Illness	
PERSONAL HISTORY:	
Have you ever had any of the following? (check all that apply)	
<input type="checkbox"/> High Blood Pressure	<input type="checkbox"/> Heart Disease
<input type="checkbox"/> Stroke	<input type="checkbox"/> Diabetes
<input type="checkbox"/> Cancer	<input type="checkbox"/> Substance Abuse
<input type="checkbox"/> Mental Illness	
WORK HEALTH HISTORY:	
Have you ever lost time from work due to any of the following? (check all that apply)	
<input type="checkbox"/> Low Back Pain	<input type="checkbox"/> Shoulder Pain
<input type="checkbox"/> Wrist Pain	<input type="checkbox"/> Foot/Ankle Pain
<input type="checkbox"/> Carpal Tunnel Syndrome	<input type="checkbox"/> Neck Pain
<input type="checkbox"/> Drug/Alcohol Abuse	<input type="checkbox"/> Headaches
<input type="checkbox"/> Other - describe _____	<input type="checkbox"/> Elbow Pain
<input type="checkbox"/> Tendonitis	<input type="checkbox"/> Sciatic Pain
CURRENT HEALTH STATUS:	
Are you currently undergoing treatment for any health problem that would require time away from work? YES - NO If yes, please explain: _____	
Do you currently have any health problems that would prevent you from performing the essential functions of this job as described to you? YES - NO If yes, please explain: _____	
CONSENT FORM	
I understand that I have been referred by _____ to the Work Injury Recovery Center for a Pre-Work Screening. The purpose of this referral is to evaluate and assess my work capacity.	
I give my permission to Work Injury Recovery Center staff to perform this screening and contact my employer with the results of the screen.	
I give permission to Work Injury Recovery Center to release copies of my report to my physician, insurance carrier, rehabilitation/vocational case manager, attorney or employer for their records.	
Signed: _____	Date: _____

FIG. 1

WIRC PRE-WORK SCREEN						
Name: _____	Date: _____					
Job Title: _____						
1. Baseline Measurements						
Height (in): _____	Resting Blood Pressure: _____ / _____					
Weight (lbs): _____	Resting Heart Rate: _____					
Grip Strength: R _____ L _____ D _____	MET Level: _____					
2. Functional Mobility						
Movements	Score	Poor	Fair	Good	Excellent	Comments
Trunk Flexion	_____	_____	_____	_____	_____	_____
Trunk Extension	_____	_____	_____	_____	_____	_____
Trunk Rotation	_____	_____	_____	_____	_____	_____
Shoulder Reach	_____	_____	_____	_____	_____	_____
Squat	_____	_____	_____	_____	_____	_____
3. Non-Materials Handling Activities						
Activity	Critical Demands	Testing	Met/Not Met	Comments		
Sit	_____	_____	_____	_____		
Stand	_____	_____	_____	_____		
Walk	_____	_____	_____	_____		
Crawl	_____	_____	_____	_____		
Kneel	_____	_____	_____	_____		
Stoop	_____	_____	_____	_____		
Squat	_____	_____	_____	_____		
Reach-Forward	_____	_____	_____	_____		
Reach-Overhead	_____	_____	_____	_____		
Reach-Behind	_____	_____	_____	_____		
4. Materials Handling Activities						
Activity	Critical Demands	Testing	Met/Not Met	Comments		
Lift #1	_____	_____	_____	_____		
Lift #2	_____	_____	_____	_____		
Lift #3	_____	_____	_____	_____		
Carrying	_____	_____	_____	_____		
Pushing	_____	_____	_____	_____		
Pulling	_____	_____	_____	_____		
5. Body Mechanics						
Components	poor	fair	good	excellent		
6. Work Capacity Level						
Foot Strength:	Sedentary	Light	Medium	Heavy	Very Heavy	
Push Strength:	Sedentary	Light	Medium	Heavy	Very Heavy	

FIG. 2

pletes a Pre-Work Screen form with the appropriate information, which is submitted to the employer (Fig.2). No diagnostic or confidential medical data is included in documentation provided to the employer.

