ORTHOPAEDIC PHYSICAL THERAPY PRACTICE

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ORTHOPAEDIC SECTION • AMERICAN PHYSICAL THERAPY ASSOCIATION •

APTA
American Physical Therapy Association

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ORTHOPAEDIC PHYSICAL THERAPY PRACTICE

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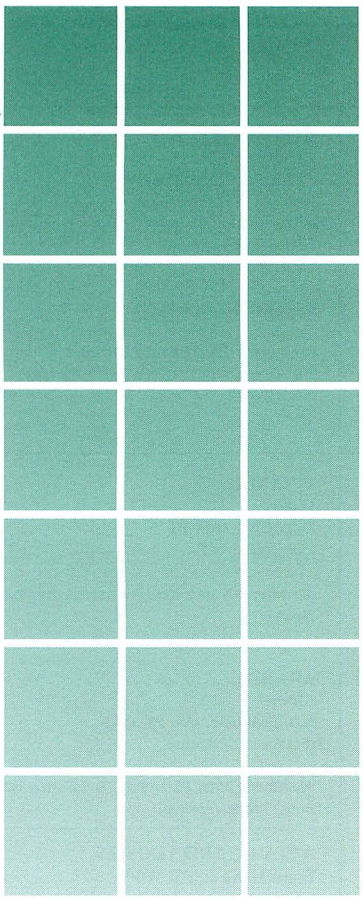

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- Advancement of education and clinical practice,
- Facilitation of quality research, and
- Professional development of members.

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Editor's Note

Reflection, Risk, and Legacy

On the way to the office one morning I was listening to the radio and got my daily dose of "Perceptions." "Perceptions" is a 60-second radio spot sponsored by a local church. In everyday language with real life examples, Dr. Bill Bouknight gives an inspirational message. On this particular day, he discussed the top three things people 95 years and older wished they had done differently in their lives. While the list may not surprise you, it does provide an interesting perspective. The top three things these elders wished they had done differently included: 1) reflected more, 2) risked more, and 3) left something behind that would live on after they were gone.

The first concept can be somewhat difficult in this day and age. Time is a precious commodity. We want to spend our time wisely, with our families, friends, coworkers, and clients. As technology has improved life in many ways, so too has it challenged us. Technology has made transmittal of information and communication with those far away almost instantaneous. While the ability to transmit information quickly is very helpful, it makes us more demanding of others time as well. We sometimes forget the human factors that slow us down.

Time for reflection is undervalued in today's society. This time is often considered a luxury and, I suspect, wouldn't make the "Top Ten" list for many a harried parent or career-minded soul. While many "day planners" suggest time for reflection be included in the daily "To Do" list, this if often a task left uncompleted. However, these elders tell us that reflection is important, and that they wish they had spent more time doing just that. Just as we plan our day and schedule time for our families, exercise, or even brushing our teeth, we must also plan time for reflection. This assures that we keep our life in check and that we are still headed in the intended direction.

Reflection is a valuable way by which to judge our progress, and important not only in our personal lives, but also in our professional lives. In today's health care environment, productivity is valued more than ever. The number of units produced by the clinician is critically examined by management and may impact both pay and promotion. We are pressured to see more clients in less time. Physical therapists try to achieve balance between efficiency and quality care. What is often lost is that necessary time for reflection. We must reflect on a chosen course of physical therapy intervention and assess progress toward the identified goals. We must look critically at where the client began, the impact of our intervention, and the progress made. Reflection on our choices and the resultant outcomes is a means by which we learn and improve our decision-making skills.

The second thing people 95 years and older wished they had done differently was taken more risks. My interpretation of this statement is that they wished they had been more willing to stick their neck out for what they believed in. Gaining knowledge and clarifying your personal goals and values allow you to make informed choices. Being willing to take risks requires courage and faith. For what are you willing to take risks? The result of taking a risk might include a positive change in the way clients have access to care, or might result in loss of the right to perform some aspect of physical therapy practice. In order to effect change, we must be willing to take these risks. Sometimes, the risks are not worth it or the timing of events is not right. Often, compromise is necessary for the best overall outcome. Once the outcome is known, as when we age and look back on life, it is much easier to wish you had done things differently or been more willing to risk.

The third area identified by these elders was the wish that they had left more behind for those that follow them. In Erikson's theory of development, this concept is called generativity. Generativity refers to building a deep concern for the next generation and nurturing that generation.[1] It is expressed by nurturing, teaching, mentoring, leading, and promoting the next generation. The legacy we leave behind is affected by not only our "big" decisions, but also by the day-to-day choices we make as well. In physical therapy, our professional legacy is impacted by not only the everyday decisions made in the clinic, but also by those made at the local and component level, at APTA, and in the House of Delegates. The development of a credentialing process for clinical residencies is one of those decisions that will

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improve our professional legacy. Clinical residencies provide a formal process for mentoring. In this issue, Joe Godges' article addresses common questions concerning clinical residencies and the credentialing process.

Our professional legacy is also affected by decisions we make and by decisions made by others, such as legislators and insurance companies. How we choose to live with those decisions is reflective of our comfort level with the decisions themselves. We can lobby, contribute money, collect data, and monitor clinical outcomes. We must provide evidence for our practice through research. We can change how we view access to health care. While the client should always receive high quality care, the volume of care may be limited by what that particular client has purchased through their insurance plan or by what they can afford to self-pay.

A relatively recent positive addition to our physical therapy legacy is the publication of the *Guide to Physical Therapist Practice*. This document begins to define our practice and has already been useful in defending it. It is useful in the clinic, the classroom, and in the legislative arena. If you haven't taken the opportunity to read or study the *Guide*, I hope you will be challenged to learn more about it after reading Lisa Giallonardo's article in this issue of *OP*.

Reflection, risk, and legacy are concepts that we all consider at some point in our lives, particularly as we age. Our everyday lives are so busy that the details of life can often obscure our vision. A clear vision is necessary to assure we follow our intended path. Daily reminders help us stay focused on our goals. Time for reflection, on a regular basis, helps to keep our lives in balance, helps us to determine when risks are worth it, and helps us to build a strong legacy.

1. Erikson EH. Major stages in psychosocial development. In: Erikson EH. *The Life Cycle Completed: A Review.* New York, NY: W.W. Norton; 1982; 55-72.

Susan A. Appling,
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President's Message

THE ROLLER COASTER RIDE: OPTIMISM AND ANXIETY

During the past 3.5 years, I have driven a number of times from Madison to LaCrosse, WI, and back for Orthopaedic Section business. The latest trip occurred over the September 24th weekend for the Section's annual Fall Board of Directors (BOD) Meeting. The drive takes me through miles of beautiful countryside and a string of wonderful towns. At times I feel as though I am on a roller coaster ride as my Jeep struggles to reach the peak of a steep hill and then again as the Jeep engine screams down the slope. While traveling home after this recent BOD meeting my mind was replaying the entire weekend. Like the Jeep, my thoughts soared, dived, looped, and screamed around the corners. When my thoughts hit the peaks, I was filled with optimism; and when they bottomed out, anxiety dominated the scene. Hop on board for the ride!

OPTIMISM

Spending 2 days with 11 focused, energetic, committed, and highly motivated physical therapists will fill anyone with optimism and confidence when discussing issues the Section and our profession are facing. Then you add the interaction we had over the weekend with our tremendous office staff and the new *JOSPT* editorial board and office staff and one could almost develop a sense of false security. A very talented team of individuals has been assembled to build upon the *JOSPT* foundation laid down by the previous editors: James Gould, George Davies, and Dr. Gary Smidt. This current team led by Dr. Rick DiFabio is committed to fast-forwarding the evolution of the Journal through the use of advanced technology and a manuscript-review process built on the premise of mentoring and nurturing. As we have the past 3 years, the Section will make a substantial contribution to the Foundation for Physical Therapy in 1999. A sum of $75,000 will be given to help provide our research community with resources necessary to advance the scientific and clinical foundation of our practice.

Physical therapy postprofessional education received a boost this past year with the development of an APTA clinical residency program credentialing body. Already, there has been a formal link developed between Orthopaedic Clinical Residencies and the American Board of Physical Therapy Specialties Orthopaedic Certified Specialization process. This link begins in the year 2000. In addition, this past July I attended an APTA-sponsored postprofessional education consensus meeting that focused on the clinical doctorate. I was encouraged by the fact that credentialed clinical residencies were frequently mentioned as the various educational models were discussed. A continuum of postprofessional educational experiences is vital to the future of our profession, and the APTA appears to be committed to developing such a continuum.

Lastly, my optimism in the area of practice is based on the activities taking place on our Practice and Public Relations (PR) Committees. As stated in the Section's Mission, one of our priorities is being an advocate for orthopaedic physical therapy practice. The Practice Committee has finalized the Manual Therapy Legislative Compendium which will be distributed to all Chapters — and the PR Committee, with the American Academy of Orthopaedic Manual Physical Therapists, is developing a legislative network with the hopes of establishing a direct link with each Chapter. This network will facilitate the exchange of information and resources. The Section will continue to advocate for our ability to practice fully in all states as described in the *Guide to Physical Therapist Practice*.

ANXIETY

So what is there to worry about? Plenty! Our Section demonstrated significant growth in the 1980s and early 1990s. Our membership growth has leveled off the past couple of years and may actually begin to decrease. Recently I received a fax from APTA stating that Association membership totals had reached approximately 73,000. This sounds like a lot of members, but this figure represents only 43% of all physical therapy practitioners. Our national organization does not come close to representing even one half of our colleagues! Can we truly say we represent physical therapy? Where are the necessary Association role models in our academic institutions and clinics? A decrease in Section membership means less revenue available to the Section that can be directed to initiatives designed to assist our membership and the profession. Surveys have revealed that individuals allowing their Section membership to lapse do so primarily secondary to the cost. Not just the cost of belonging to the Section though, but also due to the cost of having to join the National Association and Chapter which they must do before having the option of joining the Section. The potential of decreasing membership and revenue worries me.

The APTA has recently developed and published several significant documents, including the *Guide to Physical Therapist Practice* and the Model Practice Act. The key to our ability to practice does not lie within these documents, though. It lies within each State practice act. For the past several years, gaining direct access has been the most coveted legislative victory for our Chapters. Successful Chapters are heralded by the APTA, and rightly so. My anxiety here relates to direct access at what cost? Negotiations and compromise are a legislative fact of life, but it is my opinion that negotiating away any component of the *Guide to Physical Therapist Practice* is too steep a price to pay. Chapters must appreciate that their activity sets precedent that can impact other Chapters. Giving away elements of the *Guide* will turn this document into a useless and meaningless pile of papers. The Section is committed to being a resource for Chapters embroiled in legislative battles. We have been working with APTA and AAOMPT to develop and implement a strategy that meets each Chapter's needs, but when I objectively compare where we are now to 3 years ago when we began this initiative, I see little progress. Who is responsible for this struggle and spinning of the wheels? Considering the responsibilities of being President I must point my finger towards the mirror. My anxiety lies in knowing we cannot afford another 3 years of little progress.

THE HOMESTRETCH

Typically, the final 30 to 40 yards of a roller coaster ride is calm as the cars cruise to a gentle halt. These final few seconds allow one to check to see if all of the body parts are still attached before climbing out of the car. The final 10 to 15 miles of my trip afforded me the same

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luxury, allowing me time to review the plans generated at the BOD meeting — checking to see if all of the parts could be accounted for. Regarding the membership issue, 1999 marks the beginning of our Starter Dues Program which is modeled after the APTA initiative. This program is designed to help new graduates become active members at a time when finances are tight. The first year they pay one third of the normal dues, the second year, two thirds, and then finally the third year postgraduation, they pay full dues. To augment the membership dues, generating nonmembership dues revenue has been a priority for the Section. The revenues from our home study courses and other educational programming have allowed us to fund major projects such as our contributions to the Foundation for Physical Therapy. We will continue to offer high quality and affordable educational opportunities, and we have begun to market our home study courses internationally. Under the leadership of Dorothy Santi, Treasurer, the Section has positioned itself well financially and hopefully will have the necessary resources for years to come.

Regarding the practice issue, despite the lack of progress, efforts to forge a stronger, more effective relationship with APTA and Chapters continues. Members of the APTA BODs recently met with members of AAOMPT's Executive Committee to discuss a variety of issues. A meeting between members of the Section's Executive Committee and APTA's BOD will take place at Combined Sections Meeting in Seattle to discuss issues of mutual interest. Fran Welk, the APTA BOD liaison to the Section has been instrumental in organizing these meetings. For the first time the Section's Fall BOD meeting (1999) will be held in Alexandria, VA, allowing us to work directly with APTA staff as we finalize our budget for the year 2000. Lastly, over the next few months the Section BODs will be working on the development of RCs associated with practice issues that may be brought before the House of Delegates in June 1999.

I believe we have a sound strategic plan. With solid participation by membership, I believe progress can be made on all fronts. We cannot afford for this not to happen. Thanks for joining me on this exciting ride that awaits us!

William G. Boissonnault, MS, PT
President

Cleidocranial Dysplasia

Ron Scott, JD, PT, OCS

Cleidocranial dysplasia (CD), a rare autosomal dominant hereditary disorder, is characterized primarily by congenital absence (10% of cases[1]) or dysplasia of the clavicles, and by delayed ossification of the cranial fontanelles. Clavicular dysplasia often enables patients to actively approximate, or nearly approximate, their shoulders anteriorly. Cranial dysplasia causes an increase in the transverse cranial diameter,[2] often resulting in patient presentation with frontal bossing, hypertelorism,[3] and a wider-than-normal occiput. There is evidence of right clavicular selectivity in the clavicular component of the disease,[4] and, on radiographic study, the deformity is most often seen as an absence of the central part of the clavicle, with underdeveloped lateral and medial segments.[5]

Other bony abnormalities are also present with CD. In fact, the designation *cleidocranial dysplasia* recently replaced the original name for the condition, *cleidocranial dysostosis*,[6] in the literature. This change was in recognition of the fact that the disease is characterized by a generalized disturbance in bone growth, rather than just clavicular and cranial anomalies.[7]

Some of the other approximately 100 bony and soft tissue anomalies characteristic of CD include pectus excavatum, scoliosis (often secondary to hemivertebrae), syringomyelia, iliac crest hypoplasia, delayed ossification of the symphysis pubis, underdeveloped and functionally winged scapulae, temporomandibular and dental deformities, and clinodactyly of the fifth fingers.[8,9]

Because CD occurs so rarely, and often goes undetected, it has not been well-studied by health care professionals. In particular, the biomechanical considerations of CD, as well as suggested exercise programs for patients with the disease, have not been explored or reported. However, as with the clavicular and cranial manifestations of the disease, these anomalies seldom, if ever, result in disability or even significant functional limitations for individuals with CD. In fact, most of the time, patients are identified only fortuitously during physical evaluations for unrelated problems or complaints.[9]

Less than 1,000 cases have been described in the professional literature since the first discovery of a case of CD in 1760 by Meckle.[10] In 1898, Marie and Sainton[6] published the classic article that first named the condition "cleidocranial dysostosis." The Index Medicus reclassified the disease as cleidocranial dysplasia in 1985. Many articles published outside the United States, even this century, still refer to the disease as Scheuthauer-Pierre Marie-Sainton syndrome.[11]

Because CD occurs so rarely, and often goes undetected, it has not been well-studied by health care professionals.

The clavicle is a key component of the shoulder complex, responsible for multiple functional roles. The clavicle acts as support struture for the upper limb and increases available glenohumeral range of motion by causing the arm to be positioned away from the body axis.[12] The clavicle also facilitates the functional roles of the scapula,[13] by serving as a prop for the scapula and by transmitting the supporting force of the trapezius muscle to the scapula through the bifurcated coracoclavicular ligament, facilitating scapular upward rotation during active elevation of the arm. It is because of these functional roles of the clavicle, in part, that humans are capable of carrying out complex prehensile activities of daily living such as grasping and holding.[14] In addition to these roles in support of prehensile activities, the clavicle has the important function of shielding vital blood vessels and nerves, including the subclavian artery and the brachial plexus.[15]

The clavicle plays a crucial role in support of active glenohumeral abduction by ensuring normal scapulohumeral rhythm. Although there is some disagreement over the exact number of degrees of clavicular movement during shoulder abduction,[16-18] the directions and general range of clavicular movement is not in dispute. The clavicle elevates at both the sternoclavicular and acromioclavicular ends throughout the range of glenohumeral abduction. The range of scapular upward rotation, beginning after approximately 30° of humeral elevation (during which time the scapula is grossly immobile and "sets"), approximately equals the amount of movement at the clavicular joints.[19] In the last 90° of abduction, the clavicle rotates approximately 50° posteriorly on its long axis,[20] facilitating the end range of scapular upward rotation.[21]

Six muscles normally attach to the clavicle. The anterior deltoid, the upper fibers of the pectoralis major, and the lateral head of the sternocleidomastoid muscle originate on the cranial surface, and the lateral portion of the sternohyoid muscle originates on the caudal surface.[22] The upper fibers of the trapezius insert on the cranial surface, and the subclavius inserts along the midportion of the caudal surface. The principal supporting ligaments are the superior acromioclavicular and bifurcated (conoid and trapezoid) coracoclavicular ligaments at the acromial end, and the sternoclavicular, costoclavicular, and interclavicular ligaments at the sternal end.[21] Together, the supporting muscles and ligaments provide stability at the sternal end and mobility at the acromial end.

The clavicle is unique in that it is the first bone to begin to ossify and one of the last to complete ossification.[22] Like the bones of the skull, it is a membrane bone, formed directly from mesenchyme.[22] Its first two ossification centers originate in the first few weeks of fetal life. A third, near the sternal end, forms between ages 18 and 20, and unites with the body by age 25.[23]

Considering the key functional role of the clavicle in dynamic shoulder complex stability and mobility, how is it that persons with CD seem to suffer only negligible or no impairment? Is the dense irregular fibrous connective tissue band that replaces the missing clavicle[24] a suitable substitute point of attachment for diverted clavicular musculature that ordinarily would attach to the bony clavicle, so as to permit normal or near-normal functioning? Apparently this is the case, aided by the contribution of

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hypertrophied surrounding musculature, which supports the pseudoclavicle in its functional stabilization role.

With the exception of the subclavius muscle, which has been found to be hypertrophied in subjects with CD on whom post-mortem dissection has ensued,[23] clavicular musculature and the serratus anterior muscle are relatively weak. Purposes of an exercise program developed for a patient with CD are: to strengthen specific shoulder complex musculature found to be weak or that contributes to identified postural faults; to selectively strengthen peri-shoulder musculature that may contribute to shoulder instability; and, to instill a greater sense of self-confidence in the patient.

Several authors have proposed specific exercise regimes for the conservative management of shoulder complex instability and related pathologies. Jobe and Pink[25] identified four areas of concern when developing a shoulder complex exercise program: glenohumeral protectors (rotator cuff muscles); scapular pivotors (serratus anterior-trapezius muscle force couple); humeral positioners (anterior, middle, and posterior deltoid muscle); and propulsion musculature (pectoralis major and latissimus dorsi muscles). Kamkar, Irrgang, and Whitney[26] recommended specific exercises to strengthen scapulothoracic musculature as part of a comprehensive shoulder complex rehabilitation program. Burkhead and Rockwood[27] described a series of five exercises designed to strengthen the rotator cuff and deltoid muscles of patients with shoulder instability ("frequently referred to as the Rockwood-5 set of exercises) and two additional advanced exercises (shoulder shrug standing with weight in hands and progressive push-ups) to strengthen scapular stabilizer muscles. Moseley, Jobe, Pink, Perry, and Tibone[28] delineated four core scapular muscle strengthening exercises (progressive resistive scapular plane elevation and shoulder shrugs, rowing, and the prone push-up *with a plus* [end-range focused scapular adduction]).

Additional focused clinical research into the biomechanical effects of CD on patient function is required. Rehabilitation professionals have a crucial role to play not only in leading such research, but also in identifying the relatively few patients affected by CD.

Further study might include, among other tests and measurements, cinefluorographic analysis of scapulohumeral rhythm, magnetic resonance imaging study of altered soft tissue configurations, and electromyographic analysis of specific shoulder complex musculature. Such an endeavor would entail interdisciplinary collaboration among multiple health care professionals. The results of such clinical research will be of immense value not only for patients with CD and their clinical health care providers and significant others, but also in the management of other, more disabling upper quarter pathologies.

ACKNOWLEDGEMENT:
Ron thanks Rick Bauersfeld, PT for his collaboration in the development of this article and his patient with CD who was the inspiration for this article.

> Considering the key functional role of the clavicle in dynamic shoulder complex stability and mobility, how is it that persons with CD seem to suffer only negligible or no impairment?

