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Orthopaedic Physical Therapy Practice

AN OFFICIAL PUBLICATION OF THE ORTHOPAEDIC SECTION
AMERICAN PHYSICAL THERAPY ASSOCIATION

THE ORTHOPAEDIC SECTION, APTA, INC.

presents:

1996 Combined Sections Pre-Conference Course

"Pharmacology, Radiology, and Laboratory Values for the Physical Therapist"

Tuesday, February 13 &
Wednesday, February 14, 1996
Atlanta, Georgia

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Pharmacology

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Orthopaedic Physical Therapy Practice

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EDITOR'S NOTE

Leg Breakers?

Fear seems to drive our human engine as well, if not better, than any other fuel. We all learned in school about the flight or fight response and so too in our physical therapy world, emotions run wild when fear is in the mix.

In the managed care war, fear of exclusion is a prominent factor. Many therapists are positioning themselves to be a provider for any and every plan that will accept them. And who better to put the fear of exclusion into the hearts and minds of the small practitioner, but the "network." Our practice was recently asked to join at least a half dozen networks, ranging from local to national in scope. With one network, we were at first asked to become an owner. I attended one of these meetings acting on behalf of my employer. I was somewhat surprised that the organization did not provide a prospectus or a financial statement. Neither could they provide a simple bottom line figure of what it would cost to be involved. When I inquired as to the benefits of being an owner, the answer was profit, if ever realized, and control, meaning that you could be the excludor instead of the excludee. Power thereby mainfesting itself as the flip side of the fear coin.

When we declined to be an owner, we were invited to be a provider—to participate in the network. For a mere $2500.00 plus an annual fee of $600.00 we would be given the privilege of not being excluded.[1] The number of patients that we would be referred through the network was, and still is, indeterminate. However, many providers are unwilling to risk exclusion. Even there, the rationale escapes me. If the network is restrictive, it will most likely be a geographical restriction. And, if the network becomes truly successful, won't they have to add providers to handle the contract? Why then would clinics rush to be on the list? For some reason, my imagination takes me to the small business man of the twenties in Chicago, paying "protection" money to the mob to ensure that the business wouldn't be "hit."

We should all realize that there are other types of networks available. For example, there is a national network that deals with the trucking industry. The network provider fee is $200.00 per year, with a small administrative fee assessed for each patient referred through the network. The more patients you see, the more money you make, and the more the network profits. Sounds almost fair, doesn't it?

I do not want to say that all networks are bad, nor am I against the concept of networking. Certainly, not all networks are exclusionary. However, our decisions should be based on solid business planning and knowledge of our market, not on fear.

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[1] The fee was later dropped to $1500.00 per year without explanation

Jonathan M. Cooperman,
MS, PT, JD

President's Report

Originally, I had planned to use this column to describe all of the services provided by the Section for the membership. After spending a day at the Section office and meeting with each of the staff individually, I now realize that I could easily fill this entire issue listing the various services. Instead, I provide you with the Orthopaedic Section's objectives and ask: "Do you believe the objectives are being met through the provided services?" The Section's Executive Committee will also be evaluating the objectives and services rendered to determine if the membership is being served in the most effective fashion. We need your feedback and opinions to help guide us during the upcoming important meetings.

Objectives of the Section

The objectives of the Section shall be to:

A) Provide for interchange and dissemination of information about current trends and practices related to orthopaedic physical therapy; and
B) Identify resource people and materials, and address areas of concern related to orthopaedic physical therapy; and
C) Foster research in the area of orthopaedic physical therapy; and
D) Promote the development and implementation of orthopaedic specialization and special interests; and
E) Serve as a major source of information on orthopaedic physical therapy for society and the profession of physical therapy.

I would like to acknowledge the officers who completed their term at WCPT in Washington, DC this past June. Annette Iglarsh PT, PhD and John Medeiros PT, PhD finished their three year term as President and Vice-president respectively. We thank them for their willingness to serve the Section. Their tireless dedication and commitment to the advancement of the Orthopaedic Section is greatly appreciated. In addition, Karen Piegorsch PT, OCS, MSIE and Nancy White PT, MS are stepping down as Chair of the Public Relations and Education Program Committees respectively. Karen will be pursuing a post-graduate degree and Nancy has assumed the Section's Vice-president position. Their committees have made significant contributions to the growth of the Section and Karen's and Nancy's role is also greatly appreciated. We look forward to the future contributions of these valuable Section members.

Lastly, I am anxious to take on the challenges that await our profession. These challenges can be met with confidence due to the tremendous talent, energy and resources that grace our Section. I look forward to working with you during the next three years.

William Boissonnault, MS, PT
President

Election Results

By Michael J. Wooden, MS, PT, OCS
Nominating Committee Chair

The ballots have been counted, and the results of the 1995 election are as follows:

President:
Bill Boissonnault

Vice President
Nancy White

Nominating Committee member:
Catherine Patla

Congratulations and good luck to these officers-elect.

The Section membership is also to be congratulated for the record voter turnout. This year 2,824 valid ballots were returned, an increase of 1,443 over last year! Special thanks to Tara Fredrickson of the Section office for designing the ballot and overseeing the mailings.

The Orthopaedic Section will destroy all ballots from the last election within 90 days of the election results being published in the August 1995 issue of *Orthopaedic Physical Therapy Practice* if no one has contested the vote.

From The Section Office

Terri A. Pericak, Executive Director

Congratulations newly elected officers!!! Bill Boissonnault is our new Section President, Nancy White is our new Vice President and Catherine Patla is our new Nominating Committee Member. All of us at the Section office welcome you aboard and look forward to working with you over the next three years.

As with all elections, welcoming new officers also means having to say goodbye to the outgoing officers. We will not actually be saying good-bye, however, we will keep in touch with these outgoing "friends" and keep them as actively involved in the Section as possible. There is an old saying, *"Make new friends but keep the old, one is silver and the other gold."* Yes we will be making new friends but we will also be keeping the old.

It has been a very enjoyable experience and privilege to have been able to work with Annette Iglarsh both as Program Chair and President over the last several years. I have learned a great deal from Annette for which I thank her. We have also developed a kind of friendship which will go on long after her term in office has ended. She has been a wonderful mentor and will most definitely be missed. Annette will be our Immediate Past President for one year and will sit on the Board as a nonvoting member to help lend continuity to the transition of President.

John Medeiros is a wonderful person and great to work with. All of us at the Section office will miss John's cheery telephone calls. We will keep in touch with John and look forward to seeing him at future conferences.

Michael Wooden has fulfilled his three year term on the Nominating Committee with his last year being the Chair of that committee. Michael has been a joy to work with and is leaving the position of Chair in good hands with Carol Jo Tichenor. We look forward to seeing Michael at future conferences also.

Ground breaking for our new building took place on Monday, June 12. At this time construction is well under way. The projected completion date is October with a move in date of November 1, 1995. Please see the photo collage in this issue of *OP* showing the progression.

The August Finance Committee meeting is scheduled the 25th-27th of this month at the Section office in La Crosse. Besides discussing general business the committee will be formulating the 1996 budget for the Section. The proposed budget will be presented to the Board at their Fall Meeting for approval.

The Fall Board of Directors meeting will be held at Amelia Island Plantation in Florida from September 30-October 2. This will be the first official meeting for the new officers. Minutes of this meeting will be published in the January 1996 issue of *OP*.

Last but not least we would like to welcome Danielle Benzing to our staff in La Crosse. Danielle was hired on May 15, 1995. She will be assisting Sharon with publications and home study courses as the Publications Secretary.

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 Diorders of the Cervical Spine
- ✖ Robert Reif, MS, PT, OCS
  Evaluation and Differential Diagnosis
- ✖ Richard Erhard, DC, PT
  Treatment of the Painful Cervical Spine Using Manual Techniques
- ✖ Richard Bowling, MS, PT
  Treatment of the Painful Cervical Spine Using Exercise

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Please leave a message on the answering machine if you cannot call during these hours. We will gladly return the call!

A Critical Analysis of the AHCPR Acute Low Back Pain Guidelines

By Philip Paul Tygiel, PT, MTC

The Agency for Health Care Policy and Research (AHCPR) clinical practice guideline #14 "ACUTE LOW BACK PROBLEMS IN ADULTS" was released with much fanfare on December 8, 1994. There was a press conference at which representatives of many professional health provider associations had the opportunity to speak, hailing the guidelines. The APTA was not represented at that press conference but did issue a statement in the December 28, 1994 P.T. Bulletin praising the AHCPR "for its efforts to develop clinical practice guidelines for the treatment of low back pain." APTA did not analyze or comment on the content at that time.

There has been little else reported about the guidelines in our literature although much has been written in newsletters of other professions and in the public press. Most physical therapists have little knowledge of what is included in the guidelines and how they were developed. Some physical therapists who have tried to get copies of the guidelines have been frustrated because all of the original copies have already been distributed and a second printing has not yet come out. Insurance carriers received copies and are already raising questions about payment for services based on the recommendations in them.

It is important that physical therapists know what information is contained in the guideline and how it was developed. Analysis of the developmental process and the guideline itself reveals what is problematic and why. The purpose of this article is to review and comment on the AHCPR acute low back pain guideline.

AHCPR-BACKGROUND INFORMATION

In an effort to bring down the cost of care, the Agency for Health Care and Policy Research (AHCPR) was created by Congress in late 1989. AHCPR was to perform health care outcomes research, health care policy research and to set clinical guidelines in order to determine the "best way" to treat various medical conditions. Its initial budget was 97 million dollars per year. That has now escalated to 173 million a year and there have been proposals to quadruple that funding by 1998.

The agency has been criticized in some scientific circles. One criticism is that after spending nearly 200 million dollars on outcomes research the agency cannot point to a single case in which its database studies have changed general clinical practice. They have also been criticized for their analysis of the research.

> Most physical therapists have little knowledge of what is included in the guidelines and how they were developed.

For example, in one study regarding prostate cancer, which was based on outcome studies, it was found that the mortality rate for transurethral prostatectomy (TURP) was significantly higher than the mortality rate for traditional invasive surgery. Invasive surgery was therefore recommended over TURP. Subsequent analysis revealed that the studies were skewed because there was inadequate classification of data particularly with regard to the severity of patient's other conditions. Patients with more serious other physical conditions than their prostate disease were more likely to be treated with transurethral resection for fear that they would not survive the traditional invasive surgery. Naturally, since the TURP's were performed on sicker patients there was a higher incidence of mortality.

Another example of a flawed study dealt with outcomes S/P knee replacement surgery. The database did not specify whether patients had concurrent knee problems prior to surgery such as a previous patellectomy or osteotomy or even if patients had a previous knee replacement to the same knee. Not observing these complicating factors obviously limits the ability to draw conclusions from this study.

Richard Greene, Director of the Agency's Center for Medical Effectiveness Research, stated "Congress was very impatient with the rate at which results were getting into practice. They created AHCPR to see research on outcomes that they thought would be fast and cheap; and because they weren't even willing to wait for that, they set up work on guidelines based on existing research." Based on that it is no wonder that AHCPR has had difficulty delivering worthwhile research analysis and worthwhile clinical guidelines. (1,2)

CLINICAL PRACTICAL GUIDELINE: NUMBER 14

Clinical practice guideline number 14—"Acute Low Back Problems in Adults," like previous efforts of AHCPR is flawed and unfortunately misdirects clinicians in their evaluation and treatment of patients with acute low back pain. It also misdirects the public as to what they may expect in their effort to alleviate their pain and suffering and to fully rehabilitate themselves from acute low back problems. Worse yet, it can be used by payors as an excuse to deny treatment of acute low back pain. The flaws are particularly noticeable in the area of physical evaluation and treatment.

It is important to understand how this guideline was developed and what it includes.

INCLUSION CRITERIA

In developing clinical guideline recommendations for assessment and treatment methods, the PATIENT OUTCOME RESEARCH TEAM (PORT), a 23 year member multidisciplinary panel, was to review all pertinent literature and make recommendations. The panel rated the amount and quality of evidence supporting each guideline statement using the scale below:

A = Strong research-based evidence (multiple relevant and high-quality scientific studies).

B = Moderate research-based evidence (one relevant, high-quality scientif-

ic study or multiple adequate scientific studies).

C = Limited research-based evidence (at least one adequate scientific study in patients with low back pain).

D = Panel interpretation of information that did not meet inclusion criteria as research-based evidence." (6)

In the final published guideline, no recommendation received an "A" rating. That is, no assessment or treatment method could be supported by strong research based evidence. There were many recommendations that were included with a "D" rating. That is to say that the panel members, who were supposedly experts in the field of treating acute low back problems, advocated to have these methods included in the guidelines. It appears that this PORT concerned itself more with ruling out serious pathology than with treatment of patients with low back pain.

The guideline correctly states that the majority of people who suffer acute low back pain will get better within 30-90 days no matter what treatment or lack of treatment they get. The panel found little benefit in treating this population because it would get better anyway. There was little concern for alleviating pain and discomfort other than with the use of over the counter medication and perhaps some manipulation, while waiting to get better. The recommendations with regard to treatment failed to take into account movement disorders and their proper rehabilitation.

INITIAL ASSESSMENT METHODS

The initial assessment recommendations were as follows:

- Information about the patient's age, the duration and description of symptoms, the impact of symptoms on activity, and the response to previous therapy are important in the care of back problems. (Strength of Evidence = B.)
- Inquiries about history of cancer, unexplained weight loss, immunosuppression, intravenous drug use, history of urinary infection, pain increased by rest, and presence of fever are recommended to elicit red flags for possible cancer or infection. Such inquiries are especially important in patients over age 50. (Strength of Evidence = B.)
- Inquiries about signs and symptoms of cauda equina syndrome, such as a bladder dysfunction and saddle anesthesia in addition to major limb motor weakness, are recommended to elicit red flags for severe neurologic risk to the patient. (Strength of Evidence = C.)
- Inquiries about history of significant trauma relative to age (for example, a fall from height or motor vehicle accident in a young adult or a minor fall or heavy lift in a potentially osteoporotic or older patient) are recommended to avoid delays in diagnosing fracture. (Strength of Evidence = C.)
- Attention to psychological and socioeconomic problems in the individual's life is recommended since such nonphysical factors can complicate both assessment and treatment. (Strength of Evidence = C.)
- Use of instruments such as a pain drawing or visual analog scale is an option to augment the history. (Strength of Evidence = D.)
- Recording the results of straight leg raising (SLR) is recommended in the assessment of sciatica in young adults. In older patients with spinal stenosis, SLR may be normal. (Strength of Evidence = B.)
- A neurologic examination emphasizing ankle and knee reflexes, ankle and great toe dorsiflexion strength, and distribution of sensory complaints is recommended to document the presence of neurologic deficits. (Strength of Evidence = B.) (8)

> "Acute Low Back Problems in Adults," like previous efforts of AHCPR is flawed and unfortunately misdirects clinicians in their evaluation and treatment of patients with acute low back pain.