SUMMARY

Forty five case outcomes were compiled via employer questionnaire, requesting the following information:

- a. Is the employee working?
- b. Was the employee injured on the job since his pre-work screen?
- c. How many days were lost due to that injury?
- d. What was the nature of the injury?

A follow up telephone interview with each employer was conducted by the therapists to obtain additional information from the company representatives to define the outcomes for the screen participants.

Of the forty-five cases, 4 workers were not hired and 4 workers resigned. Seven injuries were reported among the remaining 38 employees, with four of those being hand-pinch trauma injuries among the medium physical demand level workers in a rail brake manufacturing plant. One injury was due to a slip and fall incident outside the workplace, one injury was due to a board falling on the employee. Of the employees surveyed, only one musculoskeletal injury was reported at the work site. The average number of days lost due to injury was 3.3, with 0 as the low and 10 as the maximum number of days lost. It should also be noted that 18 workers were on layoff from one employer, and none of those individuals received a lost time injury while working.

Ronald W. Adams, PT and
James M. Herzog, MS, OTR
WIRC—Work Injury Recovery Center
Lackawanne, NY 14218

SECRETARY'S CORNER

It seems that newsletter submission time comes around all too soon for this editor. Before I know it, Sharon Klinski at the Orthopaedic Section Office is calling or sending "the fax" as a kind but firm reminder that edited articles are due for the next edition. It seems as if everyone's schedules are full which makes soliciting articles rather difficult. This quarter, however, we have finally pulled together the powerful forces of our mem-

bership and officially formed the Publications Committee for the OHPTSIG. The group consists of very talented and dedicated volunteers who wanted to become more involved in our SIG. Current members of our Committee are: Ron Adams, Sara Craig, Mark Howard, Tim Byruns, Mark Kereston, Robert Henderson, Patty Luna-Massey, John Levene, and LaRae Miller.

This issue of the OHPTSIG newsletter has been compiled through the diligent efforts of these very busy individuals who have assisted me greatly by seeking authors and submitting timely and interesting articles/case studies. My personal thanks to these Publications Committee members for their time and responsiveness. The Executive Board and the membership of the OHPTSIG also thanks all of you for your participation in facilitating improved communication and professional sharing within the field of occupational health physical therapy. If YOU are interested in becoming a member of the Publications or any other SIG committee, please contact Bobbie Kayser, PT at (502) 451-0400 or any OHPTSIG Board member.

LEGAL BEAGLE LEGAL ISSUES OF CLINICAL PRACTICE GUIDELINES

Brief summary of a 163 page Colloquium Report on Legal Issues Related to Clinical Practice Guidelines, National Health Lawyers Association, 1995.

The purpose of this colloquium was to provide a discussion forum on an accumulation of complex legal issues associated with development, implementation, and evaluation of clinical practice guidelines. The purpose was not to formulate nor recommend answers. A brief summary of this comprehensive report can not adequately encompass all of the issues and commentary.

This summary merely represents a sampling of issues to alert physical therapists about the frailties and strengths of clinical practice guidelines. Physical therapists are under-represented in decision making groups, yet will experience their proportionate or disproportionate share of consequences (benefits and risks.)

Analogous terms: A recent study identified more than 30 different terms: 42% used critical paths; 13% practice guide-

lines/parameters; 12% clinical guidelines; 8% clinical protocols/algorithms, and 38% other names incorporating words such as care, outcomes, paths, collaborative, Tracks, processes, progressions, targets, critical pathways, protocols, clinical indicators, care maps, and standards of care. When the meaning and purpose of terms are unclear, therapists should inquire for clarification.

General definition: Clinical guidelines are systematically developed statements to assist the practitioner and patient decisions about appropriate health care for specific clinical circumstances. Practitioners in consultation with patients prospectively use these guidelines. Contrast this use with "Medical Review Criteria" use and purpose. Medical Review Criteria are systematically developed statements used to assess appropriateness of specific health care decisions, services, & outcomes. Thus, the use is retrospective and the purpose is to assess the quality of care. Clinical guidelines are NOT synonymous with reimbursement or coverage policies; although they may be used to influence reimbursement—right or wrong—directly or indirectly.