References

1. Forland M. Cleidocranial dysostosis: Review of the syndrome and report of a sporadic case, with hereditary transmission. *Am J Med.* 1962;33:792-799.
2. Jensen BL, Kreiborg S. Development of the skull in infants with cleidocranial dysplasia. *J Craniofac Genet Biol.* 1993;13:89-97.
3. Morrissy RT, ed. *Lovell and Winter's Pediatric Orthopaedics.* 3rd ed. Philadelphia, PA: J.B. Lippincott Company; 1990.
4. Jarvis JL, Keats TE. Cleidocranial dysostosis:A review of 40 new cases. *Am J Radiol.* 1974;121(1):5-16.
5. Eventov I, Reider-Grosswasser I, Weiss S, et al. Cleidocranial dysplasia, a family study. *Clin Rad.* 1979;30:323-328.
6. Marie P, Sainton P. Sur la dysostose cleido-cranienne herediataire. *Rev. Neurol.* 1898;6:835-837. (Transl. by Bick EM: On hereditary cleido-cranial dysostosis. *Clin Ortho and Relat Resear.* 1968;58:5-7.)
7. Brueton LA, Reeve A, Ellis R, et al. Apparent cleidocranial dysplasia associated with abnormalities of 8q22 in three individuals. *Am J Med Genet.* 1992;43:612-617.
8. Miller R, Sakamoto E, Zell A, et al. Cleidocranial dysostosis: A multidisciplinary approach to treatment. *J Am Dent Assoc.* 1978;96:296-300.
9. Koch PE, Hammer WB. Cleidocranial dysostosis: Review of the literature and report of case. *J Oral Surg.* 1978;36:39-42.
10. Kerr HD. Cleidocranial dysplasia. *J Rheumatol.* 1988;15(2):359-361.
11. Scott RW. Cleidocranial dysplasia: Enigma among anomalies. *J Orthop Sports Phys Ther.* 1988;10(5):184-188.
12. Hart DL, Carmichael SW. Biomechanics of the shoulder. *J Orthop Sports Phys Ther.* 1985;6:229-234.
13. Paine RM, Voight M. The role of the scapula. *J Orthop Sports Phys Ther.* 1993;18:386-391.
14. Kent BE. Functional anatomy of the shoulder complex: A review. *Phys Ther.* 1971;51:867-887.
15. Abbott L, Lucas D. The function of the clavicle: its surgical significance. *Ann Surg.* 1954;140:583-597.
16. Donatelli R, Wooden MJ, eds. *Orthopaedic Physical Therapy.* 2nd ed. New York, NY: Churchill Livingstone, Inc.; 1994.
17. Magee DJ. *Orthopedic Physical Assessment.* 2nd ed. Philadelphia, PA:WB Saunders Company; 1992.
18. Tomberlin JP, Saunders HD. *Evaluation, Treatment, and Prevention of Musculoskeletal Disorders: Extremities.* 3rd ed., vol. 2. Chaska, MN: Saunders Group; 1994.
19. Last RJ, ed. *Anatomy: Regional and Applied.* 6th ed. New York, NY: Churchill Livingstone, Inc.; 1977.
20. Halbach J, Tank, R. The shoulder. In: Gould J, Davies GJ, eds. *Orthopedic and Sports Physical Therapy.* vol. 2. St. Louis, MO: C.V. Mosby, Inc.; 1985.
21. Goss C, ed. *Gray's Anatomy.* ed. 27. Philadelphia, PA: Lea & Febiger; 1982.
22. Hollinshead WH. *Textbook of Anatomy.* 3rd ed. Hagerstown, MD: Harper & Row; 1974.
23. Terry R. Rudimentary clavicles and other abnormalities of the skeleton. *J Anat Physiol.* 1898;33:413-422.
24. Lonstein JE. Scoliosis update: Managing school screening referrals. *J Musculoskel Med.* 1989;6(7): 37-54.
25. Jobe FW, Pink M. Classification and treatment of shoulder dysfunction in the overhead athlete. *J Orthop Sports Phys Ther.* 1993;18(2): 427-432.
26. Kamkar A, Irrgang JJ, Whitney SL.

Nonoperative management of secondary shoulder impingement syndrome. *J Orthop Sports Phys Ther.* 1993;17(5): 212-224.
27. Burkhead WZ, Rockwood CA. Treatment of instability of the shoulder with an exercise program. *J Bone Joint Surg.* 1992;74A:890-896.
28. Moseley JB, Jobe FW, Pink M, et al. EMG analysis of the scapular muscles during a shoulder rehabilitation program. *Am J Sports Med.* 1992;20(2):128-134.

Suggested Readings

Beaulieu JA. Developing a stretching program. *Physician Sports Med.* 1981;9(11):59-69.
Carmen DL, Browne RH, Birch JG. Measurement of scoliosis and kyphosis radiographs: Intraobserver and interobserver variation. *J Bone Joint Surg.* 1990;72A:328-333.
Kelley MJ, Clark WA. *Orthopedic Therapy of the Shoulder*. Philadelphia, PA: J.B. Lippincott Company; 1995.
Kisner C, Colby LA. *Therapeutic Exercise: Foundations and Techniques.* 2nd ed. Philadelphia, PA: F.A. Davis Company; 1990.
Norkin CC, White DJ. *Measurement of Joint Motion.* 2nd ed. Philadelphia, PA: F.A. Davis Company; 1995.

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The Guide to Physical Therapist Practice: An Overview for the Orthopedic Physical Therapist

Lisa Giallonardo, PT, MS, OCS

Introduction

The *Guide to Physical Therapist Practice* (that "big" issue of the journal November 1997) is a document that describes the practice of physical therapy. It was developed by consensus of a thousand or more expert clinicians from a variety of practice settings and from all over the country.

The *Guide* was developed in response to a charge from the House of Delegates in 1992. At the time, the Association had no detailed outline of what the practice of physical therapy entailed. Part 1 of the *Guide* was written specifically for this purpose. The intended audiences include clinicians, educators, administrators, other health professionals, policy makers, and third-party payers. In fact, when CAPTE (Commission for Accreditation of Physical Therapist Education) revised the Guidelines for Accreditation, the language of the *Guide*, Part 1 was adopted.

There are several misconceptions about the *Guide*. It is *not* a cookbook. There are no recommended prices in the *Guide*. Nor is there any direct connection to CPT codes. The *Guide* does not specify the site of care; rather, it uses the *episode of care* concept that crosses all settings related to each episode. It also does not address the state to state variances in the scope of practice.

The Disablement Model

Experienced clinicians have asked me how the *Guide* will change their practice. My response is two-fold, the standardized language and the use of the disablement model.

Nagi developed the disablement model in 1965. It is distinctly different from the medical model where the emphasizes is on treating the specific diagnosis with pharmacology or surgery. The disablement model emphasizes the functional and health status of individuals with intervention based on improving these aspects of the patient's condition. The model has four elements to it:

pathology/pathophysiology → impairment → functional limitation → disability

Pathology/pathophysiology is the interruption of the normal cellular processes from a biomechanical, physiologic, or anatomic perspective.[1,2] The body will often go on the defensive to restore the normal state. Examples of this include hemathrosis, tumor, fracture, connective tissue damage (tear/stretch), diabetes, and rheumatoid arthritis. Intervention at this level is generally handled by physicians and is often pharmacological and/or surgical in nature.

> The purpose of the *Guide to Physical Therapist Practice* is to improve the quality of physical therapy, promote appropriate utilization of services, enhance customer satisfaction, and reduce unwarranted variations in physical therapy management.

Impairment is any loss or abnormality of physiological, psychological, or anatomical structure or function.[1,2] Physical therapists typically measure and try to correct impairments. Examples of physiological impairments would be muscle weakness, range of motion loss, pain, and abnormal joint play. Anatomic impairments would include genu recurvatum, scoliosis, femoral anteversion, and pes planus.

Functional limitation is a deviation from the normal behavior in performing tasks and activities that would be traditional or expected for the individual.[1,2] These tasks or activities should be done in an efficient or proficient fashion. Problems with transfers, standing, walking, running, and doing stairs are all examples of functional limitations.

Disability is the incapacity in performing a broad range of tasks and activities that are usually expected in specific social roles.[1,2] Inability to function as a spouse, student, parent, or worker (in the home or outside of the home) constitutes a disability.

The disablement process represents a continuum and is affected by factors such as age and sex; educational level and income; and risk factors such as weight, family history, and habits. The relationship between the four aspects will vary between individuals. We've all treated patients who suffered from significant impairments but were still extremely functional. We've also treated patients who were disabled by what seemed to be minor limitations. There are few studies in the literature to show a direct cause and effect relationship among impairments and functional limitations/disabilities.

Physical therapists traditionally examine and intervene at the impairment and functional limitation levels. The patient who has weakness in the quadriceps and an inability to climb stairs will be managed with a strengthening program and activities that include stair climbing. This organization is the basis for the Preferred Practice Patterns in Part 2 of the *Guide*.

Overview of the *Guide*: Part 1

The purpose of the *Guide to Physical Therapist Practice* is to improve the quality of physical therapy, promote appropriate utilization of services, enhance customer satisfaction, and reduce unwarranted variations in physical therapy management. Prevention and wellness initiatives are also stressed and will help decrease the need for services.

Chapter 1 is a discussion of who physical therapists are and what they do. There is a description of the various practice settings, including some less traditional ones like corporate or industrial health centers and fitness centers. The terms patient and client are defined as:

- Patient – individuals who receive direct physical therapy intervention
- Client – individuals/businesses/school systems who aren't necessarily ill but benefit from physical therapy consultation or prevention

The chapter continues with a discus-

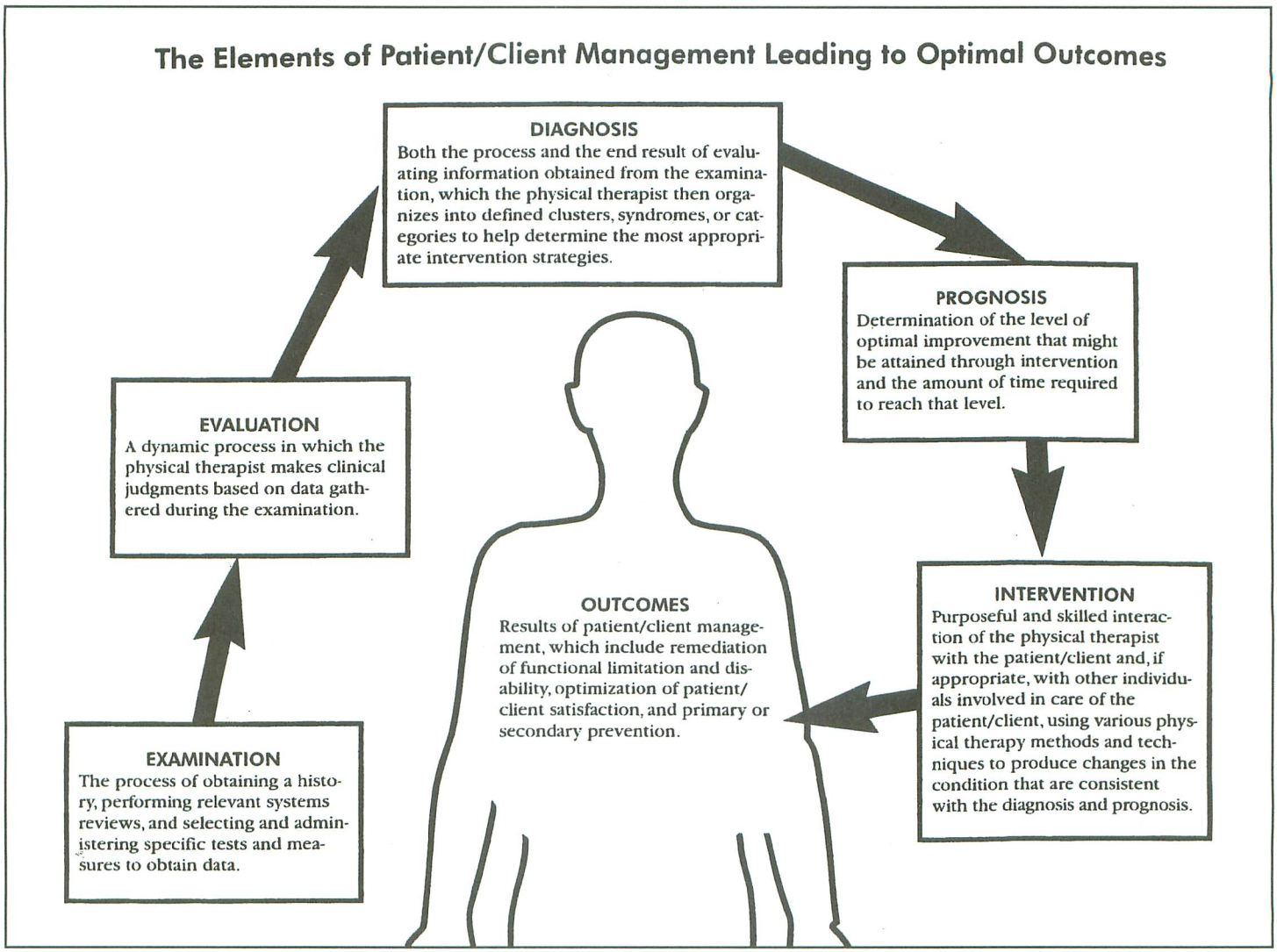

Figure 1. Reprinted with permission of The American Physical Therapy Association.

sion of the scope of practice for physical therapists. Not only are physical therapists considered clinicians in the sense of providing direct services to patients but they also interact with other professionals, provide prevention and wellness services, consult, engage in critical inquiry, educate, administrate, and supervise support personnel. Included is a model definition of physical therapy for state practice acts.

Generally physical therapy is considered an integral part of secondary and tertiary rehabilitative care. However, Chapter 1 expands on this model with a discussion of the physical therapist's role in primary care and in wellness. This involves "restoring health; alleviating pain; and preventing the onset of impairments, functional limitations, disabilities, or changes in physical function and health status resulting from injury, disease, or other causes."[1]

The clinical decision-making process is explained in the five elements of the patient/client management model: examination, evaluation, diagnosis, prognosis, and intervention (Figure 1). The physical therapist begins with a thorough *examination*. There are three components to this:

- **History** - a comprehensive investigation of the current and past health from a variety of sources, including the medical record, the patient, and the patient's caregiver. A complete list of data is included in the chapter (Figure 2).
- **Systems Review** - a limited examination of the cardiopulmonary, neuromuscular, musculoskeletal, and integumentary systems as a means of screening for other potential health problems. An example of this would be to take a baseline blood pressure and heart rate. Communication ability is also assessed here.
- **Tests and Measures** - after gathering and analyzing the above information, specific tests and measures are performed to rule in/out a diagnosis. There is an operational definition for each one followed by a three-part description: general purpose, clinical indications, and specific tests and measures.

There are 23 tests and measures listed alphabetically in the *Guide*. Some relevant examples include:

Anthropometric Characteristics
clinical indications
patient with acute sprained ankle (edema or effusion)
tests and measures
assessment of edema: palpation/volume/girth measurements
data generated
girth of lower extremity in inches or centimeters

Assistive and Adaptive Devices
clinical indications
patient with total knee replacement (impaired gait, locomotion, and balance)
tests and measures

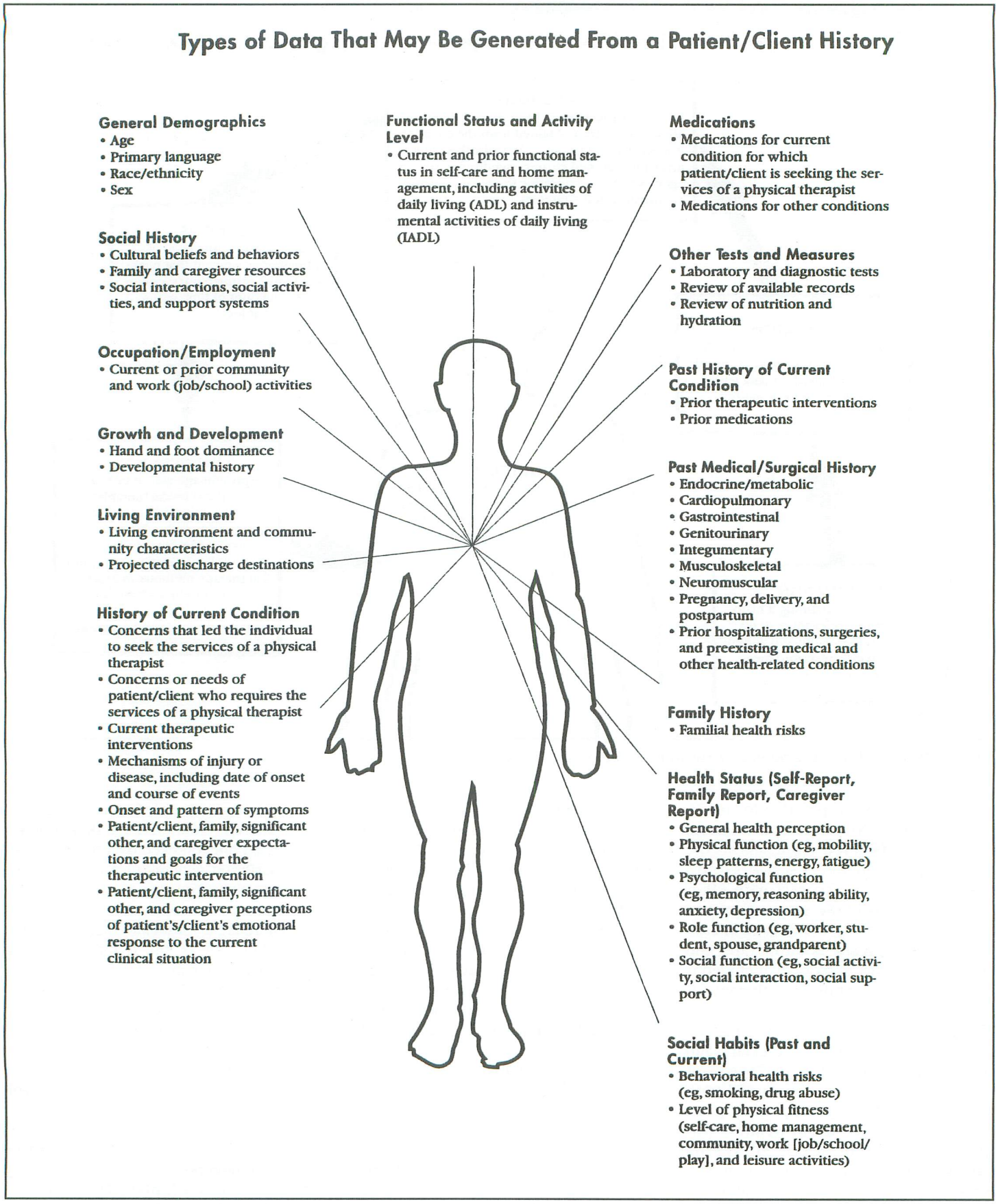

Figure 2. Reprinted with permission of The American Physical Therapy Association.

assessment of safety during use of a cane

data generated

deviations and malfunctions that can be corrected or alleviated using the cane

Environmental, Home, and Work Barriers

clinical indications

patient with osteoporosis (impaired muscle performance)

tests and measures

assessment of current and potential barriers

data generated

adaptations, additions, or modifications that would enhance safety

Ergonomics and Body Mechanics

clinical indications

patient with low back injury (pain)

tests and measures

analysis of preferred postures during performance of tasks and activities

data generated

body alignment during specific job tasks and activities

Joint Integrity and Mobility

clinical indications

patient with glenohumeral adhesive capsulitis (impaired ROM)

tests and measures

assessment of joint hypermobility and hypomobility

data generated

joint mobility classification and scale

Muscle Performance

clinical indications

patient with urinary incontinence (impaired bladder function)

tests and measures

assessment of pelvic floor musculature

data generated

strength of pelvic floor musculature

Posture

clinical indications

patient with scoliosis (abnormal body alignment)

tests and measures

analysis of resting posture in any position

data generated

alignment and symmetry of body landmarks within segmental planes, while at rest

Prosthetic Requirements

clinical indications

patient with below the knee amputation (impaired sensory integrity)

tests and measures

assessment of alignment and fit of the device and inspection of related changes in skin condition

data generated

skin integrity and edema in the residual limb

The next three steps in the process involve decision making. Using the information gathered through the examination, the physical therapist does an *evaluation*. This is the clinical judgement that results from sizing up the situation in its entirety. From there, factors such as loss of function, social considerations, and health status are taken into consideration when developing a *diagnosis* (cluster of signs and symptoms) and *prognosis* (optimal level of improvement and time to get there) which guide management of the patient.