Clearly the panel was primarily concerned with ruling out more significant pathology in this examination and placed limited value on any exam techniques that would identify movement disorders or give some clinical indication of the best ways to treat such disorders. The commentary did say that "evaluation of spinal ROM has been found to be of limited diagnostic value although some clinicians consider it helpful in planning and monitoring treatment." (9)

As physical therapists who regularly treat people with acute low back pain, we would certainly agree that ROM testing might be of limited diagnostic value in determining specific tissue pathology. However, it could be argued that active and passive ROM testing and specific mobility testing are also of great value in determining the movement disorder that is leading to or rising from the low back pain and determining ways to treat that low back pain. Such testing, therefore, could have been advocated into the clinical guideline with a "D" strength of evidence. Not including such recommendations in the guidelines gives primary care practitioners the mistaken belief that these tests are of no value and should not be carried out on the patients with acute low back pain. Worse yet, the omission gives insurance companies arguments to not pay for such testing in the evaluative process.

SYMPTOM CONTROL METHODS: PHYSICAL TREATMENT

SPINAL MANIPULATION

The panel findings and recommendations were:

- "Manipulation can be helpful for patients with acute low back problems without radiculopathy when used within the first month of symptoms. (Strength of Evidence = B.)
- When findings suggest progressive or severe neurologic deficits, an appropriate diagnostic assessment to rule out serious neurologic conditions is indicated before beginning manipulation therapy. (Strength of Evidence = D.)
- There is insufficient evidence to recommend manipulation for patients with radiculopathy. (Strength of Evidence = C.)
- A trial of manipulation in patients without radiculopathy with symptoms longer than a month is probably safe, but efficacy is unproved. (Strength of Evidence = C.)
- If manipulation has not resulted in symptomatic improvement that allows increased function after 1 month of treatment, manipulation therapy should be stopped and the patient re-evaluated. (Strength of Evidence = D.)" (10)

While these recommendations are among the better and most beneficial recommendations in the guidelines, it is interesting to look at how they got in there. There were 54 published prospective trials on manipulation. Scott Haldeman, DC, MD, PhD, a member of the

PORT has said that it is possible to criticize every one of these studies. "No single study would be able to stand up in front of an outcomes research committee. There are problems with all of this literature. But when 54 trials are considered together," he asserts, "the evidence in favor of manipulation (as a treatment for back pain) is overwhelming." (6)

Obviously, there were enough vocal practitioners of manipulation on the panel to advocate making manipulation a recommended treatment despite "no single study" that would stand up to scientific scrutiny. We can only wonder why there was no similar advocacy for some of the other physical examination and treatment techniques.

PHYSICAL AGENTS AND MODALITIES

The panel discouraged the use of any physical agents or modalities other than heat or ice applied at home. They could find nothing wrong with physical agents or modalities but they could find no studies that sufficiently proved benefits to justify their cost.

Interestingly, the summary of their findings was that, "No well designed control trials support the use of physical agents and modalities as treatment for acute low back problems. However, some patients with acute low back problems appear to have temporary symptomatic relief with physical agents and modalities." (11) The use of physical agents and modalities to facilitate other treatments such as manipulation and exercise should have been advocated in under the "D" criteria. If the panel was looking for studies that would prove that any particular modality would cure low back pain, they were obviously not going to find such studies. It is doubtful that anyone is making such claims in this day and age, but many people who treat back pain have recognized the value of these modalities in relaxing the patient and modulating their pain so that mobilization and exercise may be carried out more effectively.

TRANSCUTANEOUS ELECTRICAL NERVE STIMULATION

The panel stated that "transcutaneous electrical nerve stimulation (TENS) is not recommended in the treatment of patients with acute low back problems. (Strength of Evidence = C.)" (12)

The panel based this recommendation on only one study because they could only find one study about the use of any type of electrical stimulation for acute low back pain. The study actually evaluated the use of "electro-acupuncture" delivered by way of surface electrodes. The panel chose to consider this a variation of TENS. This was as close as they could come in any study. The patients treated with the electro-acupuncture were only given two 15 minute treatments. There was no difference in the results after 1 and 2 weeks. There was a significance in reduction of pain after the 6th week.

Other studies that the panel looked at that did involve actual TENS treatment were not considered to be quality studies for a variety of reasons. Some of the studies, of course, were more involved with treatment of chronic pain than acute pain and therefore could not be used for the acute low back pain guidelines.

Here the panel drew a very marginal conclusion. From the evidence that they were able to amass they should have said that they could draw no conclusion as

> Better research tools must be developed before any clinical practice guidelines can be advanced. The AHCPR should be dissolved or redirected because the task they were assigned to do is futile.

to the efficacy of TENS in the treatment of patients with acute low back problems and therefore could make no recommendations regarding TENS. Their statement that TENS is "not recommended" is a non sequitar.

TRACTION

Traction was not recommended in the treatment of low back problems because a meta-analysis of the studies on traction could not find sufficient evidence of its benefit. These studies were flawed in that they were comparing multiple types of traction and multiple types of low back problems. While traction may not be helpful to a large number of patients with acute low back pain, most physical therapists have found that, at least in some patients, it is a beneficial treatment. This, therefore, should have been an advocated treatment as something that is worth trying in selected cases. (13)

EXERCISE

The exercise recommendations of the panel were as follows:

- Low-stress aerobic exercise can prevent debilitation due to inactivity during the first month of symptoms and thereafter may help to return patients to the highest level of functioning appropriate to their circumstances. (Strength of Evidence = C.)
- Aerobic (endurance) exercise programs, which minimally stress the back (walking, biking or swimming), can be started during the first 2 weeks for most patients with acute low back problems. (Strength of Evidence = D.)
- Conditioning exercises for trunk muscles (especially back extensors), gradually increased, are helpful for patients with acute low back problems, especially if symptoms persist. During the first 2 weeks, these exercises may aggravate symptoms since they mechanically stress the back more than endurance exercises. (Strength of Evidence = C.)
- Back-specific exercise machines provide no apparent benefit over traditional exercise in the treatment of patients with acute low back problems. (Strength of Evidence = D.)
- Evidence does not support stretching of the back muscles in the treatment of patients with acute low back problems. (Strength of Evidence = D).
- Recommended exercise quotas that are gradually increased result in better outcomes than telling patients to stop exercising if pain occurs. (Strength of Evidence = C.) (14)

It is interesting to note that the AHCPR made no recommendation whatsoever about the benefits or lack of benefit of specific mobility exercises, active or passive, that are designed to overcome specific movement disorders. The panel once again cited a small number of studies that they considered of value. They did cite one study that compared McKenzie extension exercises to a 45 minute educational session and found that the exercise group stopped medication use early and reported more pain relief and fewer days off of work than the other group. Despite that, no recommendations were made about using movement disorder specific exercises to reduce pain in the initial 30 days or to help rehabilitate patients. (15)

Here is an example of a course of treatment that probably should have been advocated with at least a "C" recommendation. There was one adequate study

and arguably, patients respond rather dramatically to manual correction (passive exercise) of a movement disorder followed by active exercises to maintain that correction. Clearly, the benefits of such approaches in the treatment of acute low back pain have been documented and demonstrated and yet they were ignored.

EARLY TREATMENT DISCOURAGED

The panel assumed that because most patients would get better in the first 30 days regardless of treatment, there was no reason to intervene. They ignored the fact that much of the pain and suffering can be alleviated in those people who are waiting to get better and, perhaps more importantly, that early physical therapy intervention has been proven to reduce the number of patients suffering acute low back pain who will go on to develop chronic low back pain. Linton et al have demonstrated that patients who suffer a first time acute episode of low back pain and don't get early physical therapy intervention are eight times more likely to develop chronic pain than similar patients who start physical therapy within the first few days after injury. (5) The panel did not cite that study. The advice the public receives is that they should forego treatment. They must suffer with their back pain, hope it will get better, and seek further consultation only if it's not better after one month.

FOR THOSE WHO DON'T GET BETTER: SUFFER

The guideline, in its final handout, suggests to people who are not getting better than their simple recommended routine of home application of heat and ice and activities such as walking, swimming, and bike riding, that they should resign themselves to the fact that they are getting older and must curtail their activities because their back is now older than it had been. It seems to suggest that many people must resign themselves to becoming back cripples rather than seek early rehabilitation for their back problems. The handout points out that even Larry Bird couldn't get his back all better. It goes on to tell people to: "Be realistic. Ask yourself three key questions about your daily activity requirements:

- Can a reasonable exercise program overcome my back problem?
- Will it be possible to continue a more time-consuming exercise program and my usual daily requirements long term?
- Is there any way I can change my activity requirements now or in the future?

If a reasonable exercise program is not helping you, there are several options: (1) You can choose to put up with discomfort and expect some setbacks. (2) You can begin a more time-consuming conditioning program. (3) You can change the pace of doing difficult activities. This may include a job change. People may use a combination of the three approaches." (16)

MISLEADING FISCAL IMPLICATIONS

At the press conference introducing the guideline, many statements were made that imply that following this guideline will save tremendous cost. Clifton R. Gaus, Sc.D. Administrator of AHCPR stated, "In 1990 alone the United States spent more than 20 billion dollars just for direct medical costs of all low back problems. While there are no precise estimates for the cost of treating acute low back problems, a preliminary cost analysis of these guidelines suggest the nation can save as much as a third of the medical expenses of treating this condition without any loss of quality care." (3)

Gaus appears to be claiming that ⅓ of that 20 billion dollars could be saved if this guideline is followed. What he fails to point out is that treatment of those low back patients who get better within 30 days, truly the only patients who are covered by the guideline, probably costs less than 10% of the total cost of care for low back pain.

In fact, studies have shown that 79% of the total cost of caring for patients with low back pain is spent on less than 10% of these patients. (4) The vast majority of the patients who don't get better in 30 days will get better in 90 days. It is those patients who go on to have chronic problems who cost better than 79% of that 20 billion dollars. The savings achieved by following the guideline are therefore negligible if any. It is possible that the cost of treating patients with low back pain will increase if the guideline is followed as more patients will go on to have chronic problems. (5)

MISLEADING ENDORSEMENT IMPLICATIONS

In addition to the members of the PORT, the guideline lists a large number of peer reviewers and pilot reviewers. The group of peer reviewers contains the names of 11 physical therapists. As a footnote, in small print, it does state that being listed as a peer or pilot reviewer "does not necessarily imply endorsement of the guideline products." Rarely does that footnote get cited in the publication of this document. More often the public announcement is that this document was reviewed by many practitioners including medical doctors, osteopaths, chiropractors, physical therapists, and others. The implication is that all of these people who reviewed the document approved of them. Clearly, that is not the case. The AHCPR makes no attempt to let the public know to what extent the reviewers refuted the document. (17)

IMPERFECT SCIENCE: POOR CONCLUSIONS

The AHCPR has once again demonstrated that clinical research is not a perfect science and, therefore, many outcome studies and other randomized clinical trials prove to be poor tools to measure the efficacy or lack of efficacy of clinical treatment. None of these trials prove that clinical treatment is not beneficial, but rather that the research does not justify the treatment. Better research tools must be developed before any clinical practice guidelines can be advanced. The AHCPR should be dissolved or redirected because the task they were assigned to do is futile. Clearly clinical guidelines should not have been established based upon the findings.

THIRD PARTY PAYOR MISUTILIZATION

Perhaps the greatest danger in allowing this guideline to remain unchallenged is that it will be used by insurance companies and Health Maintenance Organizations as an excuse to deny needed care to patients with low back pain. The guideline could be used to sanction such denials. Attempting to correct the inequities in the guideline while leaving it as a working document would therefore be a mistake. In summary, the guideline is flawed, and often demonstrates illogical conclusions. It should be rescinded or corrected.

References:

1. Anderson C. Measuring what works in health care. Science 1994 Feb; 263:1080-1082.
2. Bourne R, Keller R. Controversy Outcomes Research. SPINE 1995 Feb; 20(3):384-387.
3. HHS News Release. Most acute low back problems go away: only some treatments beneficial, say new practice guidelines. 1994 Dec.
4. Spengler DM, Bigos S, et al. Back

injuries in industry: a retrospective study. SPINE 1986;11(3).
5. Linton SJ, Hellsing AL, Anderson D. A controlled study of the effects of an early intervention on acute musculoskeletal pain problems. Pain 1993 Sept; 54(3):353-9.
6. Manipulation's long road from quackery to scientific legitimization. The Joint Letter 1995 Mar; 1(3):27-28.
7. Clinical Practice Guideline No 14. Acute low back problems in adults. AHCPR Publication No. 95-0642. 1994 Dec.; p.13.
8. Ibid. p. 15.
9. Ibid. p. 19.
10. Ibid. p. 34.
11. Ibid. p. 36-37.
12. Ibid. p. 37-38.
13. Ibid. p. 41.
14. Ibid. p. 53-54.
15. Ibid. p. 54.
16. Ibid. p. 154.
17. Ibid. p. 128-133.

Invited Commentary

By Anthony Delitto, PT, PhD

In physical therapy, we are challenged to document that our interventions are defensible, and recent events such as the release of Practice Guidelines remind us that the time for a major effort in research is now. The recently released Agency for Health Care Policy and Research Practice (AHCPR) Guidelines on Low Back Trouble in Adults (Practice Guideline No. 14) appear to come as a surprise to some and, in turn, I have heard a variety of responses. Like many of my colleagues, Mr. Tygiel voices a very strong position against some of the AHCPR panel's methods and recommendations. In response to his commentary, I would like to focus my attention in three areas. First, I would like to point out how the AHCPR Low Back Guidelines are an excellent example of how cost-effectiveness and defensible practice initiatives have finally caught up with our profession. Next, I would like to point out what I perceive as a major shift in what used to pass as "evidence" to document cost effectiveness by comparing some of the requirements of a few years back to those I see today. Finally, I would like to discuss a few options centering around what we as a physical therapy profession should focus on next.