Five major purposes identified by Institute of Medicine (IOM):

1. to assist in clinical decision making by patients and practitioners
2. to educate individuals or groups
3. to assess and assure quality of care
4. to guide allocation of resources for health care
5. to reduce risk of legal liability for negligent care

IOM's purposes are not consistent with views of other groups. Therapists should be cautious about assuming the purpose of guidelines to be the same from one institution to another and from one organization to another.

Institute of Medicine (IOM) specified desirable attributes:

A cursory review of these attributes clearly indicates a time-consuming, costly, and complex process. Four of the attributes related to substantive content: validity reliability, clinical applicability & clinical flexibility. Four attributes related to the process of developing guidelines: clarity, multidisciplinary process, scheduled review, & documentation. Eight different attributes relate to review criteria. Eleven different elements relate to validity alone: "projected health outcomes, projected costs; relationship between the evidence and the guidelines; preference for empirical evi-

dence over expert judgment; thorough literature review; methods used to evaluate the scientific literature; strength of the evidence; use of expert judgment; strength of expert consensus; independent review; and pretesting.

General Issues: One proposed issue was whether guidelines will change the way we practice. One reluctant participant stated that research indicates that physicians compliance with guidelines is 50% or less. Second, one participant suggested that medicine may be shifting paradigms—moving from individual service or procedure-based medicine toward managing the health of whole populations. A third issue evolved around whether guidelines could be flexible but still have enough teeth to impact costs of care. Many participants agreed that the major force driving development of guidelines was to lower costs. Research, however, shows that delivery costs are not lowered by clinical guidelines. (IOM budgeted \$250,000 to \$300,000 for development of a single guideline. Actual costs of the first guidelines ranged between \$350,000 to \$800,000. These costs do not include development of review criteria.) A fourth question presented was whether Government should regulate the development of practice guidelines. Participants wondered whether practitioners who followed guidelines could force payment of services rendered because of compliance with the guidelines.

Legal Liability Issues: Legal issues were divided into three subtopics: liability for those involved with development and implementation, impact on malpractice, and multiple other issues.

Development and Implementation Issues: One question was if developers of guidelines are biased (or are a select group), could this raise a question of Antitrust violation. Will those who create guidelines have a legal duty to revise and update guidelines? The consensus of the group at the colloquium was that developers have a legal duty and should expect to be legally responsible for their actions. They suggested that it is vitally important to maintain documentation of the development process. Participants generally agreed that there will be some misuse of guidelines by payors or others involved in the delivery of care and monitoring the care process.

Malpractice Issues: Various malpractice issues were suggested. Managed care organizations which apply certain guidelines may be held liable for outcomes of

care. Requiring rigid application of guidelines may result in punitive damages. Failure to be cognizant of guidelines may represent failure to meet the Standard of Care.

During discussion of whether guidelines will be used to establish a standard of care, it was suggested that current case law suggests: 1) practitioners should not adhere to standards imposed by managed care organizations for the sole purpose of holding down costs and not quality of care; 2) guidelines will not by themselves set the standard, but guidelines with other evidence will be used to determine the standard of care; 3) research of 300 litigation files from 2 major insurers concluded that use of guidelines were predominately used as inculpatory evidence.

Regarding the question of whether use of guidelines will change the law of informed consent, some suggested that guidelines should include risks and benefits of alternative treatments. Also, patients can use guidelines as a basis to formulate questions, but guidelines should not be used as the basis for informed consent.

When discussing how practitioners should respond when guidelines are conflicting, the consensus was that treatments with a high degree of uncertainty are not appropriate for establishing guidelines.

Other Clinical Practice Issues: The following are merely representative of the myriad of legal issues discussed.

Some suggested that there should be increased regulatory standards for the implementation of guidelines in managed care, e.g., any willing provider laws and due process rights when a provider is rejected by a managed care organization.

The IOM committee favored computerized clinical decision making applications and strongly recommends availability on various computer platforms. One caution for therapists is the computer axiom, "garbage in, garbage out." Computerized clinical decision making is an excellent concept if the input measures are credible.