> Intervention is constantly being evaluated for effectiveness with an eye for functional outcomes as well as for remediating impairments.

Intervention involves the skilled interaction of the professional in performing the techniques and/or delegating and overseeing the services. The goal is to produce a positive change in the condition. Intervention is constantly being evaluated for effectiveness with an eye for functional outcomes as well as for remediating impairments. Continued care is based on the patient's response and progress towards the determined goals.

There are three components to the intervention: coordination, communication, and documentation; patient/client-related instruction; and direct interventions. Each patient will have some aspect of the first two components and one or more direct interventions (there are nine in all). Examination findings, the evaluation, diagnosis, and prognosis should support the interventions chosen. Factors that might influence the choice of interventions include:

- chronicity or severity of current condition
- level of current impairment
- functional limitation or disability
- living environment
- multi-site or multi-system involvement
- physical function and health status
- potential discharge destinations
- pre-existing conditions or diseases
- social supports
- stability of condition

The following are some relevant examples of interventions:

Coordination, Communication, and Documentation

clinical indications

patient with total knee replacement (discharge destination)

anticipated goals

care is coordinated with patient, family, caregivers, and other health professionals

specific interventions

discharge planning

Patient/Client Related Instruction

clinical indications

patient with scoliosis (patient education)

anticipated goals

intensity of care is decreased

specific interventions

written and pictorial instruction

Therapeutic Exercise

clinical indications

patient with below the knee amputation (restricted in performing necessary tasks/activities)

anticipated goals

gait, locomotion, and balance are improved

specific interventions

gait and balance training with prosthetic device

Functional Training in Self Care and Home Management

clinical indications

patient with osteoporosis (restricted in performing self care and home activities)

anticipated goals

performance and independence of ADL/IADL (Instrumental ADL) increased

specific interventions

self care and home management task adaptation

Functional Training in Community and Work

clinical indications

patient with low back injury (have a known work-related injury and disability)

anticipated goals

tolerance to positions and activities is increased

specific interventions

ergonomic stressor reduction training

Manual Therapy Techniques

clinical indications

patient with glenohumeral adhesive capsulitis (limited ROM)

anticipated goals

joint integrity and mobility are improved

specific interventions
joint mobilization and manipulation

Electrotherapeutic Modalities
clinical indications
patient with urinary incontinence (impaired muscle performance)
anticipated goals
ability to perform physical tasks is increased
specific interventions
electrical muscle stimulation and biofeedback

Physical Agents and Mechanical Modalities
clinical indications
patient with acute sprained ankle (edema or effusion)
anticipated goals
edema or effusion is decreased
specific interventions
cryotherapy, pulsed ultrasound

Overview of the *Guide*: Part 2

Part 2 of the *Guide* is the Preferred Practice Patterns. These four sections (Musculoskeletal, Neuromuscular, Cardiopulmonary, and Integumentary) were developed by 24 expert clinicians on four panels. A project advisory group and the Board oversight committee acted as first line reviewers, followed by the dispersion of completed patterns to a group of select reviewers and then finally to a broad-based review group. The review process worked in layers, so that changes were made by the panel and then sent out to reviewers again.

The patterns are structured with diagnostic labels based on impairments. The design of each pattern is as follows:

- a description of the patient/client diagnostic group (with includes/excludes list)
- a listing of the likely ICD-9-CM codes
- a description of the history and systems review section of the examination
- a list of likely tests and measures (based on clinical indications)
- a prognosis with a range of visits expected for an episode of care
- anticipated goals for intervention
- a list of likely interventions
- outcomes of care
- criteria for discharge
- primary prevention/risk factor reduction strategies

The patterns are followed by a glossary of terms, Standards of Practice, Code of Ethics, Guide for Professional Conduct, Standards of Ethical Conduct and Guide for Conduct of the Affiliate Member, and Guidelines for PT Documentation. At the end, there are two handy indices, one numerical index to the patterns and ICD-9 codes and the other an alphabetical index to the patterns and ICD-9 codes.

There are four chapters to Part 2, each one distinguished by a specific graphic that relates to the content area. Chapter 4 is the Musculoskeletal Patterns, Chapter 5 is the Neuromuscular Patterns, Chapter 6 is the Cardiopulmonary Patterns, and Chapter 7 is the Integumentary Patterns.

> Primary prevention is a significant component to each pattern, because the progression to pathology, impairment, functional limitation, and disability is not inevitable.

The Musculoskeletal Practice Patterns

The Musculoskeletal Panel consisted of nine people with a wide range of experiences and covering all areas of orthopaedic practice. The group included:

- Lori Thein Brody (sports, Wisconsin)
- John Gose (acute and pediatric orthopedics, Delaware)
- Terry Holley (geriatric orthopedics, Oregon)
- Lindsay McNulty (geriatric orthopedics, Connecticut)
- Erin Patterson (military, Navy)
- Julie Pauls (women's health, Texas)
- Allen Wicken (ergonomics and APTA staff)
- Joan Bohmert (pediatrics and Project Advisory Panel)
- Lisa Giallonardo as Chairman (education and general orthopedics)

The group, though lively and diverse, all shared a similar philosophy towards physical therapy practice. We all were committed to using the patient/client management model as a framework for practice. In describing musculoskeletal practice, we looked for common disorders treated in a variety of settings. From this list, a commonality of intervention was identified. Finally, the patterns, when grouped, would be managed similarly and have comparable outcomes.

The Musculoskeletal Patterns are either impairment-based or pathology-based. Primary prevention is a significant component to each pattern, because the progression to pathology, impairment, functional limitation, and disability is not inevitable. There is also a primary prevention pattern. The following is a description of each pattern, the purpose of which is to get a sense of what patients would fall within this category.

A. Primary Prevention of *Skeletal Demineralization*
   - includes clients with prolonged non-weight-bearing state, hormonal changes, steroid use, nutritional deficiency, or those in a known *high risk category* (eg, based on sex, ethnicity, age, lifestyle)
   - excludes patients with acute fractures, neoplasms, osteogenesis imperfecta, Paget's disease
   - use to design a screening tool and group exercise program or individualized plan

B. Impaired *Posture*
   - includes patients with *primary spinal* or *appendicular postural dysfunction* due to habit, work, pregnancy, or idiopathic
   - excludes patients with neuromuscular disorders or disease or radicular signs
   - patients with recent spinal stabilization surgery are excluded

C. Impaired *Muscle Performance*
   - includes patients with *disuse atrophy* from systemic disease or prolonged immobilization
   - also includes patients with pelvic floor muscle dysfunction
   - excludes patients with amputation, fracture, postmusculoskeletal surgery, specific joint impairments, and neuromuscular disease

D. Impairments due to *Capsular Restriction*
   - follows *prolonged immobilization* from external support/protective device or from protective muscle guarding
   - patients will have *decreased ROM* and may also have *pain*
   - excludes patients with wounds/burns, joint sepsis/hemarthrosis, lack of voluntary movement

E. Impairments due to *Ligamentous* or other *Connective Tissue Disorders*
   - includes patients with *musculotendinous strain* and *ligamentous sprain*
   - patients may have joint *hypermobility, muscle guarding/weakness,* and/or *swelling*
   - excludes patients with fractures, neurological dysfunction, open wounds, or radiculopathy

F. Impairments due to *Localized Inflammation*
- includes patients with *bursitis, tendinitis, synovitis, fasciitis, osteoarthritis, epicondylitis*
- patients may have *edema, muscle weakness, neurovascular/sensory changes, pain*
- excludes patients with fractures, systemic diseases, open wounds, sepsis, associated surgery, deep vein thrombosis, dislocations

G. Impairments due to *Spinal Disorders*
- includes patients with *disc herniation/disease, nerve root compression, stenosis, stable spondylolisthesis*
- patients may have *altered sensation, weakness, positive neural tension, DTR changes, surgery*
- excludes patients with failed surgery, fractures, neuromuscular/systemic disease, SCI, tumor

H. Impairments due to *Fracture*
- includes patients with *trauma, hormonal changes, steroid use, nutritional deficiency*, or those in known *high risk category* (eg, based on sex, ethnicity, age, lifestyle)
- excludes patients with bone neoplasms, osteogenesis imperfecta, and Paget's disease

I. Impairments due to *Joint Arthroplasty*
- patients who have *partial or total joint resurfacing* of small or large joints
- includes patients with *bone neoplasms, OA, RA/JRA, steroid induced necrosis, trauma, ankylosing spondylitis*
- excludes patients with failed surgical procedures and unrelated post-op complications

J. Impairments due to *Bony or Soft Tissue Surgical Procedures*
- includes patients with *arthroplasty, ligamentous/muscle/tendon repair, ORIF, bony debridement/graft, external fixators, soft tissue/fascial/synovial procedures*
- excludes patients with failed surgery, amputation, nonunion, OB/GYN surgery, vascular/neurologic sequelae, total joint replacements, neoplasms

K. Impairments due to *Lower Extremity Amputation*
- includes patients with *uni/bilateral amputation, congenital amputation, residual limb revision*
- patients may have *wound needs, prosthetic needs, gait deviations,* and other *mobility problems*
- excludes patients with ipsilateral hemiparesis

There are areas of musculoskeletal practice not covered by the patterns. For instance, there is no pattern dealing with the management of patients with impairments due to an upper extremity amputation. The *Guide to Physical Therapist Practice* is a fluid document and will be edited on a regular basis.

> "Guidecizing" forms is the quickest way to get staff use to using the terminology.

The Next Step: Using the *Guide* in Practice

Now that you understand the patterns, what do you do with them? There are several ways that the practice patterns can be useful in both the clinical setting as well as the education setting.

The first way to incorporate the *Guide* as a whole is to rewrite the initial evaluation form to reflect *Guide* language. "Guidecizing" forms is the quickest way to get staff use to using the terminology. From there, the *Guide* can be used for peer review. Group patients according to patterns and then see how closely the examinations and interventions match the ones outlined in the pattern. This is also a great way to validate the organization of the patterns. Do the patterns make sense based on what you're seeing in the clinic? Compiling data and keeping the APTA informed will go a long way in making the *Guide to Physical Therapist Practice* a true description of our practice.

Another use of the *Guide* and the Practice Patterns is development of a form to measure outcomes. This is a great way to assess the efficacy of a variety of interventions. The form can also be used to evaluate the relationships between impairments, functional limitations and disabilities.

Students in the clinic present another opportunity to use the practice patterns. Have the students develop a case study presentation using the patterns. Students can also use the patterns to work through complicated or unfamiliar patient management.

The practice patterns are wonderful tools for teaching in an academic setting. Besides using Part 1 of the *Guide* to describe documentation, Part 2 can be used as a framework for discussion of patient problems. For instance, patients with rotator cuff tendinitis, bicipital tendinitis, and lateral epicondylitis can all be discussed as part of Pattern F: Impairments due to Localized Inflammation. Commonality of examination and interventions can be addressed as well as a discussion of factors that would relate specifically to a particular body segment. Case studies can be presented in class using the practice patterns. The disablement model is an ideal format for outlining the management of patients.

Conclusion

Use the *Guide*. Use the *Guide* in different ways. Gather data using the *Guide*. Give APTA feedback on your use of the *Guide*.

Bibliography

1. Verbrugge L, Jette A. The disablement process. *Soc Sci Med.* 1994;38:1-14.
2. Physical Disability. Special issue. *Phys Ther.* 1994;74:375-506.

Reference

1. Guide to Physical Therapist Practice. *Phys Ther.* 1997;77:1163-1650.

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Frequently Asked Questions
APTA Credentialed Postprofessional Clinical Residency Program

Joe Godges, MPT, OCS

What is a Clinical Residency?

A Clinical Residency is a planned program of postprofessional clinical and didactic education for physical therapists that is designed to advance significantly the physical therapist resident's preparation as a provider of patient care services in a defined area of clinical practice. The emphasis of a particular residency is up to the residency program as defined by its stated mission and goals.

How is a clinical residency different from other avenues of postprofessional training for physical therapists?

The major focus of clinical residencies is for the resident to accelerate his/her expertise in evaluation, examination, diagnosis, prognosis, intervention, and management of patients. This focus may also include community service, patient education, research, and supervision of other health care professionals.

How does a residency program decide what it will teach?

For a residency to be credentialed by the APTA its curriculum needs to be based on a recognized practice analysis. For example, a clinical residency in orthopaedic physical therapy will base its curriculum on part or all of the most recent *Description of Advanced Clinical Practice* (DACP) in orthopaedic physical therapy. The DACP is available through APTA's service center at 1-800-999-2782 ext. 3395, or website catalog at www.apta.org, then click catalog. For areas of practice where a DACP does not exist, a practice analysis will provide the basis of the curriculum. This ensures consistent standards of instruction for the prospective resident as well as for the future employers of residency graduates and their patients.

Do you foresee that clinical residencies will be a requirement for OCS certification in the future?

Effective for the 2000 examinations, completing an APTA credentialed clinical residency is one of the options that a PT can use to fulfill the eligibility requirements to sit for the OCS exam. Accumulating 5 years of patient care experiences within a concentration in orthopaedic physical therapy is currently the other available option to sit for the OCS examination. For information on requirements for specialist certification contact APTA, Specialist Certification Department at 1-800-999-2782 ext. 8520.

Will APTA credential clinical residencies in orthopaedic manual therapy?

Yes, as with orthopaedic physical therapy residencies, manual therapy residencies will be required to base their curriculum on a recognized practice analysis. The recently completed Description of Advanced Orthopaedic Manual Physical Therapy Practice analysis of the American Academy of Orthopaedic Manual Physical Therapists (AAOMPT) is available and would be an appropriate practice analysis to use for manual therapy residencies.

Will APTA credential clinical residencies in subspecialty areas or other special interest areas such as performing arts physical therapy, hand therapy, occupational health physical therapy, or foot and ankle physical therapy?

Yes, APTA will credential subspecialty areas and other special interest areas if they meet the requirements including the development of a curriculum based on a practice analysis.

How would these groups develop a curriculum and set up a clinical residency or fellowship?

Performing arts and occupational health physical therapy could, for example, follow a process similar to the orthopaedic manual physical therapy process chosen by the AAOMPT.

The AAOMPT performed a practice analysis defining the aspects of orthopaedic manual therapy that were *not* included in the orthopaedic physical therapy practice analysis description. This simplified the practice analysis process and made it consistent with the accepted medical model of subspecialty training (manual therapy fellowships) built upon clinical specialty training (orthopaedic physical therapy). Performing arts physical therapy, veterinary physical therapy, and occupational health physical therapy could follow this same process.

Okay, then what about foot and ankle physical therapy?

The practice description for this subspecialty could be considered to be contained within the orthopaedic physical therapy practice description. A foot and ankle residency (or shoulder, spine, knee, hand, etc.) could follow the relevant components of the orthopaedic physical therapy practice analysis or DACP.

Would the successful completion of an APTA credentialed foot and ankle residency fulfill the eligibility requirement option to sit for the OCS exam?

No, a foot and ankle clinical residency would not cover all of the components of orthopaedic physical therapy. A clinical residency in the subspecialty of foot and ankle would not meet the breadth or depth requirements for sitting for the OCS exam. If the orthopaedic residency does not address the entire DACP, the graduate of the orthopaedic residency would have to meet the standard requirements for other applicants.

My questions have led to a lot of discussion of practice analysis and standardized curriculum. Why is that important?

It is a fundamental consumer protection and payer/policy maker survival issue. Physical therapists and consumers need to know that a residency graduate can perform the minimal acceptable standard of care for a particular diagnosis. We are not going to survive as a practice if a patient with anterior knee pain can go to five different physical therapists in the same city and receive five different diagnoses and treatment plans. The physician's system is not perfect, but, through their standardization of residency curriculums, all graduates of, for example, an emergency medicine residency should be able to perform the standard of care for a patient with acute

chest pain (as described by the American Heart Association Practice Guidelines).

I practice in a clinic and our staff wants to start an orthopaedic physical therapy clinical residency and have it be credentialed by the APTA. What are the requirements of the clinical faculty?

The clinical faculty must have the collective qualifications to conduct all the activities of a residency program: 1) advanced clinical skills with at least one faculty member ABPTS-certified in orthopaedics, 2) expertise in teaching, and involvement in scholarly and professional activities.

OK, we will base our curriculum on the Orthopaedic Physical Therapy Description of Advanced Clinical Practice. Where can I obtain a copy of this?

From the APTA's Service Center 1-800-999-APTA x 3395. Reference publication E-46.

Fine, we have the clinical faculty raring to go. What types of activities do we provide the residents to fulfill the APTA's credentialing requirements?

For sure, clinical supervision of the residents by the clinical faculty while the residents are performing patient care. Other aspects of the curriculum should include classroom and lab activities, relevant to orthopaedic physical therapy, and clinical practice hours. Other options can include academic courses, study groups, case presentations, clinical research, subordinate staff, and community service.

Are the other options you mentioned required for credentialing?

The residency program should include activities that promote the resident's further integration of practice, research, and scholarly inquiry consistent with the residency mission philosophy.

Could you summarize what is required for APTA credentialing?

The prospective program needs to provide evidence that the residency program and its institution have acceptable 1) resources, 2) organization, 3) curriculum, and 4) performance measures to conduct a residency. The evidence provided by the program is reviewed via 1) the application materials and 2) the site visit.

What is the acceptable duration of clinical residency?

The program must contain a total of at least 1500 hours. It must also be at least nine months in length but not longer then 36 months.

How does a prospective program obtain the details regarding the requirements for credentialing?

This information can be obtained from the APTA's Professional Development Department at 1-800-999-APTA x 3202 or online at www.apta.org.

Once credentialed, how long before the next review or re-application?

If a program meets the requirements, the initial credentialing is valid for three years. However, the Committee on Clinical Residency Credentialing performs a review of each credentialed program annually to ensure that the credentialing standards are maintained. Recredentialing will be for five years.

What are the financial costs of credentialing?

The initial application fee is $1500.00. The residency program is also responsible for the travel costs and expenses for the individuals performing the site visit. This could run between $800.00 to $2000.00. The fee for the annual review is $750.00.

If a program is seeking APTA credentialing but needs financial assistance with the initial application fees and site visit costs, what options are available?

If the individuals representing the program are Orthopaedic Section members and the residency program is in an orthopaedic physical therapy or related area, the Orthopaedic Section has a grant fund to assist with the initial application or site visit costs. The Orthopaedic Section's office staff can supply the details; contact Linda Weaver at 1-800-444-3982. These grant funds are limited and will be dispersed in the order that acceptable applications are received by the Orthopaedic Section office.

Great. You seem to have answered my questions, however, I am sure our members will have others that I can not think of now. Who could they contact?

For further information, please contact the director of APTA's Department of Professional Development Marilyn Phillips MS, PT at 1-800-999-2782 x 3202 or mphillips@APTA.org.

Joe Godges, MPT, OCS is Clinical Faculty at the Kaiser Permanente Los Angeles, Orthopaedic Physical Therapy Residency Program. He is is also Assistant Professor in the Graduate Program in Physical Therapy at Loma Linda University. He is a member of the APTA's Clinical Residency Credentialing Committee as well as a member of the Orthopaedic Section Finance Committee.

Update: Clinical Research Center in Physical Therapy

Center for the Study for Work-Related Low Back Injury

Anthony Delitto, PhD, PT

Orthopaedic Section Money at Work

The three-year, $600,000 grant was made possible by a contribution of nearly $300,000 from the Orthopaedic Section, along with major commitments from the State Farm Foundation, Rehability Corporation, Goodyear Tire and Rubber, and AON Corporation.

Overview

The Center for the Study for Work-Related Low Back Injury, funded by the Foundation for Physical Therapy, began its work in the Spring of 1997. The Center is primarily housed within the Department of Physical Therapy, School of Health and Rehabilitation Sciences, University of Pittsburgh. The center's director is Anthony Delitto, PhD, PT, who is also the Chair of the Department of Physical Therapy. Key investigators in the center grant include Julie M. Fritz, PhD, PT, ATC (Primary Investigator [PI], Study 1), Thomas Rudy, PhD (PI, Study 2) and Mark Redfern, PhD (PI, Study 3). James J. Irrgang, MS, PT, ATC serves as the PI of the Data Management Core.

Co-investigators and other major contributors include:

- Joseph Schwerhe, MD, Chair of Environmental and Occupational Medicine, University of Pittsburgh
- Richard Erhard, DC, PT, Assistant Professor, Department of PT, University of Pittsburgh
- Deborah Lechner, MS, PT, Assistant Professor, Department of PT, University of Alabama at Birmingham
- Susan Lieber, MS, OT, Pain Evaluation and Treatment Institute, UPMC Health System
- Ronna Delitto, MHS/PT, Assistant Professor, Department of PT, University of Pittsburgh
- Paul Lieber, MD, WorkPartners, UPMC Health System
- Rob Wainner, MS, PT, US Air Force and doctoral candidate, University of Pittsburgh
- Greg Hicks, MPT, doctoral student, University of Pittsburgh

What follows is a brief description of the major projects being undertaken by the center, an update of findings, and future plans.