Over the years, defensible has taken on different meanings. In the past, our emphasis appeared to relate more to elucidating scientific basis for practice, and we engaged in numerous meetings where such issues were the topics of a lot of *conversation*. Unfortunately, there was very little writing about the conceptual basis for such musings and even less peer-reviewed research-based papers. The need for research was always vocalized by a few, but with little to show in terms of results. But in reality, did we really need research to have successful practices? I would argue no; you could treat a patient in a variety of ways and all you really had to do to get paid was send a bill. I used to see the look in many who make a living in the practice world when the issue of research was brought up, and the look translated to me to be one of research being a "nice thing" but it really was not a "necessary thing."

Today, priorities have shifted more to a question of cost-effectiveness; we are interested in if and under what conditions (including costs) will an intervention work. We have seen a movement in our profession joining the ranks of others in outcomes based research. Once more we are doing a lot of talking, but I would argue that at this point research is no longer a nice thing, but is now a necessary thing. Why? ***Because arguments for or against treatment interventions are best made through the evidence provided, and the best evidence is that which comes from peer-reviewed publication.*** The days where you could make a presumptive argument in favor of certain interventions without the benefit of evidence provided through peer-reviewed format are gone. Mr. Tygiel can argue all he wants about "active and passive ROM testing and specific mobility testing" being of great value in determining "the movement disorder that is leading to or rising from the low back pain. . ." His comments are understandable to most of our profession (in fact I agree with what he is saying), but it is not our profession where the argument needs to be made. And how is the argument made in the most compelling way? With research-based findings to back the argument. Period.

Groups like the Agency for Health Care Policy and Research search for the "best evidence" that interventions are effective and worth the cost. It would be difficult not to applaud AHCPR's intent as well as their methods, even if we are not very happy with some of their conclusions. I agree that the guidelines offer a very non-intervention approach, and such an approach is not only bothersome to most of the physical therapists that I know and respect. In fact, in many instances, what is recommended (and not recommended) stands against my own beliefs and practice. Instead of nit-picking the guidelines, however, how about a very proactive and consolidated approach to producing the research necessary to test some of the guidelines? I would remind everyone that practice guidelines by their nature are re-visited in the future and modified. For those interested (hopefully most physical therapists), I would ask one simple question: "When the Low Back Guidelines are revisited, what additional research will physical therapists have to contribute to a new effort to change the recommendations?"

Believe it or not, another profession must have asked themselves a very similar question in the early 1980's. The answer the leaders gave to their profession was a well-balanced and thorough plan to generate the research necessary for a defensible practice. In one case, over $1 million was raised for an outside organization to produce some of that research. In other instances, the use of a foundation very similar to our Foundation for Physical Therapy was used extensively to review and fund research proposals. The outcome: a $1 million dollar gamble resulted in the Rand study, one of the more widely cited studies in the guidelines supportive of manipulative therapy of the spine in acute low back pain. It also generated numerous other clinical outcome studies published in reputable medical journals by authors from a variety of professions. I do not agree with Mr. Tygiel's assertion that the guidelines recommendation in favor of manipulation was based on "advocacy" as much as it was based on evidence from peer-reviewed publication, the legal tender in the scientific community.

Where will a well-focused research agenda come from in our profession? First, it must be made the number one priority throughout the profession, from the leadership down to all the rest of us. Funding must be raised at a time when obtaining such support is extremely difficult. ***Few understand how much money it takes to perform the quality research necessary to study the interventions and outcomes in patient populations that we see in everyday practice.*** Could we raise $1 million if we needed to for such research? Absolutely, unequivocally yes.

For example, there is a request for application (RFA) sitting with the Foundation for Physical Therapy that focuses on

Work-related Injury that was the result of a consensus of leading members of our profession. Such an endeavor is as close as we are ever going to get to a directed and focused research effort with physical therapy in the forefront. Unfortunately, the funding for this effort is now less than 40% of its $600,000 necessary to release the RFA.

Why is it so difficult to find the money necessary to get the research accomplished? I believe the answers are many, but of one thing I am certain: the Foundation raises between $1-1.5 million per year, **with the bulk of this money coming from physical therapists. Further, less than 15% of the physical therapists in our association contribute to this effort. To those who give, you are all to be commended.** I believe that physical therapists can and should shoulder most of the responsibility to raise the money necessary to accomplish our research goals mostly because I can't think of anyone else who will do such a thing. How much should we give? ***If each active member were to give $100, we would raise $6.2 million for research.*** This would not only be enough money to fund the RFA for a Clinical Research Center for Work Related Injury, but it would also fund future RFA's which would come from the Foundation's consensus conferences (e.g., Geriatric, Sports, etc.). I cannot find an argument against such an approach. The amount ($100) is what most working physical therapists could certainly afford. And for those who can afford more, all the better. The most important point is that funding research would be the first step in our effort to produce the peer-reviewed research necessary to have our practice recognized in the appropriate fashion the next time practice guidelines are visited.

It's simply a matter of priorities. Right now, funding for the Foundation appears to be a low priority for some (the 85% who contribute nothing). It also appears to be a low priority for some of our leadership. We need to look no further than our own Orthopaedic Section. We appear to have put the purchase of land at a higher priority than investment in research. I am not saying the recently announced plans to purchase land in Wisconsin for $800,000 is a bad investment. *(Editor's Note: The actual cost of the land was $317,000.)* I would ask our leadership one question: in five years, will the return on this investment be as important as the return on an investment for a Clinical Research Center which will focus on work-related injury? Time will tell. But the question remains: "do we have the time?"

Author's Response

I appreciate Dr. Delitto's comments on my analysis of the acute low back pain guidelines. Apparently we agree on many issues including our beliefs in the value of manual therapy techniques for patient evaluation and in the importance of funding research projects. I do not agree however that we should count on research to document that our interventions are defensible.

We need researchers to help us figure out why what we do works, when it works; and why it doesn't, when it doesn't. We don't need to prove whether or not physical therapy works. We know that sometimes we are successful and sometimes not. We know that sometimes a technique will be beneficial for one patient but of no benefit to another—another whose symptoms look awfully similar to those of the patient who benefited. Why?

I realize this is, today, considered an old fashioned concept. It is what Dr. Delitto refers to as "elucidating (the) scientific basis for practice." I guess that it is an old fashioned concept that the primary purpose of research should be to advance the body of knowledge so that new understanding will lead to new and better techniques that will help more practitioners help more patients.

Today we want to do research that we can use for marketing purposes. We want to please third party payors and answer the questions they pose regarding efficacy and cost efficiency. Have we, in doing so, bastardized our research efforts? I think so and I think we did so foolishly. We are trying to measure the immeasurable. We are wasting valuable research time and dollars trying to answer poorly posed and unanswerable questions.

Physical therapy, we should not forget, is an art and a science. We do our best to artfully apply scientific principles to patient care. Randomized clinical trials and outcome studies, for the most part, have failed to measure the effects of clinical practice because there are too many variables that cannot and should not be eliminated. Each patient presents a multitude of variables when compared to the next patient. Each technique is applied and modified in a variety of ways depending on another multitude of variables including patient size and response, and therapist's size and skill. The emotional and intellectual interaction between therapist and patient, and the changing factors within our daily environment produces another multitude of variables.

Because of this, most attempts to accurately measure treatment outcomes have resulted in failure. Often these failures draw illogical conclusions. Somehow despite the flaws and illogical conclusions these studies often make their way into peer reviewed publications and become the so called "legal tender of the scientific community." They can then be used by third party payors to buy their way out providing needed care.

We must be extremely careful about how we view research projects. We cannot afford to make research a sacred cow that cannot be challenged. Just as malpractice cannot be justified, neither can faulty research and illogical conclusions. We as clinicians must carefully and critically analyze current and future research. When conclusions seem obviously wrong to us based on what we know we see in practice, we must look for the flaws in the research and expose them. If we don't, the conclusions of the study will be accepted as gospel and used to deny needed care.

That is what AHCPR failed to do in developing the acute low back pain guideline. They studied the studies. They realized the studies didn't tell them much but they made clinical recommendation based on them anyway. Many of those recommendations were illogical because they were based on illogical conclusions.

Dr. Delitto takes exception to my assertion that the guidelines included recommendations for manipulation based on advocacy. I based that assertion on statements by Scott Haldeman, DC, MD, PhD, a member of the panel. I stand by that assertion. I believe that we would be remiss to assume that the political dynamics of the panel played no part in the final recommendations that came forth. This was not pure, unadulterated science. There were personalities to be dealt with, egos to be stroked and personal agendas to be fulfilled. I suspect that, at least for some members of the panel, the personal agenda was to prove that more research was necessary. Did they use clinical examination and treatment as the sacrificial lamb to achieve their agenda?

A careful review of the guideline or any other research project by practicing clinicians should not be considered "nit-picking." With much anticipation we looked to this guideline as a fertile field

from which we could harvest a crop of valuable information that would help us to better manage patients with acute low back pain. Instead of crops we found an abundance of weeds. After carefully pulling the weeds all we were left with was a few flowers and lot of fertilizer. It is not unreasonable to ask that the field be replanted and this time more carefully tended.

The question remains, "How are we to respond to third party payors' requests for defense of our practice?"

The answer lies in marketing—not science. These companies don't really want or understand science anyway. They want and understand profit. They must be made to understand that some of their questions regarding practice will never be answered because there is not a way to answer them; that we do our best to help patients and that more often than not we succeed; that our risk to benefit ratio is small and therefore our outcomes should be subject to less scrutiny than the outcomes of the more dangerous interventions; and lastly, that they should pay for our services because they are needed services. In the long run they will lose profits if they fail to take that into account.

Let us no longer confuse the purposes of marketing and science. Once we learn to better differentiate between the two we will do a better job at both.

Philip Paul Tygiel, PT, MTC

The Third Annual Fundraiser for APTA's Minority Scholarship Fund *Diversity 2000: Physical Therapy Scholarships for a Diverse Future* is scheduled for Saturday, September 23, 1995 at the Stouffer Hotel in Orlando, Florida. The Fundraiser is an integral part of the Florida Chapter Fall Conference. Single ticket prices are $100. Contributions of any amount are welcome. Ad space in the souvenir book may be purchased at $500 for a full page, $250 for ½ page and $100 for a business card. For further information, please contact APTA's Department of Minority/International Affairs at 800/999-2782, ext. 3144.

Construction Has Begun

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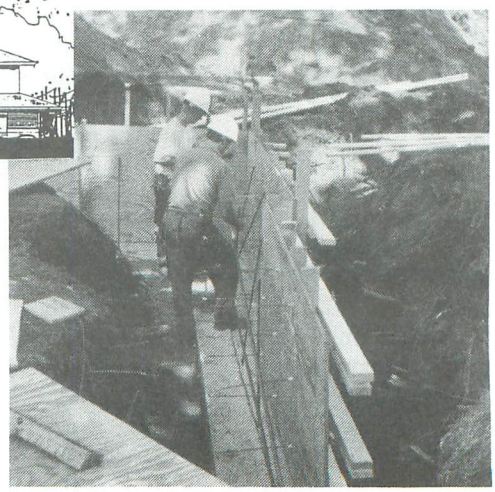

Forms for foundation walls going up.

Informed Consent in Clinical Research

By Kent Timm, PhD, PT, OCS

This is a quarterly column by the Orthopaedic Section Research Committee.

One of the fundamental components in the process of any clinical research which involves the testing or treating of patients is the aspect of informed consent. Informed consent has been defined as: "An ethical principle that requires obtaining the consent of the individual to participate in a study based on full prior disclosure of risks and benefits." (1) This ethical construct is based upon Principle I of the Nuremberg Code of 1947, which states: "The voluntary consent of the human subject is absolutely essential. This means that the person involved should have legal capacity to give consent; should be so situated as to be able to exercise free power of choice, without the intervention of any element of force, fraud, deceit, duress, overreaching or other ulterior form of the constraint or coercion; and should have sufficient knowledge and comprehension of the elements of the subject matter involved as to enable him to make an understanding and enlightened decision" (2) regarding possible participation in a research activity. In turn, this principle led to the development of The International Code of Ethics for Biomedical Research, known originally as the Declaration of Helsinki (3) and now as Helsinki II (1), which governs the protocols of any research that involves human subjects and includes the requirement of informed consent. In practical terms, the ethics of informed consent can be summarized as follows: Explain the potential risks and benefits to potential subjects as they volunteer for a research project in clear and understandable language, assume responsibility for the welfare of research subjects through the course of a clinical study, and document each subject's understanding of and voluntary participation in the research process.

Although founded as an ethical construct, the aspect of informed consent does have a practical implication: physical therapist malpractice. Under civil or criminal law, health care providers, including orthopaedic physical therapists, are both responsible and liable for the quality of services provided to patients. Just as a clinical practitioner routinely obtains and documents the consent of the patient to physical therapy care before the start of the evaluation and treatment processes, the clinical researcher must obtain and document the informed consent of the subject to participate in a research study as a method of both ethical and medicolegal protection.

The rules of informed consent may be perceived as a relative barrier in the mechanism of clinical research, because of the extra time and paper work required. Informed consent procedures can be simplified through the application of two components. These components are known as information elements and consent elements. (1) Information elements address the researcher's disclosure of information and the subject's understanding the information while consent elements deal with the nature of the subject's participation in the research study and the subject's competence to consent. (1) These elements are complemented by other factors that are designed to complete the informed consent process.

INFORMATION ELEMENTS

Subjects Must Be Fully Informed

The purpose, procedures, expected occurrences, risks, and benefits must be clearly and completely defined. The subjects must be of a legal age to participate on their own regard or must have written permission or their parent or guardian if they are a minor. All information must be provided in writing and, if necessary, read to the subject in order to ensure comprehension.

Subject Information Must Be Confidential and Anonymous

The researcher must undertake procedures that are necessary to protect the confidentiality of all information received from or generated by the subject and the anonymity of the subject's participation in the research project. The subject must be informed that they have the right to review all data material that may be collected from them during the study and that they have the right at any time to withhold permission for the use of such data by the researcher.