The healthcare industry has a history of using guidelines to determine reimbursement. Medicare has been using guidelines to determine coverage via PRO review. Such use is gaining momentum by private sectors via utilization management; however, it is difficult to assess since many URO's insist on keeping review criteria secret. Blue Cross and Blue Shield claims to be the first insurer to include contractual clauses on adherence to clinical practice guidelines in Managed Care agreements. Some Managed Care Organizations base incentive pay on adherence

to practice guidelines.

When performance assessment is based on conformity to practice guidelines, the assessment process will present legal issues, including discrimination among providers.

Some thought that practice guidelines should be one element for credentialing or selective contracting—termed "guidelines-based review". Currently, plans seek providers who provide cost-effective services with good outcomes. Other plans are beginning to increase use of practice guidelines to profile providers on conformity with guidelines. They will use these profiles to determine who to exclude from the plan or who needs corrective action.

Employer coalitions are increasingly demanding data sharing of performance reports and scorecards. National Committee on Quality Assurance has a pilot project involving 20 different plans to test data for across plan comparisons. Legal issues of data sharing and scorecards include: defamation, contract issues, intentional interference with business, exclusion of providers from plans, and exclusion to plans by employers.

The purpose of this review was to alert physical therapists about the complexity of numerous legal issues. When you are considering contractual arrangements, terms other than clinical guidelines might be used and your expected performance may be altered accordingly. PT's should not sign agreements without reviewing collateral documents related to performance expectations. Physical therapy educators need to prepare proactive future clinicians for the inevitable use of practice guidelines. Use of guidelines will not improve healthcare delivery unless the formation process is scientifically based and without bias and the implementation process is fair. If therapists increase awareness of the summarized issues and others, they will be better prepared throughout legislative and other policy making activities.

Kathy Lewis, JD, MAPT

OHSIG Election Results

Vice President	
Mark Anderson:	49 votes
Sue Patenaude:	22 votes
Secretary: (ran unopposed)	
Roberta Kayser:	69 votes
Nominating Committee Member:	
Jill Floberg:	38 votes
Laurie Johnson:	33 votes
Number of ballots sent out:	338
Number of ballots returned:	72
Return rate percentage:	21%

Foot and Ankle Special Interest Group

Orthopaedic Section, APTA, Inc.

CHAIR'S REPORT

At our business meeting at CSM in Atlanta, we will be electing a Vice-Chair as well as two Nominating Committee members. The Nominating Committee has put forth the following slate of candidates for these offices:

VICE CHAIR:

Steve Reischl
Steve Baitch
Joe Tomaro

NOMINATING COMMITTEE:

Dave Sinacore
Debbie Nawoczenski

I want to thank the members of the Nominating Committee, which include Dave Sims, Irene McClay, Michael Mueller, and Jim Birke, for all of their hard work in putting together this excellent slate of individuals. In addition to the election of officers, we will also have the reports of the Chair, Vice-Chair, and Secretary-Treasurer, as well as a discussion of old and new business. Please come with your thoughts and ideas regarding the type of future programming you would like to see at the next Combined Sections Meeting.

PLEASE TAKE THE TIME, to fill out the SPECIAL INTEREST GROUP REGISTRATION FORM located on page 19 in the last issue of *Orthopaedic Practice*. It is important that all of you interested in the Foot and Ankle Special Interest Group fill out and either mail or fax the form to the Orthopaedic Section Office. BE SURE TO DO THIS TODAY—and thanks in advance for completing the form!!

In closing, I want to invite you to join and participant in the FASIG. Please join us for both the business and educational meeting that will occur at CSM in Atlanta. As you will see below, Vice Chair, Steve Reischl and the Programming Committee have put together an excellent program that will no doubt prove stimulating and informative. If you have any questions or suggestions regarding the FASIG, please do not hesitate to contact me by either phone (520-523-1499) or FAX (520-523-9289). I look forward to seeing you in Atlanta!!

Tom McPoil
Chair, FASIG

FASIG PROGRAM at CSM, ATLANTA

The business meeting for the FASIG will be held on Saturday, February 17, 1996 from 12:30 to 1:30 p.m. The educational session which will take place immediately following the business meeting and end at 5:30 p.m. Steve Reischl will serve as the Moderator for the afternoon session. The format for the educational session will be a 30 minute formal presentation by each speaker followed by a 30 minute discussion period. The speakers and topics for this years program include:

1:30-2:30 p.m.