Title: Administrative Core

The center's overall theme is to develop and evaluate classification-based intervention strategies and to study the effectiveness of implementing such interventions to targeted patients (eg, those who match the classifications) who sustain work-related low back injuries. The center's focus will be on prevention (primary and secondary) and treatment of work-related low back pain with priority given to those interventions in which physical therapists typically play a major role in the management of work-related low back injury. The center's core investigators include physical therapists, a psychologist and biostatistician, occupational and physical medicine physicians, and an ergonomist. The investigative team coordinates and participates in studies using a variety of research designs, including a randomized clinical trial. The general hypothesis being tested is that a *priori*, treatment-based classification of patients with work-related low back pain followed by interventions using matched and well-defined treatment strategies will result in more efficient use of health care resources, and faster return to prior function with less recurrences than if the patients are treated nonspecifically with general acceptable conservative treatment strategies. The center includes three studies and a data management core.

Study 1: Does Intensive Physical Therapy Improve Outcome in Work-Related LBP?

This randomized clinical trial will compare two strategies for managing work-related low back injuries: standard management according to Agency for Health Care Policy and Research (AHCPR) practice guidelines for adults with low back trouble and standard management plus intensive physical therapy. Short-term (4 weeks) and long-term (6, 12 months) outcome will be assessed by self-report of functional status (disability indices), physical impairment measures (eg, spinal range of motion), return to work, physical capacity to return to work, and service utilization. Injured workers from a variety of occupations (health care, transit, grocery, etc.) are being admitted to the study. The study is being carried out in the UPMC Health System's WorkPartners, Inc, an Occupational Medicine group and the Core Network, LLC, the UPMC Health System's physical and occupational therapy service.

Update: upwards of 70 patients have thus far been admitted to the RCT. Preliminary results of the trial are being presented to the physical therapy community at the Combined Sections Meeting in Seattle, WA in Febuary 1999. In addition, additional preliminary results were presented to an International Forum on Acute Low Back Pain in Manchester, England in October 1998.

Study 2: Psychometric Innovations in Outcome Measurement

Recent advances in psychometric theory, namely item response theory (IRT), distinguish observations from measurement. The rating scales provided to patients enable us to collect observations. In and of themselves they are not measures. How patients use these numbers and whether the numeral observations (responses) collected can be used to derive quantitatively-sound measures are empirical questions that need to be tested explicitly. Using archival as well as data collected in Study 1 and recent innovations in IRT, this study will evaluate: (1) instrument dimensionality, (2) scoring goodness-of-fit statistics for both items and patients, (3) differential item functioning (bias) across patient diagnostic groups and (4) item and scale temporal sensitivity, particularly treatment effects. We anticipate that this study will lead to a reduced or more economical set of measures with improved psychometric properties that are uniquely tailored to the diagnosis and evaluation of treatment outcomes in patients with work-related low back injury.

Update: archival data from 100 subjects. Analysis has been performed to determine the structure and dimensionality of the tasks within the domains of dynamic strength, mobility, position tolerance, and endurance. Further analysis

will be performed to eliminate redundant tasks to create the reduced version of the instrument; prospective analysis will then be carried out to compare reduced to full version of FCE. Data from other forms (psychosocial, physical examination) are being analyzed.

Study 3: Does Physical Demand Moderate Return to Work Status?

This study will use some of the same injured workers as study #1 (only those employed by the UPMC Health System). The tasks that the worker performs will be analyzed using standardized ergonomic methods, and biomechanical models will be used to predict the compressive and shear stresses at the L5-S1 segment using anthropometric values from the injured worker as well as specific environmental and setting factors related to the tasks being performed (including the task being performed when the worker was injured). Data for the latter will be obtained using videography of the task at the job site. In addition to descriptive analysis of stresses predicted by the biomechanical model for each injured worker, the data will be used in conjunction with Study #1 to evaluate any moderating effect on the outcome of the injured worker with particular reference to return to work status.

Update: data collection is ongoing.

Title: Data Management and Analysis Core

The data management core will assist in the identification and selection of appropriate outcome measures, development of data collection forms, coordination of data collection and entry and statistical analysis of data. In the Clinical Research Center, outcomes will be broadly defined as clinical outcomes and resource utilization. Clinical outcomes will include impairment indices (Study #1, 3) and health quality of life indices (disease specific and generic) and return to work status (Study #1, 2). Primary and secondary sources will be used to track resource utilization. Primary sources of resource utilization include computerized archival data bases at both UPMC (the Medical Archival Retrieval System or MARS) and CORE, LLC. The data management core will insure successful implementation and completion of the projects included as part of the research center.

Update: the Data Management Core is now being used in additional studies and has been included as an integral part in two additional grant submissions to the National Institute for Occupational Safety and Health and the National Institute of Health.

Anthony Delitto, PhD, PT is the Chair of the Department of Physical Therapy at the University of Pittsburgh.

Please support physical therapy research through your generous donations to the Foundation for Physical Therapy.

Essential Components for Developing a Clinical Residency Program

Carol Jo Tichenor, MA, PT

Plan to attend an excellent presentation on residency education at CSM 1999!

The speakers on this panel are leaders in residency education and will be at CSM to share their expertise in the development of residency programs.

Presenters: Carol Jo Tichenor, MA, PT
Gail Jensen, PhD, PT
Mike Rogers, PT, OCS
Toby Long, PhD, PT
George Davies, MEd, PT, ATC, SCS, CSCS

Moderator: Joe Farrell, MS, PT

This course will provide the participants with a solid framework for developing a successful clinical residency program. The course will address the philosophy behind residency education, essential curriculum components, strategies for justifying funding with administrators, budgetary considerations, potential models for delivery of residency education, and preparation for the APTA Credentialing process. We will address the need for a linkage between clinical residencies and academic institutions to provide the strong educational framework for curriculum design and development, to link theory with practice, and to provide a sound research foundation for the program and participants.

Participants will be able to:

1. Analyze how changes in health care necessitate a change in post-professional education beyond the traditional continuing education model.
2. Identify the philosophical bases on which residency education is built.
3. Discuss critical components of the clinical mentoring process for experienced clinicians.
4. Analyze how clinical residency education can "jump start" the practitioner up the ladder of clinical expertise.
5. Evaluate various models for delivery of residency education.
6. Identify key factors in justifying residency education to administrators.
7. Identify key budgetary issues related to stipends, benefits, productivity, and teaching and mentoring costs.
8. Discuss problems and pitfalls in setting up a program.
9. Identify goals and key components of the APTA credentialing process and how this process will impact the development of residency curricula.

From the Top of the World

Robin L. Childers

Whitefish is a small town snuggled in the mountains of northwest Montana. From the Big Mountain Ski Resort summit of about 7,000 feet, you can simply see our entire galaxy. Well, maybe it just seems that way.

But you really can see the jagged, frozen peaks of Glacier National Park, Canada to the north, and the Bitterroots in Idaho to the west. And to the south, there's the long, stretching fingers of Flathead Lake, the largest natural freshwater lake in the United States.

Curled into trees just outside of town is Grouse Mountain Lodge, Montana's finest world-class luxury resort. If you've ever dreamed a winter wonderland dream where you sipped hot cocoa in a plush armchair beside a raging fire and sleepily gazed through a window where the setting sun tinted the frosty landscape periwinkle, you've been to Grouse Mountain Lodge. Its gold-lit windows and snow-capped roof peaks are the windows that peer out at you from each season's Christmas greeting cards.

Last January, more than 100 physical therapy professionals skied and snowshoed into this picturesque setting for the first ever Physical Therapy Summit in Montana. Physical therapists from as far away as Alaska and New Jersey came to Montana for the promise of fascinating discussions about the profession's most challenging issues and 300 inches of the country's softest snow.

Brainchild of Montana Chapter President Richard Smith, the Physical Therapy Summit in Montana was originally intended to be a reunion meeting for speakers at Chapter meetings over the last 10 to 15 years. Like many projects of this nature, the summit grew in scope as the program committee began discussing themes that might draw attendees from all over and pique enough interest among presenters to get them to come to Montana for a small honorarium, a sleigh ride, and the pledge of good conversation.

In the end, 13 professionals presented at the Summit and participants were treated to discussions that moved from the clinic to Congress. Summit faculty included: Richard DonTigny, Peter Edgelow, Tim Kauffman, Susan Michlovitz, Susan Abeln, Jerry Connolly, Helene Fearon, Don Jackson, Robert Mangine, Carl DeRosa, Terry Malone, Steve Wolf, and Stanley Paris.

At the Summit's conclusion, attendees asked, wide-eyed, if the Chapter intended to make this an annual event. Our program committee members promptly broke out in sweat. That's a little like asking a Mt. Everest expedition at the bottom of the mountain whether or not they plan to do the same again next year. Well, maybe again some day, but not tomorrow.

Publishing the proceedings of the Physical Therapy Summit in Montana was a bit of an after thought. First of all, success of the event was uncertain at the outset. But the Summit generated such momentum and high praise, that Richard Smith, who edited the proceedings, thought it might be worthwhile to share the results. It's our hope that our success and the Summit document might spur other APTA components to host similar events.

The Physical Therapy Summit in Montana proceedings include transcribed discussions from the presentations, panels, and open forums that took place during the Summit. Many of the handouts used by the presenters are also included at the back of each section. This document is the next best thing to having been there. The flavor, humor, and spirit of the Summit come through the proceedings and make the document lively, easy reading.

The Summit publication not only provides professionals with an interesting, helpful resource, but proceeds from sales of the document benefit the Foundation for Physical Therapy. Get a copy, a hot cup of cocoa, relax, and read.

If in a few years you get another invitation to a physical therapy summit, get your gear.

Robin L. Childers is the Executive Director for the Montana Chapter, APTA.

Attendees and faculty pose outside the conference center for a photo during the Physical Therapy Summit in Montana.

Clinical Problem Solving: A Practical Example

Jeff Konin, MEd, ATC, MPT

This column is geared toward the physical therapist assistant and is being coordinated by Gary Shankman, OPA-C, PTA, ATC.

INTRODUCTION

I read with great interest Alicia R. Dittmar's recent article in *Orthopaedic Practice* (Clinical Problem Solving and The Physical Therapist Assistants, Vol. 10;1:98) and couldn't help but wonder myself how many practicing PTAs actually challenge themselves to use their clinical problem solving skills. Though the process of a physical therapy diagnosis is clearly defined, other areas such as treatment intervention, minor modification of treatment, and technique of application of treatments may be more elusive with respect to definition. That is, the way in which a PTA chooses to follow any of these tactics is based on the goals outlined by the physical therapist, but the direction given to the PTA by the PT may in fact be scant and limited in nature.

Is this a sign of the times? Are PTAs given less guidance and instruction as a result of health care changes of recent times? Or are we seeing this trend of reduced dictation as a direct result of the educational background and clinical skills that PTAs of today now possess? Regardless, more challenges are now being placed on the PTA and with these challenges comes responsibility. For the PTA, it is a responsibility to use problem solving skills. It is an optimistic challenge, one that allows for a certain level of creativity. It also allows for the PTA to learn how to think outside the box. The following example of a routine clinical scenario demonstrates the difference between an effective treatment intervention and one that does a disservice to a patient solely on the basis of a lack of thoughtfulness.

CASE STUDY

As a member of this section and a reader of this article, I will take the liberty of assuming that each and every one of you practicing as a PTA has treated a person with adhesive capsulitis of the shoulder. To briefly review, this involves an adaptive shortening of the capsuloligamentous structures about the glenohumeral joint. It is the result of disuse/immobilization of the shoulder, often times preceded by an injury to various other structures of the shoulder complex. For example, a typical person may have developed adhesive capsulitis of the shoulder following a rotator cuff tear which was not treated for a couple of weeks prior to medical intervention. Subsequently, the individual chose not to use the affected upper extremity as a result of significant pain during activities of daily living. The time that elapsed enabled the glenohumeral capsule and surrounding ligaments to shorten in a position of most comfort, or what we call a resting position. This resting position is adduction, slight forward flexion and slight internal rotation.

Though the process of a physical therapy diagnosis is clearly defined, other areas such as treatment intervention, minor modification of treatment, and technique of application of treatments may be more elusive with respect to definition.

Clinically, this individual demonstrates what is known as a capsular pattern restriction for of the shoulder. That is, the range of motion that is limited as a result of this adaptive shortening is external rotation, abduction, and internal rotation. Furthermore, accessory motion will also be limited at the glenohumeral joint, and changes in biomechanics may be seen at the sternoclavicular and scapulothoracic joints as well.

LACK OF PROBLEM SOLVING SKILLS

Let me first describe what is typically seen in a clinical setting where one's lack of critical thinking reduces the potential for a positive outcome. As a PTA, let's assume that the treatment plan outlined by the PT included the following intervention: moist heat, ultrasound, range of motion activity, mobilization, and cryotherapy. After a casual greeting, the PTA places the person supine, with the arm resting at the side, and applies a moist hot pack to the anterior/superior aspect of the shoulder, placing a slight weight over the hot packs to prevent them from slipping off of the person. This is applied for approximately 15 minutes and followed by an ultrasound treatment. The ultrasound is delivered at 1.5 W/cm^2 for 5 minutes over the same anterior/superior aspect of the shoulder. When the person explains that the pain is not located there, but instead along the lateral upper third of the humerus, the PTA intelligently responds by explaining that what the person is perceiving is actually referred pain.

Following the ultrasound treatment, both physiological motion and accessory motion are addressed through therapist intervention and the treatment is concluded with 15 minutes of cryotherapy in the form of an ice bag that is placed over the anterior/superior aspect of the shoulder and allowed to melt over the contours of the area so that optimal contact is made.

UTILIZATION OF PROBLEM SOLVING SKILLS

Does this sound like a typical treatment for a person with adhesive capsulitis? Unfortunately, it is for many, especially those who neglect to utilize their clinical problem solving skills. Let me point out the common mistakes made in this situation and how a simple modification that is identified through critical thinking can make a significant change in the overall outcome of the pathology.

To begin with, prior to any treatment designed to increase range of motion both within a session and over a period of sessions, one should document pretreatment measurements so that changes as a result of treatment intervention can be accurately assessed. Likewise, posttreatment measurements should also be taken.

A question could also be raised regarding the delivery time for the ultra-

sound. If a thermal result is desired, perhaps it is possible that the unit did not reach the desired temperature until 3 to 4 minutes into the treatment, thus truly only delivering thermal acoustical energy for a period of one minute. Is this an effective delivery? I would not think so.

The most significant and critically important oversight in this scenario happens to be the positioning of the glenohumeral joint during the hot pack, ultrasound, and cryotherapy treatments. Based on what we know of adhesive capsulitis of the shoulder, one can deduct that it is the inferior most portion of the capsule itself that is most taut and has undergone unfavorable adaptive shortening. It is in fact this very portion of the capsule that may directly limit or restrict abduction of the shoulder. By contrast, the superior portion of the glenohumeral joint actually remains in an extensible position as a result of the way the individual carries himself following the injury.

So you see that delivering moist heat, ultrasound, and cryotherapy to the anterior/superior portion of the glenohumeral joint is actually incorrect if the goal is to address the tissue that has undergone shortening. Instead, the glenohumeral joint of the individual being treated should be placed in a tolerable position of abduction and external rotation such that the inferior most portion of the capsule can be attended to. Though the moist heat and cryotherapy may not actually penetrate to the level of the joint capsule, they will provide tissue temperature changes to the surrounding musculature that may assist with muscle relaxation.

Most interesting is the fact of assessing the outcome of the individual treatment itself. After engaging all efforts to further increase the available physiological range of motion of the shoulder, why would one place the shoulder back in the resting position, apply ice, and allow for the tissue to return to its original pretreatment position? This creates more of an elastic change, allowing for collagen reversibility as opposed to facilitating a more plastic deformation. Allowing the tissue to cool clown in its elongated position is much more likely to produce positive changes with respect to both accessory and physiological movement.

SUMMARY

The treatment of adhesive capsulitis of the shoulder is often delegated to a PTA. Rarely, if often, is the PTA guided by the supervising PT as to positioning of the shoulder during the delivery of therapeutic modalities and/or thermal agents. However, a PTA who utilizes clinical problem solving skills and assumes the responsibility of patient care beyond basic delivery of physical therapy services will ultimately achieve a better overall outcome with respect to a return to premorbid function for the patient.

Jeff Konin, MEd, ATC, MPT is an Instructor of the PTA Program at Delaware Technical College.

FALL BOARD OF DIRECTORS MEETING

SEPTEMBER 25 -26, 1998
LA CROSSE, WISCONSIN
MINUTES
(10/2/98)

President Bill Boissonnault called the Fall Board of Directors meeting to order at the Orthopaedic Section office in La Crosse, Wisconsin at 8:20 AM on Friday, September 25, 1998.

ROLL CALL:
Present

Bill Boissonnault, President
Nancy White, Vice President
Dorothy Santi, Treasurer
Joe Farrell, Director
Elaine Rosen, Director
Lola Rosenbaum, Education Chair
Philip McClure, Research Chair
Susan Appling, *OP* Editor
Helene Fearon, Practice Co-chair
Terry Randall, Public Relations Chair
Kim Dunleavy, Nominating Committee Chair
Ann Grove, Finance Committee Member
Terri DeFlorian, Executive Director
Linda Weaver, Administrative Assistant

Absent:
Jean Bryan, Specialty Council Chair
Mark Anderson, President, OHSIG
Fran Welk, APTA Board Liaison

MEETING SUMMARY:
MOTIONS

A. **=MOTION=** To approve the SME Board of Director meeting minutes dated June 5, 1998, Orlando, Florida as printed. **=PASSED=**

B. **=MOTION=** The 1999 Fall Board meeting will be held in Alexandria, VA on September 24-25. **=PASSED=**

SS: Meeting in Alexandria would allow us to interface with APTA and the Foundation for Physical Therapy staff during our meeting as well as have them offer leadership training for the education portion of our meeting.

C. **=MOTION=** To discard the 1995 DACP (Description of Advanced Clinical Practice) policy regarding the sale price and distribution of the document. **=PASSED=**

SS: As of January 1998 APTA has taken over the sale and distribution of the DACP.

D. **=MOTION=** Appropriate $400-$600 for a permanent display case in Section office. **=PASSED=**

E. **=MOTION=** Appoint Bob Burles to the position of Section historian. **=PASSED=**

F. **=MOTION=** Orthopaedic Section will donate a maximum of $75,000 to the Foundation for research in 1999. Out of the donated amount $50,000 will be used for a specific orthopaedic research topic. The remaining $25,000 will be used for a musculoskeletal research topic at the time matching funds become available. **=PASSED=**

G. **=MOTION=** To fund the chair of each roundtable to attend CSM. Chair is responsible for planning and moderating roundtable programming at CSM. **=PASSED=**

FISCAL IMPLICATION: 2 days per diem and round trip airfare x 2 roundtable chairs (PTA and Manual Therapy)

H. **=MOTION=** Publish *OP* in April, August, December (these would be CSM, SME, and Fall meeting issues), and June (feature issue) starting in 1999. **=PASSED=**

I. **=MOTION=** Approve the 1999 Section budget with changes. **=PASSED=** (FC 98)

J. **=MOTION=** Non-Orthopaedic Section groups wishing to apply for home study course publication with the Orthopaedic Section will follow this protocol:

a) Non-Orthopaedic Section group will select topics, authors, and an editor.

a) Obtain Orthopaedic Section Board approval on the course topic.

b) Identify authors willing to write manuscripts. The authors must possess expertise in the identified content area and demonstrate writing experience.

d) Solicit interest and support from their members.

The Orthopaedic Section will pay all costs of producing the course. Any profits after expenses will be split as follows:

- First 250 sold - 50%/50% split
- 251 - 500 sold - 60%/40% split (outside group/ortho)
- 501 and above sold - 70%/30% split (outside group/ortho)

=PASSED= (FC 98)

K. **=MOTION=** To publish the Section on Women's Health Newsletter (2 issues/year beginning in 1999 with a maximum of eight pages per issue) **=PASSED=** (FC 98)

FISCAL IMPLICATIONS: (See 1999 budget for cost)

L. **=MOTION=** To publish an Oncology Section HSC (prep work in 1999, course in 2000) according to the above recommended policy. **=PASSED=** (FC 98)

M. **=MOTION=** To publish the Section on Geriatrics HSC (3 home study courses in three years with their contract beginning in 1999). The Orthopaedic Section would pay for a phone line to be installed and answered home study courses. The Section on Geriatrics would pay for a post office box where registrations could be mailed addressed Section on Geriatrics. The contract needs to state that they will meet their deadlines. If deadlines are not met there will be financial implications. If they become delinquent the Orthopaedic Section keeps any profit. **=PASSED=** (FC 98)

N. **=MOTION=** The agreement the Section had with Commonweal Development Corporation for building of the Section's office building and selling land for us expired in April 1998. No new agreement will be drafted. **=PASSED=** (FC 98)

O. **=MOTION=** Have a large sign constructed out front by the street depicting the two lots that are for sale and the Section's 800#. A real estate attorney who will also close on the property will review offers to purchase that are received once an offer is accepted. **=PASSED=** (FC 98)

P. **=MOTION=** Proposals and information were received for doing irrigation, landscaping, gutters, and shingle work on the property. The Executive Director will make a decision as to what work will be done and by whom and inform the Finance Committee of the decision.