The Informed Consent Document Must Be Written in Clear Language

The actual informed consent form must be written in terms that can be easily understood by the layperson. The most useful suggestion is to construct a document that uses language which parallels the instruction of a patient in a home treatment program.

The Researcher Must Answer Any Questions

The researcher must ensure that the subject understands all information regarding the research process and, therefore, should encourage and then answer questions from the subject as a means of verifying such an understanding. The researcher should also make it clear to the subject that they are free to ask questions, along with the expectation that such questions will be answered by the researcher, at any time during the study.

CONSENT ELEMENTS

Consent Must Be Voluntary

The subjects must be invited to participate in the research project as volunteers and must not be coerced in any manner.

Subjects Are Free to Withdraw Consent

At any time before, during, or even after the research study, the subject must be made to feel free to withdraw consent for participation in the research process without risk of any form of penalty. The researcher must also make it clear to the subject that the research process will stop if the subject's safety or comfort is at risk.

OTHER FACTORS

Institutional Review Board

The research project, the informed consent process, and the informed consent form should be reviewed by an Institutional Review Board before the start of the formal research process. Board review, which is a legal requirement for all projects that receive grant funding from federal sources, is designed to ensure that all of the ethical, legal, and scientific aspects of the proposed

research project are sound and appropriate. (1,2,3) Institutional Review Boards may be accessed through most physical therapy education programs and through many teaching hospitals.

Injury Statement

The subject must receive a clear explanation of what measures will be taken by the researcher and the researcher's facility if the subject becomes hurt as a result of the research process. In most instances, this represents a legally binding contract between the subject and the researcher and usually includes a provision for any and all physical therapy treatments necessary to remediate the injury without cost to the subject.

Signed Documentation

The actual informed consent document should be signed by the subject, the researcher, and at least one witness who will verify that the informed consent process was completed in a satisfactory manner. This serves to protect the interests of all parties involved in the process and to minimize any future disagreements that may arise regarding the research proceedings.

SUMMARY

In summary, the process of informed consent exists to protect the rights and safety of subjects who volunteer to participate in a clinical research project. While somewhat cumbersome, the mechanism of informed consent is a very close duplication of routine practices used to verify a patient's willingness to receive care from an orthopaedic physical therapist in the clinical setting. Once completed, the informed consent process will help to ensure a positive clinical research experience for both the researcher and the subject.

REFERENCES

1. Portney LG, Watkins MP: Foundations of clinical research: Applications to practice. Norwalk, CT: Appleton & Lange, 1993.
2. Prentice ED, Purtilo RB: The use and protection of human animal subjects. In: Bork CE: Research in physical therapy. New York, NY: J.B. Lippincott Company, 1993.
3. World Medical Assembly: Human experimentation: Code of ethics of the World Medical Association, Declaration of Helsinki. British Medical Journal 2:177, 1964.

Suggested Readings

Levine RJ: Ethics and regulation of clinical research, ed 2. Baltimore, MD: Urban & Schwarzenberg, 1986.

Michels E: Research and human rights, part 1. Physical Therapy 56:407, 1976.

Purtilo RB: Applying the principles of informed consent to patient care: Legal and ethical considerations for physical therapy. Physical Therapy 64:934, 1984.

The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research: The Belmont report: Ethical principles and guidelines for the protection of human subjects of research DHEW Publication No. (OS)78-0012; Appendix I, DHEW Publication No. (OS)78-0013; Appendix II, DHEW Publication (OS) 78-0014. Washington, DC: U.S. Government Printing Office, 1978.

The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research: Report and recommendations: Ethical guidelines for the delivery of health services by DHEW Publication No. (OS) 78-0010; Appendix, DHEW Publication No. (OS) 78-0011. Washington, DC: U.S. Government Printing Office, 1978.

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Sources of Documentation Software for the Rehabilitation Practice

By Patty Iraggi and J. Scott Stephens, MS, PT

Documented outcomes, managed care, computerization, and networks are all current ideas looming over the practices we manage. The Orthopaedic Section Practice Committee sought to identify integrated practice documentation and management software that:

- assured practice documentation met professional standards of practice
- assured compliance with federal and state guidelines for timely and complete certification and recertification
- eliminated the need for transcription of dictation and
- assured charges were generated for each patient encounter.

We also thought that the software needed to adapt to the needs of multiple professions, such as physical therapists, occupational therapists and speech-language pathologists. The committee conducted a six-month search and product review. It involved visiting trade shows, reviewing multiple print publications and countless telephone calls. The result is an extensive though incomplete listing of software vendors included within this article.

Computerized documentation was evolved rapidly. Many of the products reviewed addressed elements of our desired package; however, no single application met all the needs we identified. Voice activated transcription is available but is not yet as refined as it's likely to be in a few years. There is limited software that adapts to the requirements of multiple professions. In addition, software pricing is highly variable.

The purpose of this article is to provide information currently available on documentation software. Our task was complicated by the fact that existing products are constantly being updated and new companies are rapidly entering the market with new technology. In several instances you will note that the documentation software interfaces with a billing module. More comprehensive information on billing/practice management software will be included in a future article.

Table A includes: a list of software vendors, address and telephone numbers, trade name of the software product, the nature/capability of the software, whether the documentation component interfaces with billing/practice management software, the retail price and the vendor recommended computer hardware.

Table B further describes: each vendor's option for a trial period, the product guarantee, whether the vendor provides onsite training and a comment on product enhancements or updates.

The information included in this article "road map" to guide you in your quest for the perfect software complement to patient care documentation. Please share comments on this article or your experiences with documentation software with the Orthopaedic Section Practice Committee. They may be directed to:

J. Scott Stephens, MS, PT
1316 South Jefferson Street
Roanoke, VA 24016
703/982-3689 (telephone)
703/342-3506 (FAX)
SSTEPHENS @ APTA.ORG Internet address FRHA91A Prodigy address

Please note that as this article was being written, answers to several questions could not be provided by several vendors. Their products were being readied for release to the public and/or policy had not yet been established. You may contact the companies directly for additional information.

Name of Company	Trial Period	Money Back Guarantee	On-site Training	Updates
Medical Documenting Systems, Inc.	90 days	yes 100%	yes	Included in support fee
Compute Rx Notes	yes/varies with package purchased	yes/varies with package purchased	yes	Included in support fee
Body Logic Corp.	no	no	yes	Included in support fee
Precedent Systems	30 days	30 days	yes	Included in support fee
Medical Business Automation-MBA	$89.00 Trial Pack	no	yes	Included in support fee
Notes Express	30 days	30 days	no	Included in support fee
Spectra Soft Smart Practice	30 days	30 days	yes	Included in support fee
Clinical Information Solutions	User satisfaction assurance plan currently under development.	User satisfaction assurance plan currently under development.	yes	Included in support fee
Dragon Systems, Inc.	Information not available.	Limited warranty	Information unattained	Information unattained
Physical Therapy Management Systems - PTMS	Actual use of system prior to purchase is offered.	Actual use of system prior to purchase is offered.	Upon request	Included in support fee
International Business Machines Corp. IBM	60 day warranty	60 day warranty	Information unattained	Information unattained
APS Professional Systems	Information unattained.	100% Guarantee	upon request	Included in support fee
VDI Technologies Inc	Information unattained.	Information unattained.	yes	n/a
The Blankenship System	TBA	TBA	TBA	TBA
Green Leaf Medical - ORCA	yes	yes	yes	yes

TABLE B

Name of Company	Address	Telephone/Fax	Software Name	Type of Software	Billing Integrated	Price	Equipment to be purchased
Medical Documenting Systems, Inc.	2515 Wabash AV Suite 200 St Paul MN 55114	800-321-5595 Tel 612-645-9500 Tel 612-645-0019 Fax	DocuMed	Physician based patient encounter software. Uses keyboard, templates, and penbased computers.	Yes	$799 per user	Minimum 486Dx IBM Compatible with laser printer.
Compute Rx Notes	3850 Sheridan Street, Hollywood, FL 33021-3620	305-989-2856 Tel 800-227-6668 Tel	S.O.A.P. Notes	PT & OT SOAP Notes via barcode scanner	No	$3,195	IBM Compatible 640K
Body Logic Corp.	P.O. Box 162101 Austin, TX 78716-2101	512-327-0050 Tel	Body Logic	PT, OT & ST Customized Documentation	Yes	$6,000-$20,000	Provided with purchase
Precedent Systems	P.O. Box 75239 Seattle, WA 98125	800-488-5668 Tel	GHOSTWRITER	PT/OT Narrative Report Writing via templates	Yes	$3,785 Professional Edition	IBM Compatible 4MB MS DOS 5.0
Medical Business Automation-MBA	2047 Old Middlefield Way, Mountain View, CA 94043	415-967-2673 Tel 415-967-3404 Fax	E-Voice Notetaker E-Voice 7000	Speech recognition for physicians and health care specialists. Practice Management	Yes Yes	$5,995 $995 - $2495	IBM Compatible 486/33 16MB RAM DOS 6.0 WP6.0
Notes Express	616 W Platt Street, Maquoketa, IA 52060	319-652-4364 Tel 800-999-7861 Fax	Notes Express	Developed by PT's for PT's. Generates Evaluations, Functional Outcomes Evaluations and daily notes using picklists and abbreviations.	No	$795	IBM Compatible 386 or higher 4MG
Spectra Soft Smart Practice	6100 South Maple, Suite 118, Tempe, AZ 85283	800-889-0450 Tel 602-413-0448 Fax	SpectraSoft Charting	Charting produces SOAP Notes and Evaluations via customized codes	Yes	$499 - $999	IBM Compatible with MS Windows
Clinical Information Solutions	3940 California Road, Orchard Park, NY 14127	716-667-2330 Tel	Hippocrates	PT visit notes, data collection table and graphing capabilities using a drop down list and mouse.	Information not yet available.	$9500	486 Dx 66 Mhz 8 MB RAM 420 MB Hard Drive
Dragon Systems, Inc.	320 Nevada Street, Newton, MA 02160	800-825-5897 Tel 617-965-5200 Tel 617-527-0372 Fax	Dragon Systems, Inc.	Voice Recognition Software	unknown	$395 to $1695	IBM Compatible WIN or DOS
Physical Therapy Management Systems - PTMS	24 Meadow-brook Road, Sudbury, MA 01776	508-443-2582 Tel 508-440-9173 Fax	PTMS	Menu driven evaluations, worksheets, letters and discharge reports.	No	$1500 Documentation $2500	286 DOB 3.0 to 6.0,1 10MB HD
International Business Machines Corp. IBM	1507 LBJ Freeway, Dallas, TX 75234-6062	800-825-5263 Tel	Speech Recognition Software	Voice to text for any user.	unknown		486 Dx 12 MB DOS 5.2 WIN 3.1
APS Professional Systems	18455 Burbank Blvd, Suite 408, Tarzana, CA 91356	818-705-0963 Tel	Physical Therapy Office System - PTOS IV	Documentation Module used with billing software for narrative report writing using stored codes to produce document.	Yes	$3000 for billing and $650.00 for documentation module	IBM Compatible 640 K
VDI Technologies Inc	540 LaFayette Road, Hampton, NH 03842	603-926-3100 Tel 603-926-4197 Fax	VoiceNet MedType	 Medical Transcription Enhancement System	No No	$10,000 $2500	IBM Compatible IBM Compatible with WP5.1
The Blankenship System	3620 Eishenhower Parkway, Suite 7, Macon Georgia 31206	800-248-8846 Tel	Rehab Notes	TBA	TBA	TBA	TBA
Green Leaf Medical	2248 Park Blvd., Palo Alto, CA 94306	800-925-0925 Tel 415-321-0419 Fax	ORCA - Outcomes Reporting & Clinical Analysis		Yes	$15,000 to $27,950	Included

TABLE A

Help us name our new building.
If you have a creative idea,
please call 800-444-3982.

Book Review

Techniques in Spinal Fusion and Stabilization: Hitchon PW, Traynrelis VC, Rengachary SS.

This is an edited text discussing the surgical management of traumatic and degenerative conditions of the cervical, thoracic and lumbosacral spine. The focus of the text is the indications and operative techniques utilizing different spinal instrumentation systems. The contributors are principally neurosurgeons.

Three of the introductory chapters merit attention. The chapter on Spine imaging not only gives excellent descriptions of different fracture types, but discusses the associated biomechanics. The chapters related to cervical spine biomechanics and bone healing and grafting, provide thorough discussions on those topics.

Chapters seven through nineteen are related to treatment of the cervical spine. Physical therapists will want to focus their attention to Chapters 11, 13, and 18. These chapters provide almost the full range of indications, biomechanics and basic techniques for an understanding of cervical spine fusions.

The chapter by Lin on posterior lumbar interbody fusion exemplifies what this type of textbook can offer the reader. The author begins with an excellent introduction, listing the applied biomechanical principles and the procedures' biomechanical advantages. The clinical indications are concisely described as are the authors' techniques. The illustrations are in all three cardinal planes. The author also provides a suggested postoperative regimen.

There are three chapters on anterior spinal instrumentation. These generally inform the readers about a procedure that has limited indications.

When a text has 48 authors and describes 26 different procedures, there are certainly some chapters that will be found wanting. This is particularly true in the chapters relating to the thoracolumbar spine, which are weak. For example, the description of the Cotrel-Dobousset instrumentation fails to follow the orginator's surgical recommendations. The illustrations and figures concentrate on complications rather than on optimal outcomes and the bibliography contains only one reference. Complete information on rod/hook/screw instrumentations can best be obtained through other publications.

Physical therapists working with patients who have undergone spinal fusion might want to add this text to their library. However, a discussion of postoperative rehabilitation is generally lacking.

Daniel Bethem, MD

Fixed Annuities are Regaining Popularity

By Tom Berkedal

A fixed annuity is a contract issued by an insurance company and sold directly, or through banks and investment firms. In exchange for your payment of a single initial premium, the issuer guarantees a fixed rate of return over a stated period of time, anywhere from one to ten years. Thereafter, the rate is adjusted in accordance with some measure, often the yield on U.S. government securities of similar maturity. For conservative individuals seeking a tool for tax-deferred retirement savings, the fixed annuity is an attractive choice. Fixed annuities defer interest income that would have been subject to ordinary income tax if held outside the annuity. The proceeds pass to the named beneficiary without probate. They involve no front-end sales charges. And, interest is not included in the income tax calculation of social security income. After several years of being practically shunned by investors, fixed annuities have gained notable momentum since the beginning of 1994. Why the renewed interest?