The Inverted Orthotic Technique
Presenter: Stephen Baitch, PT

3:30-4:30 p.m.

Tibialis Posterior as a Culprit of Heel Pain
Presenter: Catherine Patla, MMSc, MTC, PT, OCS

4:30-5:30 p.m.

Biomechanical Constraints of Foot and Ankle
Contributing to Abnormal Patterns of Movement
Presenter: Beth Fisher, MS, PT, NCS

OFFICERS/COMMITTEES FASIG

Chair:

Tom McPoil phone (520) 523-1499
FAX (520) 523-9289

Vice Chair:

Steve Reischl phone (310) 427-2225

Secretary/Treasurer:

Mark Cornwall phone (602) 523-1606

Research Committee:

Irene McClay phone (302) 831-8910

Practice Committee:

Joe Tomaro phone (412) 321-2151

Programing Committee:

Steve Reischl phone (310) 427-2225

FUTURE FASIG PROGRAMS

As I mentioned in the last issue of *Orthopaedic Practice*, the FASIG is planning to co-host a one day workshop with the Department of Kinesiology, University of Minnesota and Novel Electronics, Inc., on Saturday, June 15, 1996, in Minneapolis, MN. This is the day before the start of the 1996 APTA National Meeting in Minneapolis. The workshop is titled "Plantar Pressure Assessment in Physical Therapy," and will consist of both panel discussions and "hands-on" labs using pressure assessment instrumentation. To permit adequate time for each participant during the afternoon laboratory sessions, registration is limited to the first 50 applicants. A Workshop ANNOUNCEMENT as well as a tentative program are included in this issue of *Orthopaedic Practice*. Please plan on attending this workshop, especially if you will be attending the APTA National Meeting in Minneapolis.

As previously announced, the FASIG Programming Committee is planning on holding a preconference workshop prior to the 1997 CSM in Dallas. The title of the workshop will be:

"THE USE OF FOOT ORTHOSES IN TREATMENT OF PATELLOFEMORAL PROBLEMS"

The programming committee has been working closely with Lola Rosenbaum, Education Program Chair of the Orthopaedic Section, and has already contacted several speakers with tremendous clinical and research expertise in this topic area. While the planning is still in the preliminary stages, this promises to be an excellent program. Further information will be provided in future *Orthopaedic Practice* issues, regarding this exciting workshop.

RESEARCH COMMITTEE REPORT

The research committee is attempting to put together a database of those members interested or involved in foot and ankle research. The purpose of this database is to provide enhanced networking among members of the FASIG and the Orthopaedic Section. To help get the database off the ground, the Research Committee has developed a "short" survey which was printed in the last issue of *Orthopaedic Practice*. All that is required is for you to fold and seal the survey form with tape, then mail. PLEASE HELP THE RESEARCH COMMITTEE establish this database by taking a few minutes to fill out and return the survey.

PLANTAR PRESSURE ASSESSMENT IN PHYSICAL THERAPY

JUNE 15, 1996
TENTATIVE PROGRAM

8:00 am—8:30 am
Registration

8:30 am—9:15 am
General Overview of Plantar Pressure Assessment
Thomas Kernozek, PhD, University of Minnesota

9:15 am—10:00 am
The Use of Plantar Pressure Assessment in a Pediatric Population
Margo Orlin, MS, PT, Hahnemann University

10:00 am—10:30 am
BREAK

10:30 am—11:15 am
The Role of Plantar Pressure Measurement in the Management of the Patient with Diabetes and Neuropathy
Michael Mueller, PhD, PT, Washington University

11:15 am—12:00 pm
The Use of Plantar Pressure Assessment in Evaluating Foot Orthoses Effectiveness
Mark Cornwall, PhD, PT, Northern Arizona University

12:00 pm—1:00 pm
LUNCH (Box Lunch Provided)

1:00 pm—1:30 pm
Panel Discussion—
Thomas Kernozek, PhD
Margo Orlin, MS, PT
Micheal Mueller, PhD, PT
Mark Cornwall, PhD, PT
MODERATOR: Thomas McPoil, PhD, PT