=**PASSED**= (FC 98)

Q. =**MOTION**= Include in the standard letter that goes out to potential finance committee members a statement that as a finance committee member you are agreeing to run for Treasurer of the Section if asked and you are obligated to attend one Fall Board meeting during your three year term. =**PASSED**= (FC 98)

R. =**MOTION**= No dues increase for 1999. =**PASSED**= (FC 98)

S. =**MOTION**=The OHSIG was budgeted for three meetings in 1998. They did not have the third meeting and would like the funding for 1998's third meeting carried over to the 1999 budget as they plan on having the third meeting in 1999. =**PASSED**=

FISCAL IMPLICATIONS: $5,275

T. =**MOTION**=Approve running a full page ad for the *Strengthening and Conditioning Applications in Orthopaedics* home study course in the February issue of *Strength and Conditioning* magazine. =**PASSED**=

FISCAL IMPLICATIONS: $900

POLICIES

A. =POLICY= The board will review policies that are outdated or no longer apply and decide via a fax vote whether to discard or keep the policy.

B. =POLICY= SIG committee chairs and committee members speaking at CSM will receive reimbursement for travel and per diem and/or an honorarium ($300/speaking hour) from their programming budget at the discretion of the SIG officers. SIG officers already funded to attend CSM will not receive additional funding or an honorarium for speaking at CSM.

CONSENSUS ITEMS

A. Support the nomination of Fran Welk (Treasurer), Adele DiGiovanna (BOD), and Pam Duffy (Speaker of the House) for APTA office. They are all Section members.

B. For the award ceremony at CSM 1999 a time limit will be set on the award recipients speech. The Rose Award will be given at the Award Ceremony. Speeches will be limited to 20 minutes for the Paris and 10 minutes for the Rose. The title will be, Orthopaedic Section Award Ceremony featuring "The Rose Excellence in Research Award" & "The Paris Distinguished Service Award". The order of the ceremony for 1999 will be; outgoing officers/committee chairs, student awards, teaching award, Rose award, and Paris award.

ADJOURNED

APTA NEWS RELEASE

National Assembly of Physical Therapist Assistants Names New Officers

The National Assembly of Physical Therapist Assistants recently named its officers.

Ron Moreland, PTA, of Beckley, West Virginia, was named Presiding Officer. Moreland will chair sessions and serve as an officer of the Representative Body of the National Assembly (RBNA). He will serve a two-year term. Brad Thuringer, PTA, of Brookings, South Dakota, was named Vice Presiding Officer. Thuringer is an officer of the RBNA and will assume the duties of the Presiding Officer when necessary. His term is also for two years.

Travis Hale Carlton, PTA, of Lagrangeville, New York, will serve a two-year term as Director, Region I, serving the Northeastern states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

Marcia W. Sympson, PTA, of Louisville, Kentucky, will serve a one-year term as Director, Region II, serving the Southeastern states of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia, and the District of Columbia.

Scott Gilbert, PTA, of Plymouth, Michigan, will serve a three-year term as Director, Region III, serving the North Central states of Illinois, Indiana, Iowa, Michigan, Minnesota, North Dakota, Ohio, South Dakota, Wisconsin, and Puerto Rico.

Julie Newman, PTA, of Oskaloosa, Kansas will serve a three-year term as Director, Region IV, serving the South Central states of Arkansas, Colorado, Kansas, Louisiana, Missouri, Nebraska, New Mexico, Oklahoma, Texas, and Wyoming.

Therese (Teri) Ryan, PTA, of San Jose, California, will serve a two-year term as Director, Region V, serving the Western states of Alaska, Arizona, California, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, and Washington.

The primary responsibilities of the regional directors are to act as liaisons between the physical therapist assistants in each state and the National Assembly Board of Directors; facilitate and maintain communications with members; and assist APTA chapters in organizing affiliate special-interest groups. Term lengths vary so that there are always current directors in office when new directors are appointed.

The National Assembly of Physical Therapist Assistants was created by the American Physical Therapy Association's House of Delegates during its June 1998 session. It is a component and membership grouping of APTA that represents more than 8,400 physical therapist assistant members of the Association. Effective January 1, 1999, all affiliate members will automatically become members of the National Assembly.

The Orthopaedic Section, APTA
and the
Sports Section, APTA
present:

"Management of Patellofemoral Pain: A Comparison of Treatment Strategies"

1999 Combined Sections Preconference Course
February 3, 1999 * Seattle, Washington

Course Description:

Patellofemoral pain continues to be a common condition treated in orthopaedic practice. However, despite its high incidence, there is no clear consensus as to how this disorder should be managed. The purpose of this course is to present a comprehensive view of the various treatment approaches for patellofemoral related disorders. Recognized experts in the area of patellofemoral pain will compare and contrast treatment strategies and provide the scientific/clinical rationales behind the varied approaches. Emphasis will be placed on pathomechanics, assessment techniques, exercise strategies, and the use of external supports (ie, taping, bracing, protonics).

Speakers:

- Kate Grace, PT
- Ron Hruska, PT
- Mark Looper, PT
- Christopher Powers, PhD, PT

Tuition:

	Early Bird (prior to 12/11/98)	Advanced (prior to 1/8/99)
Orthopaedic & Sports Section PT Members:	$125.00	$135.00
Orthopaedic & Sports Section PTA Members:	$100.00	$110.00
APTA PT Members:	$180.00	$190.00
APTA PTA Members:	$140.00	$150.00
Non-APTA Members:	$200.00	$210.00
Orthopaedic & Sports Section Student Members:	$ 35.00	$ 45.00
APTA Student Member:	$ 50.00	$ 60.00
Non-APTA Student Members:	$ 75.00	$ 85.00

How to Register:

Contact APTA's Service Center at 800/999-2782 x3395 for details on registering.

Questions about the Course?

Contact Tara Fredrickson at the Orthopaedic Section office, 800/444-3982.

Diagnostic Imaging of Bones & Joints

January - June 1999

Proposed Topics and Authors

- **Introduction to the Science of Orthopedic Radiology**
  Lynn N. McKinnis, PT, OCS
- **Imaging Modalities of the Spine**
  James W. Leonard, DO, PT
- **Multimodality Advanced Musculoskeletal Imaging**
  Eric A. Brandser, MD
- **Plain Film Evaluation of the Extremities**
  Lynn N. McKinnis, PT, OCS
- **Spinal X-Ray Reading Process**
  Robert E. Donaldson, DC, PT, OCS
- **Radiographic Characteristics of Common Skeletal Pathologies**
  Sharon Marshall, MD

Registration Fees

Register Now
First manuscript available in January.
$150 Orthopaedic Section Members
$225 APTA Members
$300 Non-APTA Members

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

*If notification of cancellation is received in writing prior to the course, the registration fee will be refunded, less a 20% administrative fee. Absolutely no refunds will be given after the start of the course.

Educational Credit

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. ATC approved.

Objective: The objective of the Orthopaedic Section Home Study Course is to provide a self-paced learning experience on the essentials of diagnostic imaging for the nonradiologist. Registrants will learn techniques ranging from interpreting a radiologist's report to viewing films. The material enhances comprehension of normal and pathological anatomy, with obvious clinical applications.

Editor

Carolyn Wadsworth, MS, PT, CHT, OCS

Additional Questions?

Call the Orthopaedic Section, APTA, 1-800-444-3982 x 213

9.1 Home Study Registration Form

Name _____
For clarity, enclose a business card.

Mailing Address _____

City _____ State _____ Zip _____

Daytime Telephone No.(_____) _____ APTA# _____

Please make check payable to: Orthopaedic Section, APTA

Please check:
☐ Orthopaedic Section Member
☐ APTA Member
☐ Non-APTA Member
(Wisconsin Residents add 5.5% Sales Tax)

☐ I wish to become an Orthopaedic Section Member ($50) and take advantage of the member rate. Please note: APTA membership is a prerequisite to joining the Section.

Fax registration & Visa or MasterCard number to: 608-788-3965

Visa/MC (circle one)# _____ Exp. _____

Signature _____

Mail Check and Registration to: Orthopaedic Section, APTA, 2920 East Avenue South, Suite 200, La Crosse, WI 54601

American Physical Therapy Association

Education Program Committee

The Orthopaedic Section will celebrate it's 25th anniversary during the Combined Sections Meeting (CSM) in Seattle, Washington on Saturday, February 6, 1999. The celebration will begin with an awards ceremony followed by a comedy show and a casino night. The casino night will feature "celebrity" dealers (past section presidents or board members), a caricature artist, and play money which can be traded for raffle tickets. Please join us as we celebrate 25 successful years.

The education program for the 1999 Seattle CSM is listed on page 32 of this issue. Please note that the section business meeting and special interest group and roundtable business meetings are also listed. See the November issue of *PT Magazine* for more details on programming for CSM.

Congratulations to Paul D. Howard, PT, PhD who has been selected for the position of vice chair of the Education Program Committee.

The section offers a variety of off-site education courses for clinicians. Programs on low back pain, patellofemoral pain, foot and ankle dysfunction, and veterinarian physical therapy are scheduled for this and next year. Most courses offer PT, PTA, and student rates. We are also sponsoring a review course that may be helpful for PTs preparing for the orthopaedic specialty exam. Call the office or see our web site (www.orthopt.org) for more details. If your institution is interested in cosponsoring any of our courses, please call Tara Frederickson (800-444-3982).

Lola Rosenbaum, MHS, PT, OCS
Education Program Chair

Public Relations Committee

I have just returned from my first Board of Directors Meeting and would like to share some of the information that relates to the public relations committee. First let me say how impressed I was with the officers and administrative staff of the Orthopaedic Section. They displayed a true commitment to the goals of the Section. This is a very productive group of talented individuals who exemplify the highest degree of professionalism. The membership of the Orthopaedic Section should rest assured that their interests are being well represented.

I represented the Orthopaedic Section at the American Academy of Family Physicians on Sept. 17-19. Jean Pierre Viel, Amy Sellinger, and Linda Monroe's help with staffing of the APTA's exhibit booth was greatly appreciated. Prospective Orthopaedic Section members Barney Poole, Kurt Jepson, and Bradley Beard presented an educational session on Musculoskeletal Injuries and Rehabilitation which was also a positive public relations event. Thanks and keep up the good work. If you or Section members you know are presenting to professional organizations other than physical therapists, please make the Section office aware of your educational/PR efforts.

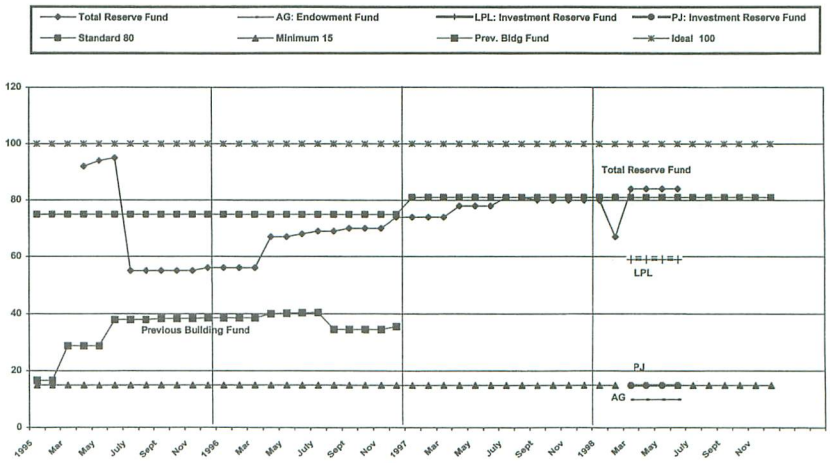
The Media Spokesperson Network (MSN) will be expanding its role into public relations. The members will not only be alert for media events that impact on the profession but will also be distributing more public relations information.

We will be fortunate to have the MSN Director, Rick Watson speaking on Marketing Strategies for the Future at Combined Sections Meeting (CSM) in Seattle, February 7, 1999. The Orthopaedic Section will be celebrating its 25th Anniversary at CSM. It will be a unique opportunity to learn about and meet some of the individuals whose vision and leadership have helped us to grow into the largest Section of the APTA. Don't miss it.

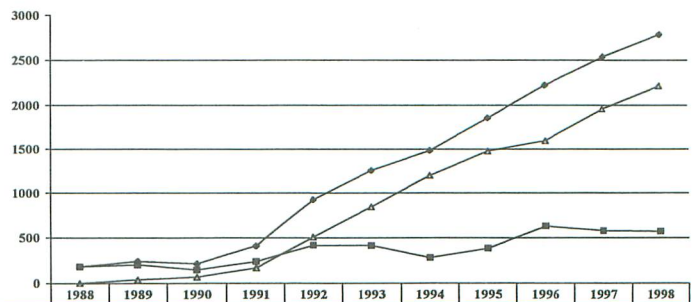
Terry Randall, MS, PT, OCS, ATC
Public Relations Chair

Finance Committee

ORTHOPAEDIC SECTION, APTA, INC
RESERVE FUNDS/YEAR END
JANUARY 1, 1995 TO JUNE 30, 1998

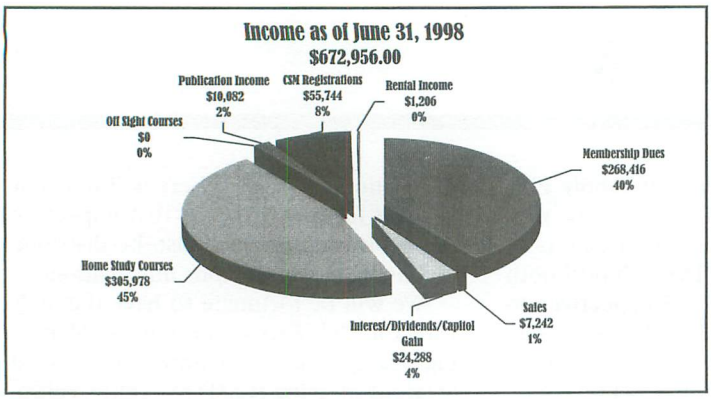


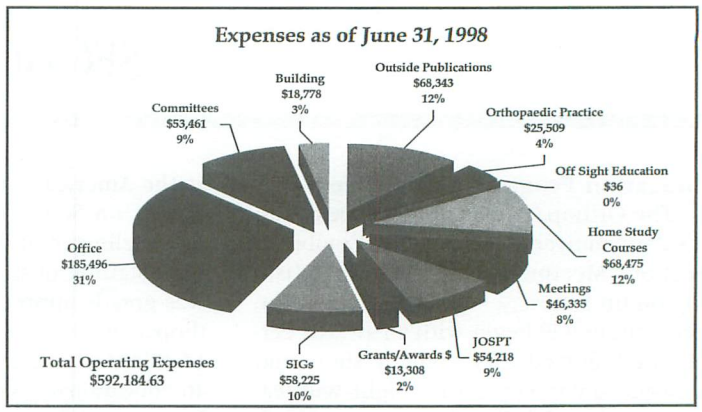
ORTHOPAEDIC SECTION, APTA, INC
YEAR END FISCAL TRENDS FROM 1988-1998
1998 DATA IS AS OF JUNE 30, 1998

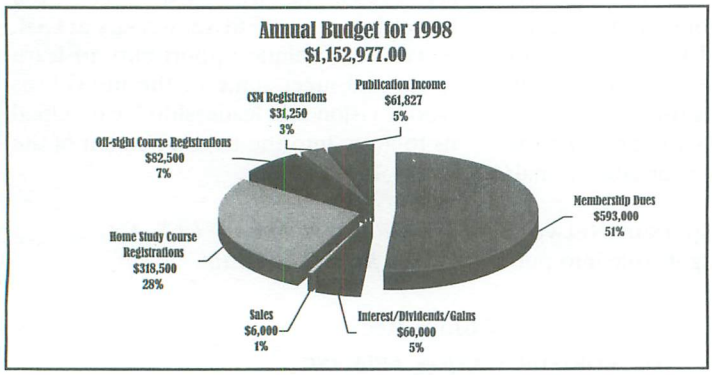


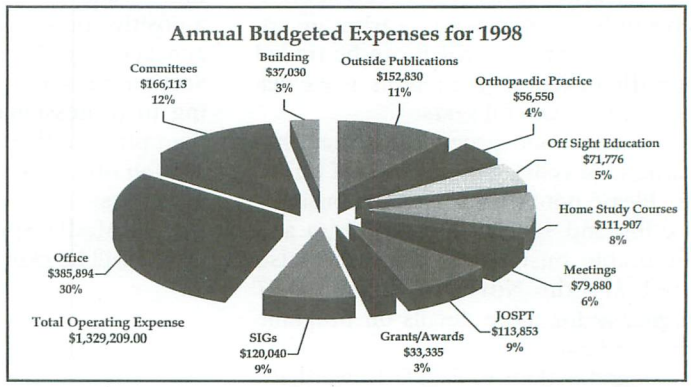
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Assests	185	243	217	410	925	1,257	1,484	1,858	2,224	2,538	2786
Liablilities	183	203	148	240	417	413	283	382	629	577	570
Equity	2	40	69	170	508	844	1,201	1,477	1,595	1,961	2216

To Nearest Thousand









Volunteers Needed for Back Pain Hotline at CSM

Physical therapist volunteers are needed to staff a back pain hotline to be held February 4-5 during the Combined Sections Meeting in Seattle, Washington. The Hotline, which is cosponsored by APTA and the Orthopaedic Section, will be held at the Washington State Convention and Trade Center in Seattle.

Volunteers will be schedule to work in shifts of two hours. Volunteers' duties will include answering callers' questions about the treatment and prevention of back pain. More than 30 volunteers will be needed to cover the four lines which will be operated from 9 AM to 5 PM, pacific time both days. All volunteers will receive a National Physical Therapy Month T-shirt.

The hotline is a public service to help educate consumers about physical therapy. The hotline will be publicized in the media throughout the United States potentially reaching more than 20 million people.

Those interested in volunteering should call Cheryl Harrison at the APTA Publication Relations, 800/999-2782 ext. 3218.

Section's Goals & Objectives

GOAL #1
Facilitate continued professional development in orthopaedic physical therapy clinical practice.

Objectives:
1. Provide programming to facilitate professional development of members in advanced clinical competencies. (1-3 years)
2. Develop highly accessible, cost effective methods of delivering orthopaedic physical therapy continuing education. (2 years)
3. Investigate mechanisms to facilitate preparation of members for the Orthopaedic Clinical Specialist (OCS) exam. (1 year)
4. Develop a template for clinical residency programs for program development, assessment, and documentation to meet credentialing criteria. (1 year)
5. Support a certification process for the credentialing of orthopaedic clinical residency programs. (2 years)
6. Revitalize, evaluate, and provide support for the Section's clinical practice mentorship program. (2 years)

GOAL #2
Create dynamic leadership development programs for members.

Objectives:
1. Provide leadership training for committee members and chairs, SIG officers, and elected officers for present and future involvement as Section leaders. (1-3 years)
2. Develop and maintain pool of candidates for nominating committee. (1-3 years)
3. Prepare selected committee chairs, officers, and members for national positions. (1-3 years)
4. Find new and innovative ways to meet and involve "grass roots" membership including student and affiliate members with the intention of grooming them for future leadership roles. (1-3 years)
5. Increase cultural diversity in Section leadership. (2-3 years)

GOAL #3
Provide leadership for fostering and directing clinical research to establish outcome effectiveness and efficacy of orthopaedic physical therapy.

Objectives:
1. Support clinical research that validates the outcome, cost effectiveness and cost efficacy of orthopaedic physical therapy. (1-3+ years)
2. Collaborate with external organizations to identify critical topics and research strategies relevant to outcome effectiveness and efficacy of orthopaedic physical therapy. (2+ years)
3. To gather and disseminate orthopaedic physical therapy research to communities of interest. (1-3+ years)
4. Identify and promote members with orthopaedic physical therapy research expertise to organizations external to the Section. (1-3+ years)
5. Recognize members demonstrating research excellence in orthopaedic physical therapy. (1-3+ years)

GOAL #4
Promote knowledge of and provide support for physical therapists as an entry point in the management of musculoskeletal dysfunction.