1. Higher taxes, for one thing. Roughly five percent of Americans—couples with income over $140,000 annually and singles with annual income over $115,000—saw their federal tax rate spike from 31 percent to 36 percent in just one year. For those without a tax-deferred retirement plan, or who already contribute the maximum allowed to their retirement plans, tax-deferred fixed annuities provide an additional way to shelter an unlimited amount of income from current taxation. The taxes must be paid when the money is withdrawn, usually at the end of the annuity contract, but until then the money can grow tax-deferred, and many individuals will likely be in a lower tax bracket during retirement.

2. The tax-deferred earnings from a fixed annuity is currently not included in the income tax calculation of social security provisional income. This can take some of the bite out of the portion of Social Security benefits that is subject to taxation.

3. The market, for another. The beleaguered returns in this year's stock and bond markets have prompted many investors to explore their alternatives.

In order to gain maximum advantage, you should be able to leave the money in the annuity for 10 to 15 years. The IRS levies a 10 percent penalty on withdrawals before age 59½, and many issuing insurance companies apply their own surrender charges as well, often for a period of up to seven years.

A fixed annuity is not guaranteed by the Federal Depositor Insurance Corporation (FDIC). Annuities are backed only by the financial stability of the issuing insurance company. Therefore, it would be prudent to do some research into the issuer's creditworthiness before purchasing its annuities. I recommend purchasing only from those insurance companies that receive top ratings from at least two of the four major rating agencies (A.M. Best, Duff & Phelps, Moody's Investors Service and Standard & Poor's).

Annuities are tax-deferred, not tax-free. At the time of withdrawal, regular income taxes are due on the entire withdrawal (excluding any portion of that withdrawal consisting of principal). For example, if you're under age 59½ and make a withdrawal assuming a tax rate of 33 percent and adding the IRS penalty of 10 percent a $1,000 withdrawal will be reduced to $570.

Annuities are not suitable for investors who need access to their money in the near future (within 10 years). Before that time, the advantage of tax deferral is outweighed by the disadvantages of surrender charges, sales commissions (charged by some banks and investment companies) and IRS penalties (if applicable).

Do Fixed Annuities Fit Into Your Retirement Plans? If you are saving for retirement, now would be a good time to review your holdings with your investment advisor. Your advisor can help you determine if you're taking full advantage of all the tax-deferred retirement plans available to you, as well as offer suggestions on how to balance your overall portfolio to meet your goals without taking unnecessary risk. Fixed annuities may be an important addition to your financial strategy.

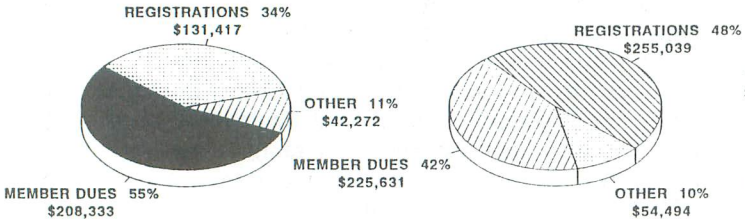
Tom Berkedal is an Investment Executive who provides investment advice to the Orthopaedic Section, APTA.

If you would like additional information, please contact Tom through the Orthopaedic Section office.

Section News

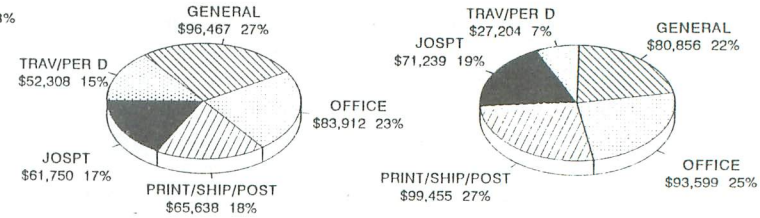
FINANCIAL REPORT

1995 BUDGET TO ACTUAL
INCOME: BREAKDOWN - May 31, 1995
(+40.1% over our expected budget)



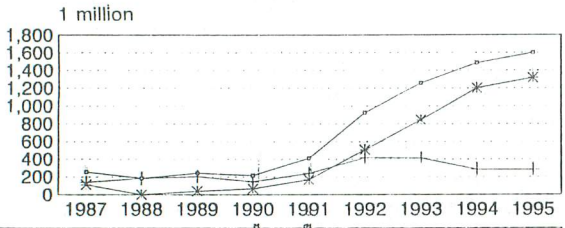
BUDGETED: $382,022.90 **ACTUAL: $535,164.84**

1995 YTD BUDGET TO ACTUAL
EXPENSE: BREAKDOWN - May 31, 1995
(+3.4% over our expected budget)



BUDGETED: $360,075.40 **ACTUAL: $372,353.75**

YEAR END FISCAL TRENDS
1987-1995 (1995 data is as of May 31, 1995)

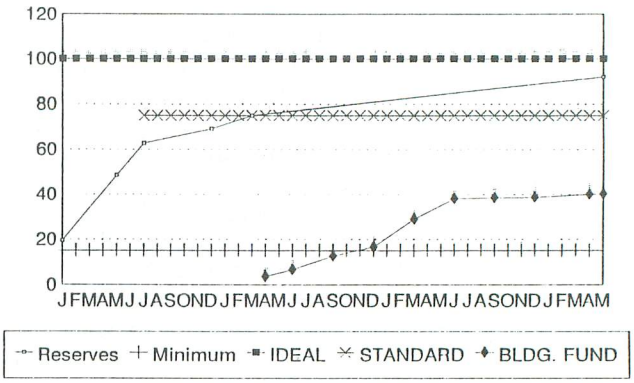


ASSETS	255	185	243	217	410	925	1,257	1,484	1,599
LIABILITIES	141	183	203	148	240	417	413	283	282
EQUITY	114	2	40	69	170	508	844	1,201	1,316

ASSETS LIABILITIES EQUITY

To nearest thousand

RESERVE FUND
January 1, 1992 to May 31, 1995



Orthopaedic Section Audit

December 31, 1994

ASSETS	UNRESTRICTED FUNDS OPERATIONS	RESTRICTED FUNDS JOSPT EQUIPMENT	W & W	TOTAL OF ALL FUNDS
Current Assets:				
Cash	$307,973	$0	$37,261	$345,234
Investments	1,089,711	13,383		1,103,094
Accounts Receivable:				
Programs	12,065			12,065
APTA	56,509			56,509
W&W	11,277		16,832	28,109
Equipment	11,340	667		12,007
Inventory	12,177			12,177
Prepaid Expenses	35,844			35,844
Total Current Assets	1,536,896	14,050	54,093	1,605,039
Property & Equipment:				
Office Furniture & Fixtures	115,965	44,674		160,639
Less: Accumulated Depreciation	(81,324)	(26,014)		(107,338)
Net Property & Equipment	34,641	18,660		53,301
TOTAL ASSETS	$1,571,537	$32,710	$54,093	$1,658,340

LIABILITIES & FUND BALANCE	UNRESTRICTED FUNDS OPERATIONS	RESTRICTED FUNDS JOSPT EQUIPMENT	W & W	TOTAL OF ALL FUNDS
Accounts Payable:				
Program	$22,368	$0	$34,151	$56,519
Orthopaedic Section		11,340	11,277	22,617
Sports Section		3,733	5,555	9,288
APTA-WCFG	17,947			17,947
Accrued Expenses	6,949			6,949
Pension Plan Payable	5,975			5,975
Deferred Income:				
Unexpired Dues	262,763			262,763
Services Paid in Advance	106,480			106,480
Total Current Liabilities	422,482	15,073	50,983	488,538
Fund Balances	1,149,055	17,637	3,110	1,169,802
TOTAL LIABILITES & FUND BALANCES	$1,571,537	$32,710	$54,093	$1,658,340

Orthopaedic Section, APTA, Inc. Bylaws

ATTENTION

THE FOLLOWING BYLAW AMENDMENTS WILL BE VOTED ON IN FEBRUARY, 1996 AT THE CSM BUSINESS MEETING IN ATLANTA, GEORGIA. THE EXACT TIME AND DATE OF THIS MEETING WILL BE PUBLISHED IN THE NOVEMBER, 1995 ISSUE OF *ORTHOPAEDIC PHYSICAL THERAPY PRACTICE.*

ONLY THOSE PRESENT AT THE BUSINESS MEETING IN FEBRUARY WILL BE ELIGIBLE TO VOTE ACCORDING TO THE PRESENT BYLAWS.

ARTICLE I. NAME

The name of this organization is the Orthopaedic Section of the American Physical Therapy Association, Incorporated, hereinafter referred to as the Section and the Association.

ARTICLE II. PURPOSE

The purpose of the Section shall be to provide a means by which Association members having a common interest in orthopaedic physical therapy may meet, confer, and promote patient care through education, practice and research.

ARTICLE III. OBJECTIVES

The objectives of the Section shall be to:

1. Provide for interchange and dissemination of information about current trends and practices related to orthopaedic physical therapy; and
2. Identify resource people and materials, and address areas of concern related to orthopaedic physical therapy; and
3. Foster research in the area of orthopaedic physical therapy; and
4. Promote the development and implementation of orthopaedic specialization and special interests; and
5. Serve as a major source of information on orthopaedic physical therapy for society and the profession of physical therapy.

ARTICLE IV. MEMBERSHIP

Section 1: Classes and Qualifications of Members

The Section's classes and qualifications of membership shall be identical to those of the Association, excluding the classes of Honorary membership and Catherine Worthingham Fellows of the APTA.

Section 2: Rights and Privileges of Members

The rights and privileges of the Section's members shall be identical to those established in the Association's bylaws for the various classes of members at Section and Committee meetings.

In the Section: Active, life, and, with the exception of the office of President, Affiliate and Life Affiliate, subject to additional eligibility requirements in the Section bylaws.

Section 3: Application for and Admission to Membership

The payment of Section dues by active, affiliate, graduate student, student, and student affiliate members in good standing in the Association shall constitute application for and admission to Section membership. Signed applications without payment of dues from life and life affiliate members in good standing in the Association shall constitute application for and admission to Section membership.

Section 4: Good Standing

An individual member is in good standing within the meaning of these bylaws if the member is in good standing in the Association.

Section 5: Disciplinary Action

A. Any member of the Section who is expelled from membership in the Association shall be expelled from Section membership.

B. Any member of the Section who fails to make timely payment of required Section dues shall be expelled from Section membership.

Section 6: Reinstatement

Any former member of the Section who is in good standing in the Association may be reinstated to membership in the Section by payment of the required Section dues.

ARTICLE V. REGIONAL AND SPECIAL INTEREST GROUPS

Section 1: Regional Groups

A. Name
The name of these regional groups is Orthopaedic Study Groups.

B. Purpose
Members of the Section residing or working in a defined geographical region may meet, confer, and promote their interests in orthopaedic physical therapy and the interests of their respective region.

C. Formation and Dissolution
Regional groups of the Section may be established and dissolved in accordance with the rules and conditions set down by the Section's Board of Directors.

Section 2: Special Interest Groups

A. Name
The name of the special interest group is Occupational Health Physical Therapy Special Interest Group.

B. Purpose
Members of the Section having a common interest in Occupational Health Physical Therapy may meet, confer, and promote their interests in Occupational Health Physical Therapy and the interests of their respective special interest group.

C. Formation and Dissolution
Special interest groups of the Section may be established and dissolved in accordance with the rules and conditions set down by the Section's Board of Directors.

Section 3:

The Section shall not be obligated for any debts incurred by a regional or special interest group unless the group has been specifically authorized in writing by the Section's governing body to act on behalf of the Section's governing body.

Section 4: Limitations

Regional and Special Interest Groups are subject to the following limitations:

A. Bylaws and policies of the Section

B. No regional or special interest group shall profess or imply that it speaks for or represents the Section or members other than those currently

holding membership in the regional or special interest group unless authorized to do so in writing by the Section's governing body.

ARTICLE VI. MEETINGS

Section 1:

The Section shall hold an annual meeting of the Section membership for the conduct of business at the time and place of the Association Combined Sections Meeting. Attendance is limited to Section members and invited guests approved by the Board of Directors.

Section 2:

The Section shall hold two (2) informational meetings with the Section membership each year, whenever possible. One in July at the 'Review for Advanced Orthopaedic Competencies' course and the second at the time and place of the Association Annual Conference. Attendance is limited to Section members and invited guests approved by the Board of Directors.

Section 3:

Additional meetings may be held at the call of the President or Board of Directors, and shall be held at the request of twenty (20) members, provided there is no conflict with Association functions.

Section 4:

Notice of time and place of business meetings shall be sent to all Section members at least thirty (30) days prior to the meeting.

Section 5:

An educational or professional program may be presented at any Section meeting. A program held at the time of the Association meeting must be coordinated with the Association schedule.

Section 6:

The Section shall submit Section Business Meeting minutes to Association headquarters within 60 days of the meeting and submit election results and program summaries within 30 days.

Section 7:

A quorum shall consist of twenty (20) members present at the meeting.

ARTICLE VII. BOARD OF DIRECTORS AND OFFICERS

Section 1: Composition

The Board of Directors shall consist of the President, Vice-President, Treasurer, Immediate-Past President, two Directors, Education Program Chair, Research Committee Chair and Executive Director.

Section 2: Qualifications

A. Only such members of the Section in good standing as are provided for in the Association bylaws, Article IV, Section 2, Sub-paragraph B. (3). b shall be eligible for election to office.

   Affiliates and life affiliates may hold office subject to the limitations specified in the Association bylaws, Article V., Section 4, Sub-paragraph C.

B. Voting on the Board of Directors
   1. The President, Vice-President, Treasurer, and Two Directors shall have the right to vote.
   2. The Immediate-Past President, Education Program Chair, Research Committee Chair and Executive Director shall have all rights except the right to vote on the Board of Directors.