1:30 pm—2:45 pm
LAB SESSION 1—Group A—Platform Measurement
Group B—In-shoe Measurement

2:45 pm-3:00 pm
BREAK

3:00 pm-4:15 pm
LAB SESSION 2—Group B—Platform Measurement
Group A—In-shoe Measurement

4:15 pm-4:45 pm
Group Discussion

5:00 pm-6:30 pm
Wine and Cheese Reception

Plantar Pressure Assessment in Physical Therapy

**Intended for Physical
Therapy Clinicians and
Researchers**

**University of Minnesota
Minneapolis, MN**

Saturday, JUNE 15, 1996

Conference Description

The purpose of this workshop is to provide the participant with information regarding the use of plantar pressure assessment in both clinical and research settings. The workshop will include specific lectures on the application of plantar pressure assessment in pediatric, diabetic, and orthopaedic/sports settings. The laboratory sessions will cover the use of both platform and in-shoe insole systems, as well as analysis software. The workshop has been planned to coincide with the APTA National Meeting, June 16th - 20th.

Conference Fees:

The cost of attending the workshop is \$40.00, which includes refreshments during the morning and afternoon breaks, a box lunch, as well as a wine and cheese reception at the end of the workshop. To permit adequate hands-on time for each participant during the afternoon laboratory sessions, **REGISTRATION IS LIMITED TO THE FIRST 50 APPLICANTS.**

Sponsored By:

Foot and Ankle Special Interest Group, Orthopaedic Section, APTA
Department of Kinesiology, University of Minnesota
Novel Electronics, Inc, Minneapolis, MN

Mail to: Plantar Pressure Workshop for
Physical Therapists
c/o Dr. Tom McPoil
NAU Box 15105
Flagstaff, AZ 86011

- I would like to register for the course and I enclosed a check for the \$40.00 registration fee.
- I cannot attend the workshop this year but would be interested in attending a future plantar pressure workshop.

Name _____

Title _____

Organization _____

Address _____

City _____

State _____

Zip _____

Phone _____

Fax _____

**Plantar Pressure Assessment in
Physical Therapy**

CALL FOR ARTICLES

Orthopaedic Physical Therapy Practice is looking for Section members who wish to contribute through publication.

Orthopaedic Physical Therapy Practice will publish articles pertaining to clinical practice and personal experiences with different treatment techniques. Research design articles and extensive reviews of literature are **not** appropriate for this publication. Although we encourage suggested reading lists, references should otherwise be kept to a minimum. Case studies when presented as the authors' experience with a treatment technique are acceptable. Abstracts of current literature or book reviews are also welcome.

Please contact Sharon Klinski or Jonathan M. Cooperman through the Section office if you are interested.

PRACTICE PROBLEMS??

The Practice Committee of the **Orthopaedic Section** needs to know your problems! Your input will define practice issues of importance to you as physical therapists in the area of orthopaedic physical therapy.

Please write, call or fax the issues you need to have addressed and resolved. Spending a few moments to share your problems may well be one of the better uses of your time today! Your voice will be heard if you speak up.

Telephone: 800-444-3982

FAX: 608-788-3965

Scott Stephens, MS, PT
Orthopaedic Section, APTA, Inc.
Practice Committee
2920 East Avenue South
La Crosse, WI 54601

Name: _____

In my practice, I'm having trouble with _____

Address: _____

City: _____

Please get in touch with me to discuss _____

State: _____ Zip: _____

Daytime Telephone #: (_____) _____

ORTHOPAEDIC PHYSICAL THERAPY HOME STUDY COURSES

COURSE LENGTH: 90 DAYS FROM DATE OF REGISTRATION

1

HSC 94-1 TOPIC: LUMBAR SPINE

- Lumbopelvic Anatomy & Mechanics and their Relationship to Low Back Pain
- McKenzie Approach to the Lumbar Spine
- Thoracolumbar Spine: Postsurgical Rehabilitation of the Orthopaedic Patient
- Radiology of the Lumbar Spine
- Industrial Medicine and the Lumbar Spine
- Cyriax Approach to the Lumbar Spine

Each manuscript will include:

- Basic Science
- Pathology
- Issues of Clinical Decision Making
- Case Studies

Registration Fees— Per Course:

\$150.00 Orthopaedic Section Members
\$225.00 APTA Members
\$300.00 Non-APTA Members

Special discounted rates are available for institutions with multiple registrants. Please call the Section office for complete information.