Objectives:
1. Collaborate with other communities of interest to increase public recognition and appreciation for the role of physical therapists as an entry point for musculoskeletal evaluation, diagnosis, and treatment. (1-2 years)
2. Facilitate utilization of and reimbursement for physical therapists as the primary provider of management for musculoskeletal dysfunction. (3 + years)

GOAL #5
Actively strive to promote orthopaedic physical therapy presence in the legislative arenas and to protect orthopaedic physical therapy practice.

Objectives:
1. Promote the exchange of information relative to legislative rules and regulations.
2. Monitor the on-going activities related to practice issues in orthopaedic physical therapy.
3. Obtain input and provide resources for members regarding practice challenges. (1+ years)
4. Facilitate interaction and dialogue with other professions and organizations for the purpose of refining and defining common legislative goals. (1+ years)
5. Coordinate efforts of the Orthopaedic Section Practice Committee with other practice committees within APTA. (1+ years)

GOAL #6
Utilize technological advancements to educate and communicate with membership and facilitate Section governance.

Objectives:
1. Improve communication to members and other components using technology.
2. Improve member access to Section education programs through utilization of technology. (1 - 3+ years)
3. Convert Orthopaedic Section Board of Directors meetings to paperless meetings. (3 years)

GOAL #7
Generate alternate sources of revenue to increase benefits to members, protect fiscal solvency, and control costs.

Objectives:
1. Increase revenues and decrease costs within the structure of the Orthopaedic Section. (1 year)
2. Endowment fund. (1 year)
3. Increase revenue for orthopaedic physical therapy through educational products and services offered to external organizations. (1-3 years)

GOAL #8
Attain international recognition for the Orthopaedic Section.

Objectives:
1. Market professional development programs internationally. (1-3 years)
2. Grant SIG status to AAOMPT with the intention of continued representation in IFOMT by the Academy. (1-3 years)
3. Encourage all SIGs to establish relationships with the appropriate international organization.

GOAL # 9
Maintain current membership growth rate of 2%.

Objectives:
1. Facilitate student member conversion. (1 year)
2. Increase responsiveness to the needs

of current and future members. (1 year)
3. Utilize information from the need assessment survey to best address member's needs. (1 year)
4. Assure that Section publications continue to be a useful and valued member benefit. (1-2+ years)
5. Enhance lines of communication between leadership and membership. (1 year)
6. Address needs of culturally diverse members of the Section. (3 years)
7. Support continued growth and development of SIGs. (1 year)

GOAL #10
Develop and maintain a record of the Section's history. (2+ years)

Objectives:
1. Develop a pictorial history of the Orthopaedic Section.
2. Develop an audiovisual library of interviews with Section leaders.

SPONSOR-A-STUDENT PROGRAM

PURPOSE:
To initiate students to the Orthopaedic Section, APTA, Inc., and serve as a liaison and/or assist in the transition for the student preparing to enter the profession of physical therapy.

THE SPONSOR SHALL:
- Assist with introducing the student to the Orthopaedic Section.
- Serve as a role model and a resource for questions.
- Sponsor the student financially by funding a one year membership in the Orthopaedic Section. The cost for student membership is $15.00.

QUALIFICATIONS:
The sponsor must be a member of the Orthopaedic Section and interested in promoting the physical therapy profession.

FOR MORE INFORMATION ON THIS PROJECT, CONTACT THE ORTHOPAEDIC SECTION OFFICE AT 1-800-444-3982.

PROCESS:
1. Sponsor will send in Sponsor Application to the Orthopaedic Section office.
2. Office will enter sponsor in computer and send sponsor's application to the PT or PTA program within that sponsor's area (when possible), or to sponsor's school preference if indicated.
3. School liaison will coordinate with the students interested in participating; assisting with matching the student with a sponsor.
4. School will forward student's name to the Orthopaedic Section's office.
5. Orthopaedic Section will notify sponsor of his or her student.
6. Sponsor will contact assigned student.
7. An evaluation form will be sent to student participants and sponsors at the end of one year.

WHY GET INVOLVED?
To assist students in the transition from PT or PTA school to professional involvement in the APTA and the Orthopaedic Section.

SPONSOR APPLICATION

NAME: _____ PT___ PTA__

Other degree(s) earned: _____

WORK ADDRESS: _____

_____

SCHOOL PREFERENCE (if any): _____

1. Would you be willing to sponsor a student(s) from a different school than the school you listed? Y N
2. Would you be willing to sponsor a PTA student? Y N

AREAS OF EXPERTISE: (please state in 25 words or less)

_____

_____

_____

AREAS OF PROFESSIONAL INVOLVEMENT:

_____

_____

_____

AREAS OF PRACTICE:

_____ Ortho _____ Pediatric _____ Geriatrics _____ Private Practice _____ Sports Medicine
_____ Hand Rehab _____ Neuro _____ Home Health _____ SNF/ECF/ICF
_____ Academic Institution _____ Research _____ Hospital _____ Rehab Center (Inpt.)
_____ Rehab Center (Outpt.) _____ School System _____ Industry _____ Other _____

PLEASE RETURN TO:
ORTHOPAEDIC SECTION, APTA, INC.
2920 East Avenue South, Suite 200
La Crosse, WI 54601

CSM Preliminary Programming Schedule

Seattle, Washington

February 3-7, 1999

WEDNESDAY February 3, 1999

8:00-5:00
Management of Patellofemoral Pain: A Comparison of Treatment Strategies"
Christopher Powers, PhD, PT
Mark Looper, PT
Kate Grace, PT
Ron Hruska, PT

THURSDAY February 4, 1999

12:30-2:30
Captivating Learners: Teaching Strategies to Maximize Interest
Jody Gandy, PhD, PT

3:30-4:30
Update on Orthopaedic Specialty Certification
Jean Bryan, PhD, PT, OCS
Bill O'Grady, MS, PT, OCS, MTC
Michael Cibulka, MHS, PT, OCS

1:00-4:30
Research Platforms Session A & B

6:30-7:30
Meet the *JOSPT* Editor Reception

FRIDAY February 5, 1999

8:00-10:00 & 12:30-3:40
Research Platforms Session A & B

8:00-10:30 & 3:30-8:30
Orthopaedic Section BOD Meeting

8:30 – 10:30
Performing Arts SIG Programming
Moderator: Nicholas Quarrier, PT, OCS

8:30-9:30
Becoming a Performing Arts Mentor
Helen Mason, PT, PhD
Lisa Maatz, MA, MLS
Brent Anderson, PT
Shaw Bronner, PT
Marshall Hagins, PT

9:30-10:30
Getting Your Research Started
Nancy Byl, PT, PhD
Kathryn Roach, PhD, PT
Linda Van Dillan, PhD, MHS, PT

8:30 – 10:30
Occupational Health SIG HOT Topics
Moderator: Jenn Panageas, MSPT

8:30-9:30
Injury Prevention Exercise Programs - What Works, What Doesn't

9:30-10:30
Outcomes Driven Management of Industrial Low Back Injuries
Frank J. Fearon, DPT, OCS
Jurine D. Hatten, BS

9:30-10:30
TMJ: Searching for the Source of Symptoms
Alexa G. Dobbs, PT, OCS, COMT

12:30-4:30
Foot & Ankle SIG Programming
Moderator: Mark Cornwall, PT, PhD, CPed

12:30-1:30
Conservative and Surgical Management of Ankle Arthritis
RobRoy Martin, PT
Joseph Tomaro, MS, PT, ATC

1:30-2:30
Measuring Functional Outcomes for the Foot
Nancy Henderson, PT, PhD, OCS, COL, SP

2:30-3:30
Foot Orthotic Materials: What, Why, and When
Jim Birke, PT, PhD

3:30-4:30
Recognition and Management of Hallux Rigidus
Brian Pease, MS, PT, OCS

12:30-3:30
Pain Management SIG Programming
Moderator: Joe Kleinkort, PhD, PT

12:30-2:30
Developing an Integrated Approach to Pain Management
G. Frank Lawlis, PhD

2:30-3:30
Rapport, Relationship, and Compliance: Physical Therapy and the Difficult Patient.
Lisa Janice Cohen, MS, PT, OCS

12:30-4:30
Essential Components for Developing a Clinical Residency Program
Carol Jo Tichenor, MA, PT
Joe Farrell, MS, PT
Gail Jensen, PhD, PT
Mike Rogers, PT, OCS, LMPT
George Davies, MED, PT, ATC, SCS, CSCS
Toby Long, PhD, PT

12:30-2:00
JOSPT Board of Directors

2:30-3:30
Veterinary SIG Business Meeting

6:00-7:00
Performing Arts SIG Business Meeting

7:00-9:00
Performing Arts SIG Reception

SATURDAY February 6, 1999

8:30-10:30
Orthopaedic Section Business Meeting

12:30-3:30
Orthopaedic PTA Roundtable
Programming
Moderator:
Gary Shankman, PTA, ATC, OPA-C
Hip Fractures: Practical Treatment Strategies for the PTA
Trudy Goldstein, PT
Christopher Scott, BS, PTA, CSCS

12:30-4:30
Veterinary SIG Programming
Moderator: Lin McGonagle, MSPT, BS - Animal Science
David Levine, PhD, PT
Equine/Animal Physical Therapy
Lesley Kerfoot, PT, President of CHAP

Canine Physical Therapy
Wesley Rau, PT, MTC
Lin McGonagle, MSPT, BS - Animal Science

12:30-3:30
Manual Therapy Roundtable Programming
Moderator: Laurie Kenny, PT, OCS
Treatment of the Neurovascular Consequences of Repetitive Strain Injuries
Peter Edgelow, MA, PT
Patty Zorn, PT, M.AppSci, FAAOMPT

12:30-3:30
Performing Arts SIG and Occupational Health SIG Programming
Moderator: Nicholas Quarrier, PT, OCS

12:30-1:30
Ergonomic Solutions for the Injured Musician
Lori Stotko, OTR, CHT

1:30-2:30
CTD Prevention: Creating and Selling a Program
Mary Davenport, PT, OCS

2:30-3:30
Psychosocial Aspects of the Workplace: Issues Around Performance
Linda Hamilton, PhD

2:00-5:00
Research Platforms Session A

2:00-5:30
Research Platforms Session B

3:30-5:00
OHSIG Business Meeting

3:30-4:30
Orthopaedic PTA Roundtable Business Meeting

3:30-4:30
Manual Therapy Roundtable Business Meeting

3:30-4:30
Pain SIG Business Meeting

3:30-4:30
Foot and Ankle SIG Business Meeting

6:30-8:00
Orthopaedic Section Awards Program

8:00-11:00
Orthopaedic Section Anniversary Party

SUNDAY February 7, 1999

8:30-10:30
PT Marketing Strategies for the Future
Rick Watson, PT

8:00-12:00
Occupational Health BOD Meeting

1999 Poster & Platform Presentations

NOTE: You will find the complete abstracts in the January 1999 issue of the *Journal of Orthopaedic & Sports Physical Therapy.*

POSTER PRESENTATIONS

Adams KS.
Reliability And Comparison Of Three Methods For Measuring Forearm Supination And Pronation Active Range Of Motion.

Albano LM.
Using The SF-36 To Determine Functional Outcomes In A Structured Work Conditioning Program.

Alexander KM.
Effectiveness Of Strain-Counterstrain Techniques On A Patient With Chronic Lower Abdominal Pain.

Barr KB.
The Effect Of Weight Bearing Terminal Knee Extension Exercise On Vastus Medialis Obliquus & Vastus Lateralis Activity.

Mawdsley RH.
Reliability Of Two Methods Of Measuring The Hand With A Volumeter.

Brosky JA.
Rehabilitation Following Proximal Tibial Allograft For Treatment Of Giant Cell Carcinoma: A Case Report.

Brosky JA.
Musculoskeletal Screening Of A Group Of Municipal Fire Fighters: On-site Wellness And Prevention.

Russell BE.
Evaluation Of Muscle Strength Following Ankle Disc Training.

Butler BK.
Relating Life Events, Functional Disability, And Waddell Signs/Symptoms For Acute Nontraumatic LBP.

Buter BK.
Relating Stress, Waddell Signs, Waddell Symptoms, And Oswestry Disability For Naval Personnel With Acute Nontraumatic LBP.

Carpenter AD.
The Effectiveness Of Three Stretching Protocols On The Length Of The Iliotibial Band.

Cox RA.
Non-weightbearing, Partial Weightbearing And Full Weightbearing Orthotic Casting Techniques.

Dumont TL.
The Effects Of An Eccentric Exercise Program On Knee Pain, Knee Function, Quadriceps Femoris And Hamstring Strength, And Activity Levels In Patients With Jumper's Knee.

DuVall RE.
The Accuracy Of Manual Diagnosis For Spondylolisthesis: A Case Study.

Elpers KR.
The Use Of Myofascial Release Techniques As A Component Of The Rehabilitation Of Shoulder Dysfunction: A Case Study.

Ernst BA.
Windlass Taping Technique For Symptomatic Relief Of Plantar Fasciitis.

Greenan-Naumann AC.
Relationship Of Head Position To Cervical Muscle Endurance And Cervical Spine Flexibility In Healthy Adults.

Guthrie JA.
Functional Outcomes After The Ilizarov Reconstruction Procedure.

Farmer SR.
The Reliability Of CROM Instrument And Metric Ruler Measurements Of Resting Head Posture.

Greenwell N.
Hamstring Extensibility Changes Using Static Stretch Alone And Static Stretch Combined With Ultrasound.

Gulick PA.
Comparison Of Energy Expenditure Carrying A Single Strap And Double Strap Golf Bag.

Hagins M.
Intratester And Intertester Reliability Of The Palpation Meter (Palm) In Measuring Pelvic Position.

Hoffmann LM.
Case Report: Review Of The Rehabilitation Process And Functional Outcome Of An Individual Who Underwent Two Rotator Cuff Repairs To The Same Shoulder Following An Occupational Injury.

Hollman JH.
Comparison Of Knee Pathways Of The Instantaneous Center Of Rotation (Picrs) Produced During Two Different Movement Conditions.

Hoy DK.
Reliability And Validity Of The Figure-of-eight Method Of Measuring Ankle Edema.

Jefferson J.
Glenohumeral Components Of Shoulder Motion.

Kana M.
Reliability Of Two Goniometric Methods To Assess Shoulder Internal Rotation ROM.

Krugh J.
Cervical Radiculopathy: The Differential Diagnosis.

Kern C.
Michael Jordan's Vertical Jump.

Kuhl AM.
Comparison Of Hand-held Dynamometer And A Computerized Dynamometer In Assessment Of Isometric Quadriceps Performance.

Levsen M.
Cardiorespiratory Responses To Abdominal Stabilization Exercises Utilizing A Therapeutic Exercise Ball.

Lombardo G.
The Relationship Between Endurance Of The Scapular Retractors And Scapular Position In Asymptomatic Individuals.

Long DD.
Effect Of Carried Loads On Posture And Electromyographic Activity Of Cervical Muscles.

Ludewig PM.
Alterations In Scapular Muscle Activity In Persons With Shoulder Impingement Symptoms.

MacIntyre DL.
Muscle Soreness In Patients With Muscle Atrophy Who Are Beginning Weight-bearing And Eccentric Exercise.

Mangan PM.
The Effects Of Imagery And Belief In Imagery On Quadriceps Motor Performance.

Mariano MH.
Reliability Of The Modified-Modified Schober Method Of Measuring Lumbar Range Of Motion.

McCuen JC.
Reproducibility And Reliability Of Measuring Glenohumeral Versus Combined Shoulder Joint Motion Upon Physical Examination In Standing And Supine.

Menck JY.
A Manual Therapy Approach In The Treatment Of A Patient With T4 Syndrome.

Mitchell R.
Effect Of Carried Loads On Posture And Electromyographic Activity Of Lumbar Paraspinal Muscles.

Pfalzer L.
The Effectiveness Of Neural Tissue Provocation In The Treatment Of Neural Pathology In The Upper Extremity.

Reis T.
Physical Therapy Outcomes In Patients With Anterior Cruciate Ligament Reconstruction.

Schwanz LA.
Health Status, Goal Attainment, And Number Of Visits Of Knee Impaired Physical Therapy Patients: A Comparison Of HMS vs Fee-for-Service Insurance Plans.

Sekiya KM.
Electromyographic Study Of The Forearm And Upper Trapezius Musculature While Typing At Different Keyboard Heights.

Stumbo TA.
Effect Of Stabilization On Isokinetic Knee Extension/Flexion Torque And Electromyographic Activity.

Swanton JE.
Tensile Properties Of The Autogenous Quadruple-Stranded Semitendinosus-Gracilis Graft Used For Reconstruction Of The Anterior Cruciate Ligament.

Viti JA.
Use Of Upper Thoracic Manipulation In A Patient With Headaches.

Ward JD.
The Effectiveness Of A Postural Exercise Program On Reducing Forward Head Posture As Measured By The Cervical Range Of Motion Instrument.

Wilcox SM.
Campbell's Realignment And VMO Advancement Procedure For Recurrent Patella Luxation In The Adolescent: Physical Therapy Management.

Willett GW.
A Preventative Method For Reducing Hand And Wrist Repetitive Use Injuries In The Workplace.

Wilkinson SG.
The Influence Of Various Factors On Physical Modality Use By Physical Therapists For The Treatment Of Low Back Pain.

Willy R.
The Effect Of Cessation And Resumption Of Muscle Stretching On Joint Range Of Motion.

York AM.
Differential Diagnosis Of Low Back Pain: Work Injury Versus Coccidioidal Spinal Infection.

Zipple JT.
Peak Torque Production For Internal And External Rotation Of The Shoulder Joint In The Scapular Plane.

PLATFORM PRESENTATIONS

SESSION A
Thursday, February 4, 1999

Brooks J.
Use Of Outcomes Analyses To Direct Continuing Education Needs For Physical Therapists.

Walsh RM.
Self-rating Depression Scores In An Outpatient Physical Therapy Population- A Pilot Study.

Greenberger HG.
The Effects Of Active Exercise On The Onset And Recovery Of Delayed Onset Muscle Soreness.

Hart DL.
Effect Of Exercise History On Clinical Outcomes.

Hart DL.
Effect Of Orthopaedic Specialist Certification On Clinical Outcomes.

Hayes KW.
Skin Temperature Palpation In Evaluation Of Musculoskeletal Conditions.

Higgins D.
The Effects Of Contrast Therapy On Intramuscular Tissue Temperature.

Hughes JG.
Effect Of Two Harness Systems On Comfort Level And Energy Expenditure During Body Weight Supported Treadmill Exercise.

Masterson MM.
The Effect Of Static Magnetic Therapy On Blood Flow Velocity.

Ellison B.
Ergometer Usage In Physical Therapy Clinics Part 1: Physical Therapist's Knowledge Of Ergometer Operation And Calibration Procedures.

O'Connell DG.
Ergometer Usage In Physical Therapy Clinics Part 2: A Mechanical And Physiological Calibration Survey Of Ergometers Found In Physical Therapy Clinics.

Williams DA.
Conceptual Decision-making Framework For Musculoskeletal Tissue Injuries.

Zito MA.
Williams Syndrome: Screening A Young Adult Population For Musculoskeletal Dysfunctions.

SESSION B
Thursday, February 4, 1999

Anderson BD.
Cost Containment Of A Professional Ballet Company Through In-house Physical Therapy.

Bronner S.
The Dance Functional Outcome System: A New Measurement Tool.

Konecne JL.
Musculoskeletal Problems In Violinists And Violists.

McKenzie A.
Case Study Of Focal Hand Dystonia Ina Professional Flutist: Somatotopic Reorganization Of The Cortex As Measured With Magnetic Resonance Imaging.

Medoff L.
Neuromuscular Retraining Of Injured Musicians.

Isernhagen SJ.
Optimum Timing For Fce And Return To Work.

Isernhagen SJ.
Return To Work Levels Among Those Who Participated In A Work Conditioning Program.

Strikeleather SJ.
Theoretical Conceptualization Of A Questionnaire Designed To Measure 'Perceived Injury Legitimacy' In A Sample Of Patients On Workers' Compensation.

Tschoepe B.
Muscular Fatigue Patterns And Postural Alterations With Five Selected Keyboard Designs.

Marks AN.
The Presence Of A Posterior-anterior Glide Of The Femur In The Acetabulum: A Cadaver Study.

Milidonis MK.
A Patient Expectations Model For Persons Who Undergo Total Hip Replacement.

Shaffer SW.
Femoral Neck Stress Reaction Presenting As Medial Knee Pain: A Case Study.

Worrell TW.
The Influence Of Joint Position On Emg And Force Generation During Maximal Voluntary Contractions Of The Hamstrings And Gluteus Maximus Muscles.