Section 3: Terms and Vacancies

A. Officers shall be elected for a term of three (3) years or until their successors are elected.
B. No member shall be elected to serve more than two (2) full consecutive terms in the same office.
   A member who has served at least one and a half (1 1/2) years of a three (3) year term shall be considered to have served a full term in that position.
C. No elected member shall serve more than four (4) complete consecutive terms on the Board of Directors.
D. The Immediate-Past President shall serve for one year in an advisory capacity on the Board of Directors.
E. The President shall appoint eligible members in good standing to fill any vacancy or unexpired term which occurs in an elected office, in accordance with the requirements of these bylaws. Upon a majority vote of approval by the Board of Directors, the appointee shall serve for the remainder of the unexpired term.

Section 4: Officers

The elected officers shall be the President, Vice-President, Treasurer, and Two Directors.

A. The President shall:
   1. Call special meetings; and
   2. Preside at all meetings of the Board of Directors; and
   3. Be an ex officio member of all committees except the Nominating Committee; and
   4. Create and appoint all special and advisory committees necessary to accomplish the functions of the Section, with the advice and consent of the Board of Directors; and
   5. Submit the Annual Report to the Association and such other reports as may be required by the Association Board of Directors by February 15.
B. The Vice-President shall:
   1. Assume the duties of the President if absent or incapacitated. In the event of a vacancy in the office of the President shall succeed to the Presidency for the remainder of the unexpired term, and the office of Vice-President shall be declared vacant; and
   2. Be an ex officio member of all designated committees as outlined in the Strategic Planning programs.
C. The Two Directors shall:
   1. Review and recommend amendment of the Section Bylaws and Section Policies and Procedures in agreement with Association Bylaws and directives from the Section membership or Section Board of Directors.
   2. Serve as Liaison officers between the Nominating Committee and the Board of Directors.
   3. Be ex officio members of all designated Committees as outlined in the Strategic Planning programs.
D. The Treasurer shall:
   1. Oversee the maintenance of complete and accurate financial records which shall be audited annually by a Certified Public Accountant, and shall submit the audited report in writing to the Board of Directors, and to the Association by April 15; and
   2. Submit an annual financial report and proposed budget to the Board of Directors; and
   3. Oversee the collection and disbursement of monies as mandated by the Section or the Board of Directors; and
   4. Serve on the Finance Committee as Chair-person.

Section 5: Duties

A. The Board of Directors shall carry out the mandates and policies of the Section membership. Between meetings of the membership, the Board of Directors may make and enforce policies which are consistent with the Bylaws and policies of the Section.
B. The Board of Directors shall appoint a Section Delegate and an alternate at the annual meeting.
C. The Board of Directors shall hire an Executive Director. The Executive

Director shall act as secretary and serve at the discretion of the Board of Directors. The Executive Director shall keep the official minutes of all Board of Director and Executive Committee meetings of the Section.

D. The Board of Directors shall appoint the Education Program Chair. The Education Program Chair shall serve at the discretion of the Board of Directors.
E. The Board of Directors shall approve meeting minutes taken by the Executive Director.

Section 6: Conduct of Business

A. Frequency of Meetings
The Board of Directors will meet at least three (3) times per year; during the Combined Sections Meeting of the Association, during the Association Annual Conference and at the Fall Board of Director meeting of the Section.
B. Special Meetings
Additional Board of Director meetings may be held during the course of the calendar year as deemed necessary by the President.
C. Notice of Meetings
Notice of the time and place of meetings shall be determined by the President.
D. Quorum
A quorum shall consist of two-thirds (2/3) of the Board members present at a meeting.

ARTICLE VIII. COMMITTEES

Section 1: Standing Committees

A. Names
The standing committees shall be the Education Program, *Orthopaedic Physical Therapy Practice*, Research, Specialization, Finance, Practice, Public Relations, Awards, and Nominating.
B. Appointment and Tenure
The chair-persons of the standing committees shall serve for a term of three (3) years or until their successors are appointed. Committee members shall also serve for a term of three (3) years. Committee members and chair-persons shall be appointed by the Section President with the advice of the Board of Directors. Committee members and chair-persons shall be current Section members in good standing.
C. Vacancies
Vacancies on a committee due to death, resignation, or the failure to perform assigned duties, may be filled by a majority vote of the Board of Directors.

Section 2: Finance Committee

A. The Finance Committee shall consist of at least four (4) members, one of whom is the Treasurer, and each member shall serve a term of three (3) years.
B. The Treasurer shall be the Chair of the Finance Committee and the committee members shall be appointed by the Section President with the advice of the Board of Directors.
C. Committee members shall be current Section members in good standing.

Section 3: Nominating Committee

A. The Nominating Committee shall consist of three (3) eligible members in good standing, each of whom shall serve for three (3) years.
B. One member shall be elected by the Section membership each year.

Section 4: Special Committees

Such special committees as the Section or the Board of Directors may deem necessary shall be appointed by the President, with the advice and consent of the Board of Directors. Committee members and chair-persons shall be current Section members in good standing.

ARTICLE IX: Official Publications

A. Orthopaedic Section and Sports Section
1. *The Journal of Orthopaedic and Sports Physical Therapy* is an official publication of the Orthopaedic Section and the Sports Physical Therapy Section. It is to be edited by an Editor contracted by the Executive Committee/Board of Directors of both Sections.
2. *Orthopaedic Physical Therapy Practice* is an official publication of the Orthopaedic Section.

B. Publication in *Orthopaedic Physical Therapy Practice* or *The Journal* of meeting notices, issues to vote upon or a slate of nominees shall constitute official notice to all members, provided *Orthopaedic Physical Therapy Practice* or the *Journal* has been mailed thirty (30) days prior to the meeting date, or deadline for receipt of a mailed ballot.

ARTICLE X. DELEGATE TO THE ASSOCIATION'S HOUSE OF DELEGATES

Section 1: Selection

A Section Delegate and alternate shall be appointed by the Board of Directors at the Annual Meeting.

Section 2: Qualification

A. Only active or affiliate members of the Association in any class of membership who have been members in good standing for two (2) years immediately preceding may serve as a Section Delegate.
B. The Section Delegate may not also serve as a Chapter Delegate.

Section 3: Length and Number of Terms

A. The Section Delegate and alternate shall serve for a two (2) year term.
B. The Association shall be notified of the Section Delegate and alternate's names, addresses, telephone numbers, and terms no later than March 1st of each year, with additions and changes sent within two weeks of their selection.
C. The Section shall be represented in the House of Delegates annually.

ARTICLE XI. ELECTIONS

Section 1: Nominations and Offices

A. Only those members giving written consent to serve if elected may be nominated. Nominations shall be compiled by the Nominating Committee into a slate of candidates which shall be published in *Orthopaedic Physical Therapy Practice*, an official publication of the Section.
B. The President and Vice-President shall be elected in the same year.
C. The Treasurer and one director shall be elected in the second year and one director in the third year. The yearly election sequence shall be sequenced: 1) One Director; 2) President and Vice-President; and 3) Treasurer and Second Director ad infinitum.
D. Newly elected officers shall assume office at the close of the Annual Business Meeting.
E. Nominees for Treasurer shall have served on the Finance Committee for no less than one (1) year from the time they would assume the office of Treasurer at the end of the Annual Meeting. Exceptions to this can be considered by mutual agreement between the Finance Committee and the Board of Directors.

Section 2: Election Ballot

A. Elections shall be conducted via mailed ballot in April of each year and coordinated by the Nominating Committee. The results of the election shall be announced at the Annual Business meeting.

#1 MOVE TO AMEND ARTICLE XI. ELECTIONS, SECTION 2A BY: Replacing the word "April" with "November" in the first sentence.

SS: Amendment will be consistent with the change in the Section election schedule approved by the Board at the Fall Board Meeting, 1994.

#2 MOVE TO AMEND ARTICLE XI. ELECTIONS, SECTION 2A BY: Adding a second sentence which reads, "A minimum return of mail-in ballots consisting of five (5) percent of valid ballots is required for a mail ballot to be valid."

SS: A minimum return of mail-in ballots should be required for a mail ballot to be valid. Otherwise, one returned ballot would carry the issue, if it was the only one. This is like setting a quorum at a meeting.

B. Election of an officer shall be made between two (2) candidates, whenever possible, when a candidate receives a majority of the ballots cast. In the case where members vote for more than two (2) candidates, that candidate who receives the plurality of the votes of the ballots cast shall be declared elected. All ties shall be broken by drawing of lots by the Nominating Committee.

ARTICLE XII. FINANCE

Section 1: Fiscal Year

The fiscal year of the Section shall be the same as that of the American Physical Therapy Association, from January 1 to December 31.

Section 2: Limitation on Expenditures

No officer, employee or committee shall expend any money not provided in the budget as adopted, or spend any money in excess of the budget allotment, except by order of the Section's governing body. The governing body shall not commit the Section to any financial obligation in excess of its current financial resources.

Section 3: Dues

A. Annual dues shall be fifty dollars ($50.00) for active members, thirty dollars ($30.00) for affiliate members, fifteen dollars ($15.00) for graduate students, students and affiliate student members, and no dollars for life and honorary members. Changes in dues are to be recommended by the Finance Committee to the Board of Directors, which in turn makes recommendations to the Section membership. Changes approved by the Section must also meet Association approval before August 1st and shall become effective on the first day of the next fiscal year.

B. All dues shall be for the period specified in the Association Bylaws.

C. All dues changes approved by the Section membership and approved by the Association's Board of Directors before the Association's deadline will become effective on the first of the Section's next fiscal year.

D. Before the expiration of twelve (12) months of membership, Section dues for the ensuing twelve (12) months shall be received by the Association. Section members whose dues have not been received at such time shall be considered not in good standing in the Section, and his/her Section membership shall be revoked on that date by the Association.

E. Persons wishing to join the Section or former members wishing to be reinstated shall pay current Section dues to the Association, which payment shall entitle them to membership in the Section until such time as they are billed for Association dues.

Section 4: Special Interest Groups

Dues may be levied by Section special interest groups, however, non-payment of special interest group dues shall not carry punitive action at the Section or National level. All special interest group dues are collected by the Section.

ARTICLE XIII. DISSOLUTION

Section 1:

The Section may be involuntarily dissolved in accordance with the Association's Bylaws.

Section 2:

The Section may dissolve subject to a recommendation to dissolve supported by a no less than two-thirds (2/3) vote of the members of the Section's Board of Directors and adopted by two-thirds (2/3) of the Section's members.

Section 3:

In the event that the Section is dissolved, all property and records of the Section shall, after payment of its bona fide debts, be conveyed to the Association.

ARTICLE XIV. PARLIAMENTARY AUTHORITY

The rules contained in the current edition of 'Robert's Rules of Order Newly Revised' shall govern the Section in all cases to which they are applicable and in which they are not inconsistent with these Bylaws and any rules of order adopted by the Section.

ARTICLE XV. AMENDMENTS

Section 1:

The Section Bylaws may be amended in whole or in part by two-thirds (2/3) of the members present and voting at the annual business meeting of the Section, providing a copy of the proposed amendment(s) has been sent to all members at least thirty (30) days prior to the ballot return deadline. The amendments shall be in effect only after approval by the Board of Directors of the Association.

#3 MOVE TO AMEND ARTICLE XV. AMENDMENTS, SECTION 1 BY: Replacing with the following; "The Section Bylaws shall be amended in whole or in part via a mailed ballot. A minimum return of mail-in ballots consisting of five (5) percent of valid ballots is required for a mail ballot to be valid. The proposed amendment(s) shall be referred to the Board of Directors at least thirty (30) days prior to being discussed by the membership at the annual Section business meeting. Following the annual Section business meeting the proposed amendment(s) shall be published in an official publication of the Section or in a separate mailing and shall be sent to all members at least thirty (30) days prior to the ballot deadline.

SS: A minimum return of mail-in ballots should be required for a mail ballot to be valid. Otherwise, one returned ballot would carry the issue, if it was the only one. This is like setting a quorum at a meeting.

Section 2:

When Association Bylaws have been amended so as to require amendment of the Section Bylaws, the Directors shall prepare the necessary amendments and submit them to the Board of Directors of the Section for approval. Notification of the approved amendments shall be sent via *Orthopaedic Physical Therapy Practice* (an official publication of the Section) to each member of the Section

in the next issue after Board of Directors approval. (Exception: Changes in Section dues which become effective on the first of the Section's next fiscal year following approval). The amended Section Bylaws must be submitted to the Board of Directors of the Association for approval. Such changes in Bylaws mandated by the Association will not require a vote of the Section members but will be automatically adopted, upon approval of the Board of Directors of the Association.

Section 3:

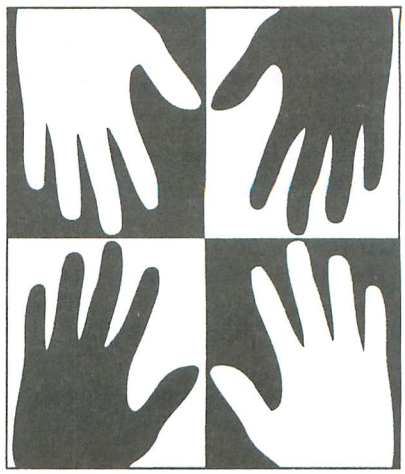
If the intent of an amendment is editorial or to bring the Section's bylaws into agreement with those of the Association, the amendment shall be made as required by the Directors and approved by the Board of Directors. The Directors shall notify the Section's membership of such amendment.

ARTICLE XVI. ASSOCIATION AS HIGHER AUTHORITY

In addition to these Bylaws, the Section is governed by the Association Bylaws and Standing Rules, and by Association policies.

Adopted (August, 1984), Amended February, 1986, December, 1988, August, 1990, July, 1991 and March, 1993)

Physical Therapy
Hands-On Health Care



American Physical Therapy Association
National Physical Therapy Month October 1995 ©

Request for Recommendations for Orthopaedic Section Offices

The Orthopaedic Section of the APTA needs your input for qualified candidates to run for the offices listed below. To serve is exciting and an honor! If you would like the opportunity to serve the Section or know of qualified members who would serve, please fill in the requested information. Return this completed form to the Chair of the Nominating Committee as soon as possible before January 1, 1996. The Nominating Committee will solicit the consent to run and biographical information from the person you recommend.