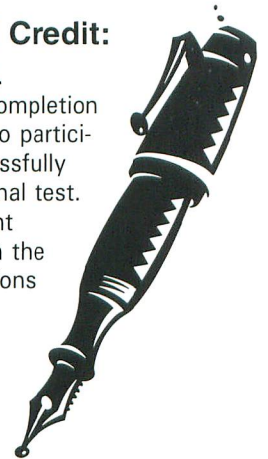
* Absolutely no refunds will be given after the start of the course!

Please make check payable to:
Orthopaedic Section, APTA

Mail check and registration to:
Orthopaedic Section, APTA
2920 East Avenue South
La Crosse, WI 54601
1-800-444-3982 or 608-788-3982
FAX 608-788-3965

Educational Credit:

30 contact hours.
A certificate of completion will be awarded to participants after successfully completing the final test. Only the registrant named will obtain the CEUs. No exceptions will be made.



2

HSC 94-2 TOPIC: LUMBAR SPINE

- Anatomy of the Lumbar Spine
- The Aging Lumbar Spine
- Lumbar Traction
- Evaluation and Treatment of the Lumbar Spine and Pelvis in the OB/GYN Population
- Differential Diagnosis for the Patient with Low Back Pain
- Evaluation and Treatment of the Lumbar Spine: An Overview of the Maitland Concept

3

HSC 95-1 TOPIC: THE FOOT AND ANKLE

- Anatomy of the Foot and Ankle
- Management of Foot Problems Resulting from Complications of Diabetes or Arthritic Conditions
- Overuse Symptoms of the Foot and Ankle
- Biomechanics of the Foot and Ankle
- Traumatic Disorders of the Foot and Ankle
- Treatment Approaches to Foot and Ankle Disorders using Exercise and Orthotic Devices

4

HSC 95-2 TOPIC: THE WRIST AND HAND

- Anatomy and Mechanics of the Wrist and Hand
- Burns and Open Wounds of the Hand
- Cumulative Trauma Disorders of the Wrist and Hand
- Degenerative and Inflammatory Conditions of the Wrist and Hand
- Fractures and Ligament Injuries of the Wrist and Hand
- Tendon and Nerve Injuries of the Wrist and Hand

REGISTRATION FORM

ORTHOPAEDIC PHYSICAL THERAPY HOME STUDY COURSE

(COURSE NO.)

Please check:

- Orthopaedic Section Member
 APTA Member
 Non-APTA Member

Name _____

Mailing Address _____

City _____

State _____ Zip _____

Daytime Telephone Number (_____) _____

APTA # _____ (Wisconsin Residents add 5.5% Sales Tax)

JOIN THE SECTION AND TAKE
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REGISTRATION RATE IMMEDIATELY!

- I wish to become an Orthopaedic
Section Member (\$50) and take ad-
vantage of the member rate.



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Announcing...

TOPICS IN ORTHOPAEDIC PHYSICAL THERAPY ASSESSMENT

96-2 HOME STUDY COURSE

July-December 1996

OVERVIEW: This course will focus on global issues of orthopaedic assessment. The responses from our survey indicated great interest in these areas. This course will be constructed to reflect the changing paradigms in PT practice, e.g.: 1. increased responsibility in diagnosis and screening, 2. issues relating the meaningfulness of our measurements and 3. the need for appropriate outcome assessment.

AUTHORS AND TOPICS INCLUDE:

- 1. Principles of measurement in orthopaedic PT, Understanding the use and misuse of tests and measurements.**
Jill Binkley, MS, PT
- 2. Medical screening and differential diagnosis**
Terry Randall, MS, PT
- 3. Manual examination of neural tissues**
Paul Howard, PhD, PT
- 4. Psychological screening for patients with orthopaedic disorders**
Thomas Zastowney, PhD
- 5. Outcome assessment: general principles**
Diane Jette, PT
- 6. Outcome assessment: spine**
Author TBA

Please watch for further details.