SESSION A
Friday, February 5, 1999

Bales S.
Manual Therapy And Dosed Exercise With Adhesive Capsulitis.

Gibbs M.
Measurement Of Head And Shoulder Posture Variables In Coal Miners.

Howard PD.
The Effect Of A Radial Nerve Biased Neurodynamic Test On Shoulder Abduction In Asymptomatic Adults.

Johnson GC.
Outcome After Sternoclavicular Joint Resection And Physical Therapy: A Case Study.

Johnson MP.
Validity Of A New Method To Assess Scapular Upward Rotation In Healthy Subjects.

Leggin BG.
Rehabilitation Following Latissiums Dorsi Transfer For The Treatment Of Massive Rotator Cuff Tear: A Case Report.

Maas RD.
Utilizing Scapular Upward Rotation For Taping And Supporting A Type Ii Acromioclavicular Joint Separation: A Case Study.

McClure PW.
Direct Three-dimensional Measurement Of Scapular Kinematics During Dynamic Movements In Vivo.

Michener LA.
Comparison Of A Single Global Rating Of Shoulder Function Score Versus The Modified American Shoulder And Elbow Surgeon's Score.

Roddey TS.
Shoulder Functioning: Do We Measure It Well All Of The Time? Some Of The Time? Or None Of The Time?

Ross MD.
Reliability Of The Apley's Range Of Motion Test And Dominant And Nondominant Upper Extremity Differences.

Carter SK.
Abdominal Muscle Activation During Proprioceptive Training.

DeRosa C.
The Morphology Of The Abdominal Muscles: Implications Of Function From Structure.

Schuit D.
The Effect Of Maximum Flexion And Extension On Active Lumbar Side Bending And Active Lumbar Rotation.

Walsh RM.
Iontophoresis Accelerates Recovery In Acute Low Back Pain.

Williams KI.
Long Term Satisfaction, Efficacy, Outcomes And Costs In Patients With Low Back Pain Receiving Physical Therapy: A Comparison Between The Outpatient Hospital And Private Practice Settings.

SESSION B
Friday February 5, 1999

Carley PJ.
The Impact Of Sized Polyurethane Shoe Inserts On Reducing Back And Knee Pain.

Cook CE.
Determining Best Practices Through Outcomes For Therapists Treating Patients With Low Back Impairments.

Berkey JL.
The Effect Of Hamstring Length On Thoracolumbar-pelvic Motion In Young Female Gymnasts And Non-gymnasts.

Fritz JM.
A Comparison Of The Ahcpr Guidelines Versus A Classification Approach To The Treatment Of Acute, Work-related Low Back Pain. Preliminary Report Of A Randomized Clinical Trial.

Fritz JM.
The Validity Of Waddell's Nonorganic Physical Signs And Symptoms In Patients With Acute Work-related Low Back Pain.

Hagins MA.
The Effects Of A Lumbar Stabilization Program As Measured By An Isometric Stability Test.

Hinton JH.
Dynamic Spinal Flexion Range Of Motion: Its Correlation To Hamstring Muscle Length In Men And Women Between 20 And 30 Years Of Age.

Jefferson J.
The Effects Of Cervical And Lumbar Spine Position On Knee Flexion Angle During Prone Knee Bending In Normals.

Johnson DV.
Use Of The Rand-36 Health Survey To Assess Change In Physical Therapy Patients With Low Back Pain.

Levangie PK.
The Association Of Static Pelvic Asymmetry And Low Back Pain.

Levangie PK.
The Association Of Four Subjective Tests Of Sacroiliac Joint Dysfunction With Static Pelvic Asymmetry And Low Back Pain.

Myers JR.
Lumbar Stabilization Exercises: EMG Analysis Of Co-contraction.

Ross MD.
Physical Therapy And Functional Outcomes For Patients With Low Back Pain.

Nitz AJ.
Response To Treatment Of Cervical Spine Dysfunction Using The Pronex Home Traction Device.

Wass DR.
Patient, Treatment, And Outcome Characteristics Of Individuals Receiving Physical Therapy For Cervical Spine Disorders.

Wilmarth MA.
A New "User Friendly" Instrument For Measuring Head Posture And Specific Cervical Spine Curvature.

SESSION A
Saturday February 6, 1999

Donaldson DM.
The Effects Of Fatigue On Active Position Sense At The Knee.

Fearon FJ.
The Effects Of McConnell Taping Versus Patella-loc System On Quadriceps Femoris Torque Production And Subjective Pain Reports With The Visual Analog Scale In Patients Diagnosed With Patellofemoral Pain Syndrome.

Fitzgerald GK.
A Comparison Of Two Non-operative Rehabilitation Programs For Early Return To High Level Physical Activity After Anterior Cruciate Ligament Injury.

Manal TJ.
The Presence Of Reflexive Quadriceps Inhibition In The Acute Patellar Contusion Population.

Levine CD.
Rate Of Return To Home And Community Activities After Total Knee Arthroplasty.

Riegger-Krugh C.
The Visible Human Knee.

Tercyak CA.
Alterations In Pain Perception And Patellar Position In A Subject With Patellofemoral Syndrome: Comparison Of Two Taping Procedures.

Watson CW.
Reliability Of The McConnell Classification System Of Static Patellar Orientation.

Pfeufer DS.
Reduction Of Forefoot Plantar Pressures Using Regionally Specific Outsole Modifications.

SESSION B
Saturday February 6, 1999

Dennis A.
Comparison Of Running Kinematics And Flexibility Between Novice And Elite Runners.

Martin RL.
Development Of The Foot And Ankle Disability Index (FADI).

McCauley CM.
A Comparison Of The Effects Of Hot Pack Application And Exercise In The Lengthening Of The Gastrocnemius In College-Aged Females.

Mercer SR.
Meniscoids And Anterolateral Ankle Impingement.

Moddeman KE.
Muscle Fatigue About The Ankle And Its Relationship To Standing Balance.

Nawoczenski DA.
Outcomes Following Non-operative And Operative Treatment For Hallux-rigiddus Deformity: A Case Study.

Sawhney R.
Long Term Compliance Of Patients Using Functional Orthotics For Plantar Fasciitis.

Vansant RS.
The Symmetry Of Plantar Pressure Patterns In Healthy Subjects During Walking.

Williams DS.
Reliability and Validity Of Several Arch Characterizing Measurements.

Sneak Preview 9.3

Orthopaedic Rehabilitation for Seniors

Course Description

This course focuses on the physiological aspects of aging relative to the musculoskeletal system. It discusses specific implications for rehabilitating older patients. You also will learn techniques for maintaining health and fitness, preventing falls and disability, and advising seniors about sports participation.

Topics And Authors

Biology and Physiology of Aging
Terry Holley, PT

Bone Changes in Older Persons
Jennifer Bottomley, PhD[2], PT

Common Fractures in Older Persons
Edmund Kosmahl, PT, EdD

Total Joint Arthroplasty
Michael Moran, ScD, PT and Mark Brimer, PhD, PT

The Aging Athlete
Tim Kauffman, PT

Balance, Incoordination, and Dizziness
Sue Whitney, PhD, PT, ATC

Please watch for further details.

ORTHOPAEDIC PHYSICAL THERAPY PRACTICE

Susan A. Appling, MS, PT, OCS, Editor
Sharon L. Klinski, Managing Editor
800/444-3982

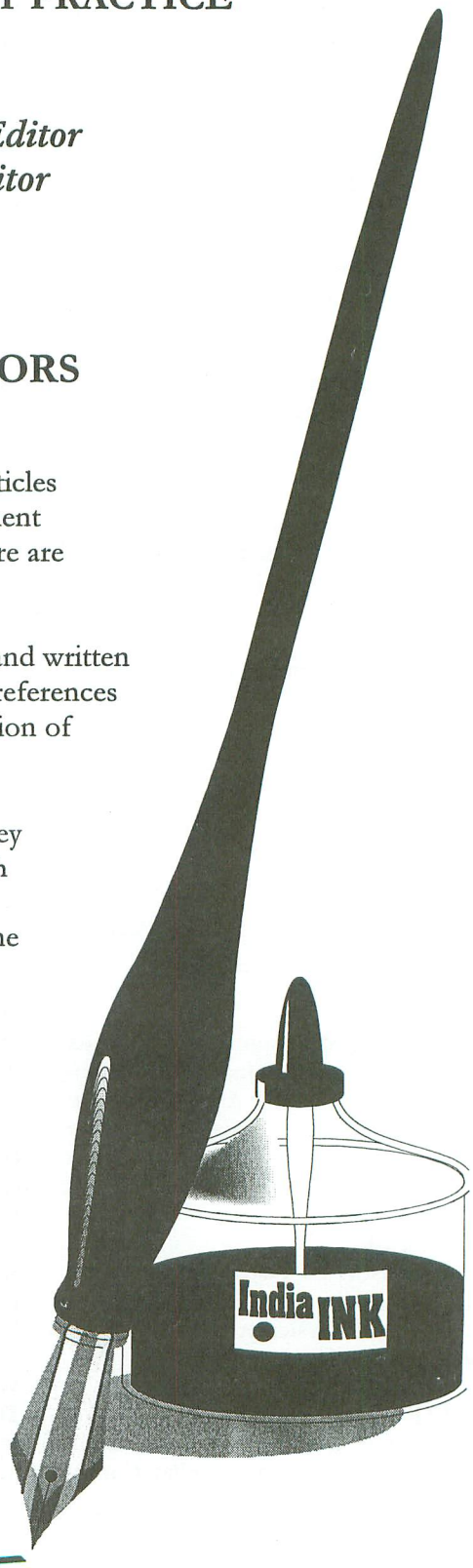
INSTRUCTIONS TO AUTHORS

1. *Orthopaedic Physical Therapy Practice (OPTP)* will publish articles pertaining to clinical practice. Articles describing treatment techniques as well as case studies and reviews of literature are acceptable.

2. Manuscripts should be reports of personal experiences and written as such. Though suggested reading lists are welcomed, references should otherwise be kept to a minimum with the exception of reviews of literature.

3. Two copies of the manuscript should be submitted. They should be double spaced, with one-inch margins on each side. The title page should include the author's name, degree, title, place of work, corresponding address, phone and FAX numbers, and email address. The manuscript should be sent to: *Orthopaedic Physical Therapy Practice*, ATTN: Managing Editor, 2920 East Avenue South, Suite 200, La Crosse, WI 54601-7202.

4. Black and white photographs to accompany the text should be glossy 5 x 7. A photo release form must accompany any photographs where patients may be seen. Any tables that might add to the usefulness of the article are also welcome.



Occupational Health Physical Therapists Special Interest Group

Orthopaedic Section, APTA, Inc.

Fall 1998 Volume 5, Number 3

THREE YEAR STRATEGIC PLAN

Introduction

The Strategic Plan of an organization exists to focus on achieving the organization's specific goals. The structure of an organization exists to organize the business and administration of the organization's work as it strives to attain its specific goals.

Programs

Within the Occupational Health Physical Therapy Special Interest Group (OHPTSIG) are 10 programs (not consecutively numbered) specific to administration of the OHPTSIG that parallels programs within the Orthopaedic Section. The 10 OHPTSIG programs are:

Program 01:	Governance	Program 09:	Finance
Program 04:	Membership	Program 10:	Practice
Program 05:	Education	Program 13:	Public Relations
Program 06:	Publications	Program 14:	Awards
Program 07:	Research	Program 16:	Nominating

General Goals

It is evident that the division of programs follows administrative and organizational structure and process. Achieving OHPTSIG goals requires the utilization of resources across program lines. Therefore, it is appropriate to produce a Strategic Plan that focuses on goals, regardless of which programs provide the resources to achieve the goals.

(Strategic Plan Goals continued on page 40)

The OHPTSIG Board Retreat in St. Louis, MO in September 1998 proved to be a very productive planning session. The Executive Board members worked diligently through the weekend to set a progressive course for the OHPTSIG. The revised OHPTSIG THREE YEAR STRATEGIC PLAN combines innovative ideas and aggressive, process-oriented goals to be achieved into the new millenium.

The Board welcomes and encourages OHPTSIG membership input in organizational planning and program development as well as member participation in OHPTSIG committees, task forces, publications, and annual meetings. OHPTSIG member input is critical to our SIG's growth and long-term viability. It is imperative that OHPTSIG activities continuously add value for members. On balance, our goal is to promote and enhance occupational health physical therapy practice.

Membership response to the questions below will assist the OHPTSIG Board in reaching current goals, working toward future goals, and setting long-term objectives:

1. What is your opinion of the OHPTSIG Three Year Strategic Plan?
2. What type of educational programming would you like to see the OHPTSIG sponsor at CSM 2000?
3. The following documents currently comprise The Compendium of Occupational Health Physical Therapy:
   - Definition of Occupational Health Physical Therapy
   - Guidelines for PT Management of the Acutely Injured Worker
   - Guidelines for Evaluating Functional Capacity (FCE)
   - WC / WH Guidelines (Guidelines for Programs for Injured Workers)
   - Injury Prevention and Education Guidelines

(Continued on page 42)

CONTENTS

Strategic Plan
(Specific Action Plans)

Goal 1: ***Administration***

Ensure that the regular business of the OHPTSIG occurs efficiently and effectively.

Goal/ Plan	Action Plans	Program	Office	Target Date	Comp Date
1.1	Maintain a viable membership and an up-to-date membership roster.	04	Treasurer	Feb	
1.2	Hold annual nominations and elections for officers of the OHPTSIG.	16	Nominating Chair	Oct	
1.3	Hold Board of Director meetings four times - CSM, Fall retreat, two conference calls.	01	President	Feb May Sept Dec	
1.4	Hold annual membership meeting at CSM.	01	President	Feb	
1.5	Review and confirm committee appointments.	01	OHPTSIG Board	Feb	
1.6	Review and update by-laws as necessary.	01	OHPTSIG Board	Nov	
1.7	Maintain a Policy and Procedure Manual.	01	VP	Feb	
1.8	Maintain a three-year Strategic Plan.	01	VP	Feb May Sept Dec	98
1.9	Nominate members for awards and recognize outgoing officers.	01	Nominating Chair	Feb	

Goal 2: ***Communication***

Facilitate two-way communication between OHPTSIG members and the Board within the OHPTSIG, between the OHPTSIG and other components of the APTA, and between the OHPTSIG/APTA and external organizations.

Goal/ Plan	Action Plans	Program	Office	Target Date	Comp Date
2.1	Provide OHPTSIG Board reports to the membership.	06	Secretary	March June Sept. Dec.	
2.2	Seek membership suggestions for, and input on:	04	VP	Dec	
	2.2.1 Desired education programs	05	Education	Dec	
	2.2.2 Desired documents and plans	04	Chair	Dec	
	2.2.3 Drafted documents and plans	10	Practice Chair Research / Practice		
2.3	Disseminate reports and compile/edit publications, including:	06	Secretary	March	
	2.3.1 OPTP Newsletter		Secretary	June	
	2.3.2 Mail Communications		Secrtetary/ OHPTSIG Board	Sept. Dec.	
2.4	Communicate the contents of documents and plans developed by the OHPTSIG and other organizations, both internal and external, to the OHPTSIG membership.	06 13	Secretary	Ongoing	
	2.4.1 Ergonomics Guidelines				7-98
	2.4.2 Injury Prevention Guidelines				7-98
2.5	Establish a OHPTSIG component to the Orthopaedic Section Web Site	06	Secretary/	6-99	
	2.5.1 Obtain Orthopaedic Section approval	13	Ortho	2-99	
	2.5.2 Approve design and content		Section	2-99	
	2.5.3 Explore the requirements and potential for development of an OHPTSIG list serve			2-99	

Goal 3: *Research*

Define and improve the body of knowledge that is essential for physical therapists to practice safely and effectively within the realm of occupational health.

Goal/ Plan	Action Plans	Program	Office	Target Date	Comp Date
3.1	Monitor and analyze the environment in which occupational health physical therapy occurs with respect to outcomes, reimbursement, case law, and education.	07 10	Research Chair	Ongoing Nov 98	
	3.1.1 Draft a proposal to the Orthopaedic Section to secure services of a practice environment "watchdog."	06	Practice Chair	Dec 98 Feb 99	
	3.1.2 Disseminate draft document to the OHPTSIG for review and comment.				
	3.1.3 Present the proposal to the Orthopaedic Section Board of Directors for consideration and approval.				
3.2	Provide information to the APTA and the FPT concerning research priorities within the realm of occupational health.	07 05	Research Chair/		
	3.2.1 Attend the APTA research agenda.		Education	12-98	
	3.2.2 Convene a similar research priority group within the OHPTSIG coordinating this effort with the Orthopaedic Section.		Chair	02-00	

Goal 4: *Education*

Contribute to the professional development of physical therapists providing services within the realm of occupational health.

Goal/ Plan	Action Plans	Program	Office	Target Date	Comp Date
4.1	Provide educational opportunities each year at CSM.	05	Education Chair	April	COMP 99
4.2	Produce advanced level Orthopaedic Home Study Courses on topics relevant to Occupational Health .	05	Scott Minor	Oct 98	
	4.2.1 Explore the feasibility of advanced home study courses with the Orthopaedic Section.				
	4.2.2 Explore feasibility of the Orthopaedic Section developing Internet self-directed learning modules.		Education Chair	Sept 99	

Goal 5: *Practice*

Promote professional practice and appropriate reimbursement in occupational health physical therapy through development, dissemination, and implementation of guidelines and competencies.

Goal/ Plan	Action Plans	Program	Office	Target Date	Comp Date
5.1	Complete the Injury Prevention Guidelines and bring them before the APTA Board of Directors for approval as an APTA document.	10 06		Practice Chair	10-98
5.2	Complete the Ergonomics Guidelines and bring them before the APTA Board of Directors for approval as an APTA document.	10 06	Practice Chair		2-99
5.3	Initiate and complete the Guidelines for Payers, Guidelines for Employers, Issues of Reimbursement and Regulation, Legal and Risk-Management Issues documents, and bring them before the APTA Board of Directors for approval as an APTA document.	10 06	Practice Chair	10-99	
5.4	Review and revise all existing Occupational Health PT Compendium documents into a consistent publication style without content alteration.	10	Practice Chair	2-99	
	5.4.1 Republish all existing Compendium documents.				
	5.4.2 Notify APTA Publications of the title change from *Guidelines for Treatment of Injured Workers* to *Work Hardening / Work Conditioning Guidelines* .				
5.5	Develop a plan for additional guidelines.	10	Practice Chair	6-99	
	5.5.1 Pre-Placement / Post-Offer Screening	06			
5.6	Publish the Occupational Health PT Compendium as a unified document.	10	Practice Chair	3-00	
5.7	Recommend updates and revisions of Occupational Health PT Compendium component documents.	10 06	Practice Chair	3-00	
5.8	Explore the development of clinical competencies in occupational health physical therapy practice.	10	Practice Chair/	2000	

- Guidelines for Ergonomics

Topics listed below will be documents that are added to the Compendium by year-end 1999:

- Guide for Employers in Utilization of PT
- Guide for Payers
- Issues of Reimbursement and Regulation in OHPT
- Legal and Risk Management Issues in OHPT
- Pre-Placement / Post-Offer Screening

What additional areas would be appropriate for a useable and comprehensive occupational health physical therapy practice guide?

4. Do you currently have Internet web site access?
5. What information would you like to see on an OHPTSIG web site?
6. If you are an OHPTSIG member, please submit your name with your e-mail address. If you are not currently a member of the OHPTSIG, submit your name, address, telephone number, and e-mail address with a request to join the OHPTSIG (you must concurrently maintain membership in the Orthopaedic Section APTA, Inc.).

Please contact the Orthopaedic Section office (tfred@centuryinter.net) with comments by November 30, 1998.

Respectfully submitted to the OHPTSIG Membership by Bobbie Kayser, OHPTSIG Secretary

Bobbie Kayser, OHPTSIG Secretary and Publications Chair

PROPOSED BYLAWS CHANGES FEBRUARY 1998 FOR APPROVAL BY THE MEMBERSHIP FEBRUARY 1999:

The following OHPTSIG Bylaws changes are published in OPTP for OHPTSIG membership review and comment. The proposed changes will be on the agenda for vote approval by the membership at CSM 1999, Seattle, WA. Comments and/or suggestions for changes should be submitted to the Orthopaedic Section office (tfred@centuryinter.net) no later than November 30, 1998.

ADD the following to:

ARTICLE VII. OFFICERS, EXECUTIVE BOARD Section III. Vacancies

If an elected officer is unable to complete the term of service or fails to effectively carry out assigned duties, the Executive Board shall appoint within two (2) months an eligible member to serve the unexpired portion of the term. If this elected officer is the President, the Vice President will assume the duty of President and the Executive Board shall appoint within two (2) months an eligible member as Vice President.