_____
(print full name of recommended nominee)

_____
Address

_____
City, State, Zip

_____
(Area code) Home Phone Number

_____
(Area Code) Office Phone Number

is recommended as a nominee for election to the position of:

CHECK THE APPROPRIATE POSITION:

☐ TREASURER (3 years):
Should have good working knowledge of accrual accounting, annual and long range budgeting, reserve funds and investment strategies. Nominees shall have served on the Finance Committee for no less than one year from the time they would assume the office of Treasurer.

☐ DIRECTOR (3 years)

☐ NOMINATING COMMITTEE MEMBER (3 years):
Should have broad exposure to membership to assist in formation of the slate of officers.

Nominator: _____

Address: _____

_____

Phone: _____

PLEASE RETURN BY JANUARY 1, 1996 TO: Carol Jo Tichenor, PT
Orthopaedic Section, APTA
505 King Street, Suite 103
La Crosse, WI 54601

Call for Nominations
APTA Special Awards

Mary McMillan Scholarship: Honors outstanding physical therapy students.

Dorothy E. Baethke-Eleanor J. Carlin Award for Teaching Excellence: Acknowledges dedication and excellence in teaching in physical therapy.

Signe Brummstrom: Acknowledges individuals who have made significant contributions to physical therapy.

Award for Excellence in Clinical Teaching: Acknowledges individuals who have made significant contributions to physical therapy clinical education through excellence in clinical teaching.

Catherine Worthingham Fellows of the APTA: Recognizes those persons whose work has resulted in lasting and significant advances in the science, education, and practice of the profession of physical therapy.

Henry O. Kendall and Florence P. Kendall Award for Outstanding Achievement in Clinical Practice: Acknowledges contributions to physical therapy in general (must have engaged in extensive clinical practice at least fifteen years).

Marion Williams Award for Research in Physical Therapy: Given for sustained and outstanding basic, clinical, or educational research.

Lucy Blair Service Award: Acknowledges members whose contributions to the Association have been of exceptional value.

Mary McMillan Lecture Award: Honors a member of the Association who has made a distinguished contribution to the profession; through a lecture presented at Annual Conference.

Minority Achievement Award: Recognizes continuous achievement by an entry-level accredited physical therapy program in the recruitment, admission, retention, and graduation of minority students.

Minority Initiatives Award: Recognizes the efforts of a physical therapy program in the initiation and/or improvement of recruitment, admission, retention and graduation of minority students.

Chapter Award for Minority Enhancement: Acknowledges exceptionally valuable contributions to an APTA chapter to the profession relative to minority representation and participation.

Margaret L. Moore Award for Outstanding New Academic Faculty Member: To acknowledge an outstanding new faculty member who is pursuing a career as an academician and has demonstrated excellence in research and teaching.

Helen J. Hislop Award for Outstanding Contributions to Professional Literature: To acknowledge individual physical therapists who have made significant contributions to the literature in physical therapy or in other health care disciplines.

Jack Walker Award: In honor of the contributions made to physical therapy by Jack Walker, former President of Chattanooga Pharmaceutical Company (now the Chattanooga Corp), this corporation has funded an annual award of $1,000 for the best article on clinical practice published in *Physical Therapy.*

Golden Pen Award: Gives recognition to members who have made significant contributions to the advancement of *Physical Therapy.*

Eugene Michels New Investigator Award: This is a $1,000 incentive award to encourage continued research efforts in physical therapy.

Chattanooga Research Award: In order to encourage the publication of outstanding physical therapy clinical research reports, the Chattanooga Corporation has funded an annual award of $1,000 for the best article on clinical research published in *Physical Therapy.*

Dorothy Briggs Memorial Scientific Inquiry Award: To give public recognition to physical therapist members of the APTA for outstanding reports of research in physical therapy, undertaken while they were students and published in the official journal of the APTA.

Space limitations do not permit a complete description of awards and scholarships, or the complete criteria. If you desire additional information, please contact me through the Section office.

Send your recommendations/nomination by December 1, 1995 to:

Orthopaedic Section, APTA, Inc.
505 King Street, Suite 103
La Crosse, WI 54601
(800) 444-3982

CALL FOR NOMINATIONS

FOR

THE 8TH ANNUAL ROSE EXCELLENCE IN RESEARCH AWARD

THE BEST RESEARCH ARTICLE OF 1995 IN ORTHOPAEDIC PHYSICAL THERAPY

The Research Committee of the Orthopaedic Section of the American Physical Therapy Association is soliciting nominations in order to recognize and reward a physical therapist who has made a significant contribution to the literature dealing with the science, theory, or practice of orthopaedic physical therapy.

I) ELIGIBILITY FOR THE AWARD

The recipient must:

1) be a physical therapist licensed or eligible for licensure in the United States of America;
2) be a member of the American Physical Therapy Association;
3) be the primary (first) author of the published manuscript.

The article must be published in a reputable, refereed scientific journal between September 1, 1994 and August 31, 1995 to be considered for the award. Should the journal containing an otherwise eligible article experience a delay in releasing its August, 1995 issue, the article must be available to the general public no later than September 1, 1995 to be considered.

II) SELECTION CRITERIA

The article must have a significant impact (immediate or potential) upon the practice of orthopaedic physical therapy. The article must be a report of research but may deal with basic sciences, applied science, or clinical research. Reports of single clinical case studies or reviews of the literature will not be considered.

III) THE AWARD

The award will consist of a plaque and $500.00 to be presented at the Combined Sections Meeting in Atlanta, GA, February 14-18, 1996.

IV) NOMINATIONS

Written nominations should include the complete title, names of authors, and the citation (title of journal, year, volume number, page numbers) of the research article. The name, address, and telephone number of the person nominating the research article should also be included.

Nominations (including self-nominations) will be accepted until close of business September 1, 1995 and should be mailed to:

Daniel L. Riddle, MS, PT
Research Committee Chair
Orthopaedic Section, APTA
c/o Department of Physical Therapy
Virginia Commonwealth University
McGuire Hall, 1112 East Clay Street, Room 209
Box 980224, MCV Station
Richmond, VA 23298-0224

ORTHOPAEDIC PHYSICAL THERAPY HOME STUDY COURSES

COURSE LENGTH: 90 DAYS FROM DATE OF REGISTRATION

1 HSC 92-1 TOPIC: LOWER EXTREMITY

- Gait Analysis: The Lower Extremities
- Functional Biomechanics of the Subtalar Joint
- Cardiopulmonary Considerations in Orthopaedic Care
- Anterior Knee Pain: Differential Diagnosis and Physical Therapy Management
- The Posterior Cruciate Ligament
- Plyometric Exercise Testing: Combining Strength with Speed

2 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

3 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

4 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 Exericse and Orthotic Devices

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.

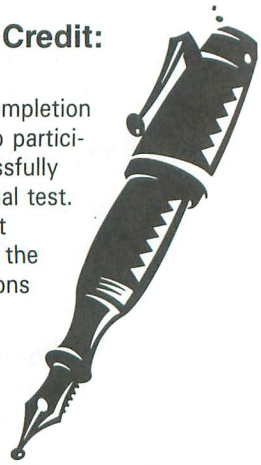
* Absolutely no refunds will be given after the start of the course!

Please make check payable to:
Orthopaedic Section, APTA

Mail check and registration to:
Orthopaedic Section, APTA
505 King Street, Suite 103
La Crosse, WI 54601
1-800-444-3982 or 608-784-0910
FAX 608-784-3350

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.



REGISTRATION FORM

ORTHOPAEDIC PHYSICAL THERAPY HOME STUDY COURSE

Please check:
- ☐ Orthopaedic Section Member
- ☐ APTA Member
- ☐ Non-APTA Member

JOIN THE SECTION AND TAKE ADVANTAGE OF THE DISCOUNTED REGISTRATION RATE IMMEDIATELY!
- ☐ *I wish to become an Orthopaedic Section Member ($50) and take advantage of the member rate.*

Name _____

Mailing Address _____

City _____

State _____ Zip _____

Daytime Telephone Number (_____) _____

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

Occupational Health Physical Therapists
Special Interest Group
Orthopaedic Section, APTA, Inc.

Newsletter

SUMMER 1995 VOLUME 2, NUMBER 3

APTA OFFICIALLY COMMENTS ON THE USE OF BACK AND WRIST SUPPORTS

In the Fall, 1994, the Ergonomics Protection Standard (EPS) rule-making team of the Occupational Safety and Health Administration (OSHA) contacted the American Physical Therapy Association concerning the development of an EPS for OSHA. EPS development has been on-going for the past six years. As part of this process, OSHA has examined the use of back belts and wrist supports as personal protective equipment (PPE). The purpose of the OSHA contact with APTA in the Fall, 1994, was to solicit an official APTA statement concerning the use of back belts and wrist supports as personal protective equipment.

The OSHA request to APTA was channeled to the Occupational Health Physical Therapy Special Interest Group (OHSIG). The newly formed Research Committee was charged by the Executive Board to draft a Position Paper concerning the use of back belts and wrist supports as personal protective equipment. The Position Paper was completed in January, 1995, and adopted by the OHSIG Executive Committee at the 1995 Combined Sections Meeting in Reno.

The document was forwarded to the Orthopaedic Section for approval, then to the national office of APTA. At the same time, the Chairperson of the OHSIG Research Committee, Scott D. Minor, PhD, PT was appointed by the APTA Board of Directors as the liaison to OSHA for a March, 1995 meeting. In an effort to provide a timely response on the back belt and wrist support issue, the APTA Board of Directors worked quickly to review and modify the OHSIG's Position Paper in consultation with Dennis Isernhagen, PT, President of the OHSIG and Scott Minor.

The following document was sent by the APTA Board of Directors to OSHA. Formal APTA Board of Directors review, modification, and adoption of the Position Paper as a formal APTA Board of Directors Policy is on the agenda for the June, 1995, APTA Board of Directors meeting. The APTA Position Paper forwarded to OSHA closely follows the Position Paper adopted by the OHSIG.

POSITION PAPER

Many physical therapists are directly involved in occupational health and ergonomics or treat patients with occupational injuries. The use and misuse of back and wrist supports and other similar orthotic devices is addressed by the APTA.

The term orthotics describes products

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SECRETARY'S CORNER

It has been my great pleasure to bring you this Occupational Health Physical Therapy Special Interest Group newsletter edition. Since assuming the position of secretary for OHSIG from Susan Ablen, PT, ARM in February, 1995, I have had the opportunity to meet many SIG members and participate in two Executive Board meetings. Through this participation, I now more fully appreciate the enormous contributions of time and talent that are made by all Board members and the great impact our SIG is having within the occupational health arena. Facilitating, compiling, and editing this newsletter has been both a growth experience and huge challenge for me. I, however, could not have completed this project without the input, guidance, and support of SIG members who submitted articles and informational materials. Thank you so much to these members and those who have volunteered to serve on the Publications Committee. As we expand the newsletter and share ideas, new features and columns will be added to better share information in our dynamic, constantly changing physical therapy specialty field. I appreciate the opportunity to serve the OHPTSIG in the capacity of secretary and newsletter editor. I hope that you find this and future editions interesting and informative.

Roberta Kayser, PT
Secretary

CONTENTS

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ranging from back and wrist supports available over the counter to devices prescribed and fabricated for an individual's need.

Over-the-counter orthotic devices are not customized for a specific individual or with consideration to specific task requirements. Research findings indicate such generic orthotics do not have a significant impact on the prevention of injury. Clinical experience and practical observation demonstrate that many over-the-counter orthotics are worn or used improperly. Moreover, the use of such devices has been shown to alter normal body movement patterns thus transferring forces to other motions or body parts creating additional risk. Employers are usually not aware of the potential risks when they require employees to obtain these readily available orthotics. Specifically-fabricated orthotics are prescribed and fit by physical therapists or other qualified health professionals. Research findings indicate that such devices, when prescribed in response to an existing medical condition, can improve the pathokinesiology and limit potential for further injury when worn and used correctly.

It is the position of the APTA that orthotic devices, including back and wrist supports, specifically prescribed and fitted or over-the-counter products, should not be used for protection against occupational injury unless they are used during the healing period under the supervision of a physical therapist or other qualified health professional. In addition, such a device must be a part of an overall treatment plan, and its use must not interfere with movement required for performance of work activities. Careful musculoskeletal examination and evaluation of the individual and ergonomic evaluation of the specific work station and work activities by physical therapists or other qualified health professionals provide the appropriate basis for determining the necessity of orthotic devices for injury prevention and management.

The APTA makes the following recommendations:

1. Prevention of work place injuries involves primarily a comprehensive ergonomics program including appropriate strategies.
2. Effectiveness of back and wrist supports as personal protective equipment has not been established in the literature and their use may pose additional risk. These devices should, therefore, not be recommended nor required for uninjured workers.
3. When back or wrist supports are used as orthotic devices for injured workers, their prescription and fitting should be performed by physical therapists or other qualified health professionals.
4. Further research concerning the use of such orthotic devices as personal protective devices is encouraged.

   Funding for such research by both industry and federal agency sources is encouraged. Such research should be at the level of appropriate scientific rigor.

A copy of the complete Position Paper adopted by the OHSIG and list of references may be requested from the Orthopaedic Section, APTA, 505 King Street, Suite 103, La Crosse, WI 54601.

NOMINATING COMMITTEE NOTES

Being in office is lots of fun and a great chance to get to know others passionately interested in Occupational Health Physical Therapy. The Nominating Committee is looking for qualified, interested people to run for the following offices:

Vice President
Secretary
Nominating Committee

Please contact any of the following:
Barbara Merrill (408) 253-5971
Helene Fearon (602) 997-7844
Mark Mashburn (800) 239-1900

RELIABILITY AND VALIDITY IN FUNCTIONAL CAPACITY EVALUATION

Inability to work due to physically disabling conditions has immense personal, social, and economic consequences. To minimize the individual and societal costs, effective methods of assessing physical work ability must be utilized. Both partial and total loss of capacity to work need to be measured in a reliable and valid way. The purpose of functional capacity evaluation (FCE) is to determine whether an individual has the physical ability to meet specific job demands. FCE is one of the most important evaluations that an injured worker will experience during the process of rehabilitation. The results of FCEs are used to make very important decisions that affect the future and livelihood of many individuals. In addition these evaluations are used to resolve litigation involving millions of dollars. Despite the significance of FCEs, little attention has been paid to the reliability and validity of these evaluations.

Measures of impairment (such as range of motion and muscle strength) are not good predictors of functional ability. Physicians' return to work decisions are often based solely upon medical diagnoses, clinical impressions, and measures of impairment and, as such, have fallen into disfavor. As a consequence, the demand for objective, functional testing has increased. As physical therapists who perform these FCEs we must now ask ourselves: are the FCEs we are performing more reliable and valid than the impairment measures and physician ratings that preceded them? We hope that they are. However, most of us utilize FCE procedures whose reliability and validity have yet to be documented.

What do the terms "reliability" and "validity" mean and how can we demonstrate these concepts through research, specifically as they relate to FCE? The term **reliability** refers to the consistency of a measure. There are two main types of reliability, intrarater or test-retest reliability and interrater reliability. If an FCE has **test-retest reliability**, the same therapist should be able to administer the test on two separate occasions to an individual whose condition is stable and get the same result. If an FCE has **interrater reliability**, two different therapists should be able to administer and score the test on the same patient and get the same result.

Validity is often a much more difficult concept to understand and to demonstrate through research. There are several

(Continued on page 33)

LEGAL BEAGLE

Provider Beware: "Any Willing Provider" (AWP) Laws Influence Your Contracts with Insurance Companies: To assure an adequate patient base, physical therapists and other health care providers are finding it necessary to join provider networks for contracting with health maintenance organizations (HMOs) or preferred provider organizations (PPOs). Since HMOs and PPOs are maintained and operated by insurance companies, service contracts are negotiated between providers and insurance companies. These contractual relationships introduce concerns such as claims that providers must make treatment decisions that do not meet patients' best interests and that providers are arbitrarily excluded from networks.

Over half of the states have responded to these claims by passing "Any Willing Provider" (AWP) laws. Providers should beware that these laws may not protect them. Concerns include: 1) there are different categories of AWP laws; 2) courts interpretations of AWP laws have placed limitations on these laws; 3) research indicates that AWP laws increase costs of health care.

AWP laws vary among the states in one of four general categories: freedom of choice, mandatory admittance, due process, or essential community provider. Freedom of choice requires insurers to reimburse non-network providers if those providers agree to accept the insurer's reimbursement. Mandatory admittance require insurers to admit any provider who will accept insurer's terms and conditions for the network. Due process require insurers to follow certain procedures in developing and maintaining a network and provide an appeal process when a provider is terminated from the network. Essential community provider requires inclusion of those providers who serve medically needy and the poor.

"A number of court actions have sought to enforce these state AWP laws. These actions have generally been unsuccessful." (Jiranek & Baker, 1994-95)

Opponents of AWP laws cite research that indicates litigation on these laws ultimately increase costs of health care between 34 and 127%. Other studies found losses in claim savings between 5.8% and 18.4%. Costs of other law suits not related to AWP laws (defamation, interference with professional practice, and misrepresentation) may refute these claims against AWP laws.

Economics, politics, new laws, and consumer demands will continually influence physical therapy practice. Recommended action steps:

- when AWP legislation is pending, get information beyond key words and general purpose, e.g. who is included, what are rights provided, who has those rights, and which terms are left to interpretation by the courts.
- when current AWP laws are interpreted by courts to narrow legislators' intended purpose of the law, mobilize legislative efforts to modify those laws.
- when your network is submitting a proposal, obtain legal consultation about current case law to identify potential exclusions from competitors.
- watch for Federal legislation that might pre-empt your current state laws.

Jiranek, A. L., & Baker, S. D. (Winter, 1994-1995). Any Willing Provider Laws: Regulating The Health Care Provider's Contractual Relationship With The Insurance Company. *The Health Lawyer, 7*, 1-5.

Membership in the Occupational Health SIG is open to any member of the Orthopaedic Section. To join, simply contact Tara Fredrickson at the Section office, 1-800-444-3982.

President:
Dennis Isernhagen, PT
ph: 218/722-1399
FAX: 218/722-1395

Vice President:
Karen Piegorsch, PT, OCS, MSIE
ph: 803/732-0086
FAX: 803/781-8107

Secretary:
Roberta Kayser, PT
ph: 502/451-0400
FAX: 502/451-0818

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Kathy Lewis, PT, JD
ph: 806/354-5595
FAX: 806/354-5591

Education Committee Chair:
Gwen Parrott, PT
ph: 502/493-0031
FAX: 502/493-8182

Practice & Reimbursement Committee Chair:
David Clifton, PT
ph: 610/604-0450, x: 333
FAX: 610/604-0461

Research Committee Chair:
Scott Minor, PT, PhD
ph: 314/286-1432
FAX: 314/286-1410

Nominating Committee Chair:
Barbara Merrill, PT
ph: 408/253-5971

INTERESTED IN SUBMITTING AN ARTICLE FOR THE OHPTSIG NEWSLETTER?

If you have time, talent, and/or desire to write articles related to the subjects of occupational health and physical therapy, abstract "news briefs," provide informational material to colleagues, or assist with editing submissions for this newsletter, the Occupational Health Physical Therapy Special Interest Group invites you to become involved in its Publications Committee. Contact Roberta Kayser, PT, OHPTSIG Secretary at ERGOPLEX by Physiotherapy Associates, 4425 Kiln Court Louisville, KY 40218 (502) 451-0400.

The OHPTSIG welcomes any comments and ideas for submissions in the newsletter. Inquiries can be directed to: Roberta Kayser, OHPTSIG Secretary, ERGOPLEX by Physiotherapy Associates, 4425 Kiln Court, Louisville, KY 40218

(Continued from page 31)
types of validity. **Content validity** refers to the extent to which a measure covers the universe of content under investigation. Content validation insures that a test does not contain items that are irrelevant. A comprehensive functional capacity evaluation is considered to have content validation if it covers all 20 physical demands of work as defined by the Department of Labor. A job-specific FCE is considered to have content validity if it covers the physical demands of a specific job. This can be determined by comparing the job demands to the tasks of an FCE.

Face validity is similar to content validity and is considered a type of content validity. Face validity refers to the extent to which a measure appears valid. An evaluation that lacks face validity may not be accepted by those administering it, those being tested by it, and those who are using the results. For example, if a comprehensive FCE is being administered to a patient whose job does not demand all the tasks of the FCE, the patient may not understand the need for evaluating tasks that are not required for the job. This seeming lack of face validity for the patient (who is being tested) may affect his/her cooperation. Therefore, patient education as to the rationale behind comprehensive testing is often important. Both face and content validity are subjective and are not adequate documentation of a test's validity. If one relies solely upon face and content validity to support FCE, there is little defense against challenges because these types of validity are based solely upon subjective opinion. To firmly establish the validity of an evaluation process, one of the other following types of validity must be determined.

Criterion-related validity refers to the comparison of a newly developed test or a test whose validity is unknown to one whose reliability and validity are already established. The test to be validated is considered to be the "target test" while the previously validated test is considered to be the "gold standard." Both tests must be administered to the same group of subjects and their results compared. If there is a high correlation between the target test and the gold standard, then the target test is considered to be reliable. There are two types of criterion-related validity, concurrent and predictive, based on the time frame in which they are tested. In **concurrent validity**, both the target test and the gold standard are administered at relatively the same time. In **predictive validity**, the gold standard is some future behavior or condition. The target test can be administered at one point in time and the gold standard test is administered at a later time. In FCE the individual's actual work activity might be compared to predictions made by the FCE, either concurrently or in the future. Individuals work at levels, however, above or below their maximal physical ability for a variety of reasons. Therefore, actual levels of work are not the perfect gold standard.

Without a gold standard for comparison, as is the case with FCE, we are left with establishing construct validity. **Construct validity** is much more difficult to understand and to demonstrate than criterion-related validity. In establishing construct validity of an FCE, one must correlate the test to be validated with a variety of other measures, some that are related to the FCE and some that are unrelated to the FCE. In construct validation, one attempts to predict the magnitude and direction of the correlation rather than expecting perfect correlation with the related measures. **Convergent validity** is a type of construct validity in which two tests measuring similar phenomenon have a positive correlation. In **discriminant validity**, the other type of construct validity, low correlations are expected from measures that are thought to be dissimilar. To establish convergent validity in FCE, we can compare the subject's actual work status with scores on the FCE. If actual work activities have at least a moderate positive correlation to FCE scores then we can consider the FCE to have evidence in support of convergent validity. If we compare results of an FCE to scores on a test of cognitive aptitudes, we are likely to see low correlations and therefore, have demonstrated evidence in support of discriminant validity. Construct validation is never fully achieved because of it's complex nature. Instead, each study provides evidence in support of or demonstrates a lack of evidence in support of construct validity.

In summary, there is still much research that needs to be done in the area of reliability and validity of FCE. Validity research is particularly lacking. Reporting research results in procedure manuals is not acceptable documentation of reliability and validity. Research results need to be published in peer-reviewed journals for close scrutiny and acceptance of the methodology and conclusions by the medical, scientific, and legal communities.

Submitted by Deborah E. Lechner, MS, PT, Assistant Professor with the Division of Physical Therapy at the University of Alabama at Birmingham. For bibliography/references, contact Ms. Lechner at 3929 Glenwood Ave, Birmingham, AL 35222, (205) 595-4536.

WORK GROUP FOR ERGONOMICS

The SIG is in the process of forming a Work Group to provide for rapid response to issues related to ergonomics that may emerge on national, regional, and local levels. The proposed activities for the Work Group include:

- Providing timely, up to date information to the membership regarding certification of practitioners of ergonomics.
- Assessing and responding to new standards that may be promulgated by the Federal OSHA relative to ergonomics and work-related musculoskeletal disorders.

MEMBERSHIP SURVEY

Over 30% of SIG members responded to the membership survey this spring. Responses were discussed by the SIG Executive Board during the strategic planning meeting in March. Survey highlights are listed below:

- many members volunteered to serve on committees, however, there is still a great need for people to run for offices.
- 25% of members are involved in research in the area of occupational health.
- the amount and usefulness of past educational programs were rated as good or better by the vast majority of those who attended.

RESEARCH COMMITTEE OF THE ORTHOPAEDIC SECTION
APTA, INC.

CALL FOR PARTICIPANTS

PLATFORM AND POSTER PRESENTATIONS
APTA COMBINED SECTIONS MEETING
ATLANTA, GEORGIA, FEBRUARY 14-18, 1996

Persons wishing to make platform or poster presentations dealing with topics related to orthopaedic physical therapy (basic science, applied sciences, and clinical sciences) are invited to submit abstracts for consideration.

LIMITATIONS:
Presenter must be a current member in good standing of the Orthopaedic Section of the APTA, Inc. or must be sponsored by a current member in good standing of the Orthopaedic Section.

Each prospective presenter may submit no more than two abstracts. These abstracts must contain original material and may not have been presented at any national meeting or published prior to the 1996 CSM. Authors presenting accepted abstracts at the meeting must register for the day they are presenting.

SUBMISSION REQUIREMENTS:
Deadline for Receipt of Abstract: Abstract must be received at the address below by September 1, 1995. Address abstract to:

Daniel L. Riddle, MS, PT
Research Committee Chair
Orthopaedic Section, APTA
c/o Department of Physical Therapy
Virginia Commonwealth University
McGuire Hall, 1112 East Clay Street, Rm. 209
Box 980224, MCV Station
Richmond, VA 23298-0224

Format for Abstracts: The abstract must be typed double-spaced on one side of a single 8 1/2" x 11" sheet of paper. The type must be 10 point or larger and produced on an electric typewriter, letter quality printer (impact or laser), or a high quality dot matrix printer with near-letter-quality type. The abstract must use standard abbreviations and should not contain subheadings, figures, tables of data, or information that would identify the authors or the institution. Margins for BODY of the text must be 1" on all sides.

The identifying information must be single-spaced in the 1" top margin and include: 1) the title in capitalized letters, 2) the full name(s) of the author(s) with the presenter's name underlined, 3) the place where the work was done, 4) the address of the presenter enclosed in parentheses, and 5) acknowledgement of any financial support for the work being presented.

In the lower left margin, type single-spaced: 1) the APTA membership number of the presenter (or name and membership number of APTA member/sponsor if the presenter is not an Orthopaedic Section member), and 2) the telephone number and area code of the presenter. In the lower right margin be sure to indicate the preferred mode of presentation (Platform or Poster) and the type of content (research, special interest, theory — see below).

Copies: Include one original and one copy of the complete abstract with all the identifying information as outlined above. Include five copies of the abstract with only the title and the body of the text (eliminate all identifying information except the title).

CONTENT:
RESEARCH reports must include in order: 1) purpose of study; 2) hypothesis, if appropriate; 3) number and type of subjects; 4) materials and methods; 5) type(s) of data analysis used; 6) numerical results of statistical test(s) where appropriate; 7) conclusion; and 8) clinical relevance.

SPECIAL INTEREST reports must present a unique program, idea, or device and must include: 1) purpose of the presentation, 2) description, 3) summary of experience or use, and 4) the importance to members of the Orthopaedic Section.

THEORY presentations must: 1) state the phenomenon that the theory proposes to explain or predict, 2) explicitly state the theoretical proposition or model, 3) give the evidence on which the theory is based, 4) suggest ways that the theory could be tested, and 5) describe the importance and utility of the theory to the Orthopaedic Section.

EVALUATION AND SELECTION:
All abstracts are reviewed by members of the research committee without knowledge of the identity of the authors. Abstracts are selected on the basis of compliance with the content requirements, logical arrangement, intelligibility, and the degree to which the information would be of benefit to the members of the Orthopaedic Section. All selections are final.

Orthopaedic Physical Therapy Practice
American Physical Therapy Association
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The Orthopaedic Section of APTA presents

1996 REVIEW FOR ADVANCED ORTHOPAEDIC COMPETENCIES

BOSTON, MASSACHUSETTS
Royal Sonesta Hotel
July 14-20, 1996

The purpose of the "Review for Advanced Orthopaedic Competencies" is to provide the Orthopaedic Section members and non-members with a process for review. (It is not intended to satisfy examination criteria for the Orthopaedic Physical Therapy Specialty Competency Examination, but to serve as a **review process only**.)

Watch for further information.