Rationale: This change would make vacancies for Officers congruent with Committee vacancies

(ARTICLE VIII. COMMITTEES, Section V. Vacancies)

helps clarify the

for any reason

in ARTICLE VII. OFFICERS,

EXECUTIVE BOARD: Section I. SIG Officers G. Which reads:

If the office of President becomes vacant for any reason, the office shall be assumed by the Vice President for the duration of the term. All other officer vacancies will be filled by appointment of the SIG Executive Board for the unexpired portion of the term.

ensures experienced SIG leadership at the earliest possible date.

clarifies the intent of our original bylaws.

Change two year terms to three.

(Kathy Lewis resigned her position as Bylaws Chair February 1998)

OHPTSIG Executive Board Meeting February, 1998

MOTION: Delete Bylaws chair and Bylaws Committee because the bylaws are in place via the Orthopaedic Section and only minor changes will need to be made periodically which will be monitored and facilitated by the Vice President of the OHPTSIG.

MOTION: Bobbie Kayser

Second: Scott Minor

Approved unanimously by the OHPTSIG Board members present.

Submitted for membership review and feedback by Deborah Lechner, OHPTSIG Vice President

Bylaws have been printed as submitted by the OHPTSIG.

FOOT & ANKLE

SPECIAL INTEREST GROUP
ORTHOPAEDIC SECTION, APTA, INC.

CHAIRS REPORT

As we move towards CSM in Seattle, the committees of the FASIG have been working tediously to finalize their plans for the upcoming year. The educational agenda is already in place for Seattle, thanks to the work of our educational chair, Mark Cornwall. This should prove to be another well attended day of educational programming. Also the concept of retreat will soon become reality as a result of the cooperative efforts of Irene McClay and the Research Committee. This conference will tentatively take place in New York, May 1999. The plans for this meeting will attempt to bring the ideas of clinicians and researchers together, which will hopefully be finalized at CSM in Seattle.

As a result of funding appropriated by the Orthopaedic Section, the FASIG is moving forward with plans to forge a working relationship with the American Orthopedic Foot and Ankle Society (AOFAS). I will be meeting with the liaison of this organization at CSM in order to formalize the goals and objectives between our two groups.

On another note, on behalf of the entire FASIG, I would like to congratulate Tom McPoil, PhD, PT on receiving the Award for Excellence in Teaching Orthopaedic Physical Therapy. Tom is certainly worthy of such an honor and has made excellent contributions in his area of teaching.

One of the issues which was resolved at last CSM was that each presenter from the educational meeting would submit his presentation in abstract form in OP on a quarterly basis. In the next several pages, I have attempted to summarize my lecture entitled, "The Sinus Tarsi Syndrome" presented at CSM 1998. Please feel free to voice your comments or questions.

I look forward to meeting with all of you at CSM Seattle, 1999. I also hope that if you are not already a member of the FASIG, that you will consider joining our organization. Remember, there is no membership fee if you are already an Orthopaedic Section member.

With regards,
Stephen P. Baitch, PT
Chairman, FASIG

Sinus Tarsi Syndrome: Evaluation and Treatment
A lecture presentation overview – CSM Boston 1998

Stephen P. Baitch, PT

Sinus tarsi syndrome (STS) is one of the most frequently misdiagnosed conditions of the foot and ankle; it is defined as, "persistent pain, anterior and inferior to the lateal malleolus." The structures involved in sinus tarsi syndrome are not well defined, and therefore, the evaluation and treatment of this entity is made even more difficult. The anatomy of the sinus tarsi includes the lateral extension of the tarsal canal, the inferior surface of the talus and dorsal surface of the calcaneous. It also includes the posterior, middle, and anterior facets of the subtalar joint. The ligamentous structures include the talocalcaneal, cervical, interosseous, and bifurcate ligaments. The soft tissue structures that are comprised within the sinus tarsi are the origin of the extensor digitorum brevis, the inferior extensor retinaculum, the dorsal cutaneous nerve, and adipose tissue.

O'Conner first described tarsi syndrome in 1958 but noted a lack of positive diagnostic findings or histologic changes. In 1981 Taillard discovered abnormal subtalar joint arthrograms in some patients with STS. Kirk and Hecker noted that the pain might be caused by damage to the anterior talofibular ligament along with possible peroneal nerve entrapment. Diagnostic findings including X-rays, MRI, and bone scans are negative. The best diagnostic tool may be a cortisone injection into the sinus tarsi region, which often provides temporary relief of pain.

Patients with STS often present with a history of ankle sprain or even a previous ankle fracture. The signs and symptoms of sinus tarsi include: (1) diffuse pain that is anterior and inferior to the lateral malleolus, (2) complaints of lateral ankle instability, and (3) mild swelling anterior and inferior to the lateral malleolus as well as pain on palpation in this area.

Conservative management of sinus tarsi syndrome generally consists of nonsteriodals, cortisone injections, and physical therapy. The success rate of these regimens is noted in the literature as having temporary or minimal success. Surgical management of STS has also been

reported in the literature with mixed results. Taillard, in 1981, operated on seven patients with STS, five of which had postop pain after one year. Kuwanda, however, reported that 66 out of 88 patients with STS required surgery and that all 66 patients had a 100% success rate following surgery.

The true cause of sinus tarsi syndrome is not well understood. However, there is a fair amount of evidence to suggest that the cause is secondary to abnormal foot biomechanics. In 1991, Eric Fuller proposed two theories regarding abnormal foot mechanics as a cause of sinus tarsi syndrome. The first theory is that abnormal foot pronation causes excessive talar adduction and plantarflexion, which creates an abuttment between the sinus floor and the anterior aspect of the lateral process of the talus. This abnormal pronation leads to fat pad or synovial impingement in the sinus tarsi region. The pain caused by the impingement results in decreased firing of the peroneals, and thus increases the pronation torque around the subtalar joint axis. This results in causing more pain and instability.

The second theory revolves around the concept that STS may be secondary to a previous ankle sprain, leading to damage of the cervical or interosseous ligament. The inversion ankle sprain causes proprioceptive nerve damage that inhibits peroneal firing, thus contributing to pain and subtalar instability.

In my clinical experience, I can concur with both of Fuller's theories in that most of the patients with STS do exhibit excessive pronation and also in many cases have a history of chronic ankle sprains. The biomechanical faults that I have observed in patients with STS include: (1) excessive midtarsal and subtalar joint pronation, (2) a resting calcaneal stance position of greater than 5° everted, (3) a resting calcaneal stance position which is asymmetrical (ie, inverted vs everted calcaneous).

The high incidence of abnormal biomechanics as a cause of sinus tarsi syndrome has prompted the use of orthotic devices which have produced a great deal of success. The biomechanical rationale for the use of orthotic devices is as follows: (1) the pain is caused by increased pronation torque around the subtalar axis, (2) the pronation torque is opposed by an equal and opposite torque, (3) the orthotic provides the needed supination torque at the subtalar joint axis. Kirby best described the biomechanical rationale for orthotic devices when he stated, "The supination moment generated by the orthosis on the subtalar joint, effectively neutralizes the interosseous compression forces within the sinus tarsi."

Once STS has been diagnosed, temporary orthotics such as a medial wedge, cobra pad, or low dye strapping can be implemented to determine the potential effectiveness of a custom orthosis. A semi-rigid or rigid custom orthotic made from a neutral suspension cast is then fitted to the patient, with the necessary forefoot and rearfoot posting.

As the results of our survey indicated (see survey results below), the standard prescription orthotic may not always be totally effective in the treatment of sinus tarsi syndrome. In these cases, the use of the Blake Inverted or Kirby medial skive technique may be necessary to provide better motion control of the foot.

This brief overview of the lecture presented at CSM in Boston, 1998 is an attempt to outline the critical aspects of sinus tarsi syndrome in regards to evaluation and treatment.

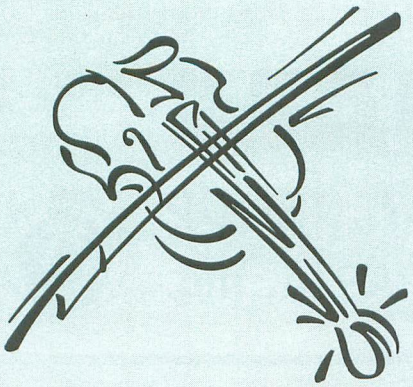
For complete references, please contact the author.

SURVEY RESULTS

Baitch, Maloney (1997)

Number of sinus tarsi cases	38
Surveys returned	19

- → 9 out of 19 patients had previous trauma (ie, fx or ankle sprain)
- → The resting calcaneal stance positions (RCSP) were as follows:
  16 pts were everted
  2 perpendicular
  1 inverted
- → Of the 19 returned surveys, 15 had decreased pain with orthotic therapy.
- → Of the 15 patients with decreased pain, 7 required a standard prescription and reported decreased subjective pain level (0-2).
- → Of the 15 with decreased pain, 8 required additional inverted orthotic technique (5-15° inverted) and reported full relief of symptoms.



Performing Arts

SPECIAL INTEREST GROUP **ORTHOPAEDIC SECTION, APTA, INC.**

PASIG Membership Directory and Mentorship Questionnaire

Questionnaires continue to come in. Please submit your questionnaire ASAP. This will allow new PASIG members to be included in our updated Directory. The Directory will be available at CSM '99, or after that, through Tara at the Orthopaedic Section office for a nominal fee.

PASIG Membership News

Congratulations to Nick Quarrier and Amy Wightman on the publication of their case study entitled "A ballet dancer with chronic hip pain due to a lesser trochanter bony avulsion: The challenge of a differential diagnosis." Interested readers can find it in *J Orthop Sports Phys Ther* 28(3): 168-173.

Bob Turner will be providing therapy coverage and services to the new all-male Broadway production of Swan Lake.

Shaw Bronner and Bruce Brownstein are pleased to announce the move of their lab, Soar Research, to the Brooklyn campus of Long Island University. Soar Research at LIU Brooklyn is a biomechanics lab devoted to studying dance movement, motor control, and injury. It is their hope to foster multidisciplinary and multi-site collaboration in dance research.

PASIG Nominations for President and Treasurer

Due to the schedule change of the September issue of *OP,* nomination deadlines were extended. Ballots and candidate statements will be mailed to our members on 11/30 and all ballots must be returned to the Orthopaedic Section office by 12/31/98. In addition to selecting a President and Treasurer, members will be asked to vote on proposed amendments to the PASIG Bylaws.

Request for Membership Participation in *OP*

OP is a forum for special interest articles in the performing arts. If you have an interesting story, aren't ready to write for a more scholarly or research publication, or have information we should disseminate to our members, please pass it on to the PASIG secretary, Shaw Bronner. [E-mail: sbronner@liu.edu]. [New phone number at Soar Research: (718) 246-6375 and fax: (718) 246-6385].

PASIG Executive Board

President: Brent Anderson PT, OCS phone: (305) 529-0023 fax: (305) 284-4534 e-mail: brentlizet@ shadow.net

Vice President: Nick Quarrier PT, OCS phone: (607) 274-3053 fax: (607) 274-1137 e-mail: nquarrie@ithaca.edu

Treasurer: Jennifer Gamboa PT phone: (703) 528-3980 fax: (703) 528-3980 e-mail: jennS26@AOL.com

Secretary: Shaw Bronner, PT, MHS, OCS phone: (202) 752-4021 fax: (212) 752-4029 e-mail: sbronner@liu.edu

Veterinary

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SIG COORDINATOR
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FAX: (608) 788-3965
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UPCOMING COURSES

Integrative Therapies in Health Care
November 5-8, 1998 Orange Park Acres, CA
Speakers: Gail Wetzler, PT
Susan Crawford, DC
Donna Starita, DVM
Contact: The Upledger Institute
800/233-5880 ext 4552 $500
Call for more information and course outline. Additional dates and locations may be available in the future.

Plan Ahead for CSM!
Veterinary Physical Therapy
February 6, 1999 Seattle, WA
Speakers: Lesley Kerfoot, PT, CHAP
"Equine Physiotherapist"
Wesley Rau, PT
"Canine Manual Therapy"

Canine Physical Therapy I
June 1999 Knoxville, TN
Speakers: David Levine, PT, PhD
Darryl Millis, DVM
Contact Tara Fredrickson, Orthopaedic Section, APTA
800/444-3982
For: Physical Therapists, Physical Therapist Assistants, Veterinarians, Veterinary Technicians, and Students of those professions

First International Symposium on Rehabilitation and Physical Therapy in Veterinary Medicine
August 7-11, 1999 Oregon State University
Speakers: 60 International Contributors
Contact: Linda Blythe, DVM, Dean, Veterinary College
541/737-2098 $300 range
Call for more information and conference brochure.

EDUCATION PLAN

In the last newsletter we introduced the Canine Education Plan. This issue includes the Equine Plan and the Wildlife/Exotic/Farm Animal Plan. Our goal is to create a curriculum to support the certification process. We hope to establish 4-5 education centers across the country linked to veterinary and physical therapy colleges, ie, New York, Tennessee, Colorado, California, and North Carolina. A series of up to 7 courses would be provided over a period of 2 years for each area of interest. The format of the basic classes would include: lecture, laboratory sessions, and demonstrations. Advanced topics would be optional and will be provided when sufficient numbers of therapists, veterinarians, or veterinary technicians register for the classes. Please remember the curriculum is in the development stage. We welcome your input and suggestions.

We have had many questions about who can attend our courses. Our policy is to allow only physical therapists, physical therapist assistants, veterinarians, veterinary technicians, and students of those professions to attend our courses. In limiting the registrant to these professionals, we are supporting the AVMA national guidelines and state veterinary and physical therapy practice acts. If we were to allow other people who are interested in veterinary medicine and physical therapy, it would contribute to unethical and illegal practice. This may be frustrating to some of your colleagues and friends. We apologize for any confusion or inconveniences you may have experienced when registering for the Equine Physical Therapy I course. Our policy will be clearly stated in our future course brochures and advertisements.

VETERINARY PHYSICAL THERAPY EQUINE EDUCATION PLAN

Basic Topics:

Anatomy and Physiology
Biomechanics
Evaluation
Surgical Procedures
Safety and Handling
Behavior
Functional Training
Musculoskeletal Dysfunction
Treatment and Home Programs
Geriatrics
Pharmacology
Orthotics/Prosthetics

Laboratory Sessions:

Anatomy Dissection
Gait Evaluation
Handling and Restraint

Demonstrations:

Performance Center with Treadmill or Pool
Riding/Working Horses: Dressage, Rodeo, Jumping, Driving, Circus
Orthopaedic/Neurological Surgery

Courses:

Equine Physical Therapy I – Introductory Course – 2½ days with demonstrations
Equine Anatomy/Physiology – 4 days
Equine Biomechanics and Gait – 3 days
Equine Musculoskeletal Dysfunction, Surgical Procedures, and Geriatrics – 4 days
Equine Behavior, Safety, and Handling – 2 days
Equine Physical Therapy Evaluation, Treatment, and Functional Training – 5 days
Veterinary Pharmacology and Terminology (Home Study)

Advanced Topics:

Accupressure
Massage
Manual Therapy
Performance Training
Nutrition and Exercise
Hydrotherapy
Saddle Fitting
Topline Dysfunction/Spinal Problems
Equine Denistry
Therapeutic Shoeing – Farrier
Marketing
Natural Horsemanship
Alternative Therapies: Tellington Touch, Craniosacral Therapy, Healing Touch
Myofascial Release
Research

VETERINARY PHYSICAL THERAPY WILDLIFE/EXOTIC/FARM ANIMAL EDUCATION PLAN

Basic Topics:

Anatomy and Physiology
Biomechanics
Evaluation
Surgical Procedures
Safety and Handling
Behavior
Functional Training
Musculoskeletal Dysfunction
Treatment and Home Programs
Wildlife Rehabilitation (NWRA)
Pharmacology
Geriatrics
Orthotics/Prosthetics
Adaptive Equipment

Laboratory Sessions:

Anatomy Dissection
Handling and Restraint

Demonstrations:

Rehabilitation Center or Zoo

Courses:

Physical Therapy I – Introductory Course – 2½ days with demonstration
Anatomy/Physiology – 3 days
Biomechanics, Gait, and Movement Analysis – 2-3 days
Musculoskeletal Dysfunction, Surgical Procedures, and Geriatrics, 2-4 days
Behavior, Safety, and Handling – 2 days
Physical Therapy Evaluation, Treatment, and Functional Training – 3-5 days
Veterinary Pharmacology and Terminology (Home Study)

Advanced Topics:

Accupressure
Massage
Manual Therapy
Nutrition and Exercise
Hydrotherapy
Marketing
Alternative Therapies
Research

Stay Connected!

Just a reminder...our SIG is included on the Orthopaedic Section web page! There will be a current list of officers and their contact information, bylaws, and upcoming courses.

Opportunity is Knocking!

As you can imagine, there are many important projects that need to be completed to keep a new SIG with BIG goals growing. We have several ways for you to become involved in this grass roots effort. There are 16 committees that have begun to organize. Each officer oversees 4 to 5 committees

and will report on their progress at our business meeting. Contact Lin if you plan to contribute to Education, Nominations, State Liaisons, Practice Acts, Resource Manual, or International Organization. Contact David if you want to be part of Certification, Research, Standards for Practice, or Protocols. Contact Gwynne if your interests are Public Relations, Logo, Brochure, Newsletter, or Surveys.

If committees are not for you, you might become a speaker for our courses, serve as a liaison for your state, write a home study course, present a case study, make phone calls, review books, write an article about your practice for the newsletter, spend time in the library, surf the net, help with a guide on "How to Get Started", write a PR letter, volunteer to "man" or "woman" our section booth, arrange to set up a course or booth at your state PT or Veterinary meeting, take pictures at CSM or our off-site courses, or...come up with your own idea! All donations of input, time, and energy are welcome!

TIPS ON "HOW TO GET STARTED"

The SIG receives many calls each week on courses, practices issues, and resources but by far the most frequent inquiries relate to what steps to take first. The following suggestions may help to move you forward in your goal to educate yourself and eventually practice in the field of veterinary physical therapy.

1. Contact your state education department and request a copy of both the physical therapy and veterinary practice acts. Read them. Call your state PT and Veterinary Practice Boards to find out how they interpret those practice acts in relation to physical therapy for animals. If you need help in assessing your malpractice risk, contact a lawyer.
2. Become a member of VET PT SIG, CHAP (Canadian), ACPAT (United Kingdom), or VOS (Veterinary Orthopedic Society).
3. Add to your home library. Subscribe to newsletters, magazines, and journals.
4. Purchase the VET PT SIG Resource Manual after 1/99.
5. Audit or enroll in classes at a veterinary or vet tech college.
6. Network with other interested PTs and veterinarians in your area. Purchase the SIG Directory after 1/99.
7. Observe animal movements at zoos, shows, competitions, or at home.
8. Use APTAs The *Guide to Physical Therapist Practice* and PR-7 in presentations to veterinarians.
9. Volunteer at a local vet clinic or wildlife rehabilitation center.
10. Provide inservices to local animal organizations, clubs, clinics, veterinary colleges.
11. Develop a VET PT Manual to collect all your resources.
12. Practice simple evaluation and treatment techniques on your own animals ie, ROM, reflexes, massage.

WHAT IS A LIAISON?

The Veterinary Special Interest Group is currently seeking a representative from each state who would be responsible for the distribution of information about veterinary physical therapy to their state's therapists and veterinarians. No experience working with animals is necessary, just an interest in this new area of physical therapy. Familiarizing yourself with the practice acts of physical therapists and veterinarians in your state, developing a statewide directory of physical therapists interested in veterinary physical therapy, and establishing lines of communication between your state's physical therapy and veterinary organizations are some of the primary responsibilities of a V-SIG liaison.

HOW DO I BECOME A LIAISON? If you are interested in becoming involved as a state liaison for this new special interest group, please contact:

Rita Brereton, MPT
2536 Sandusky Avenue
Virginia Beach, VA 23456
(757) 416-1247 (home)
(757) 496-1800 (work)

Benefits of Physical Therapy

- Increased speed of recovery
- Reduced costs of hospitalization
- Positive psychological effects for pet and owner
- Improved performance and quality of movement
- Increased strength and endurance
- Minimized secondary complications
- Improved biomechanics and flexibility
- Reduced pain
- Noninvasive approach
- Prevents future injury through owner/trainer education

Physical Therapy Intervention

- Heat-Moist Heat, Diathermy, Infrared
- Massage
- Range of motion and stretching
- Joint mobilization
- Gait training
- Individualized conditioning/strengthening programs, PNF
- Hydrotherapy
- Electrical stimulation – FES, TENS, Hi-volt
- Microcurrent, interferential, iontophoresis

Physical Therapy Intervention

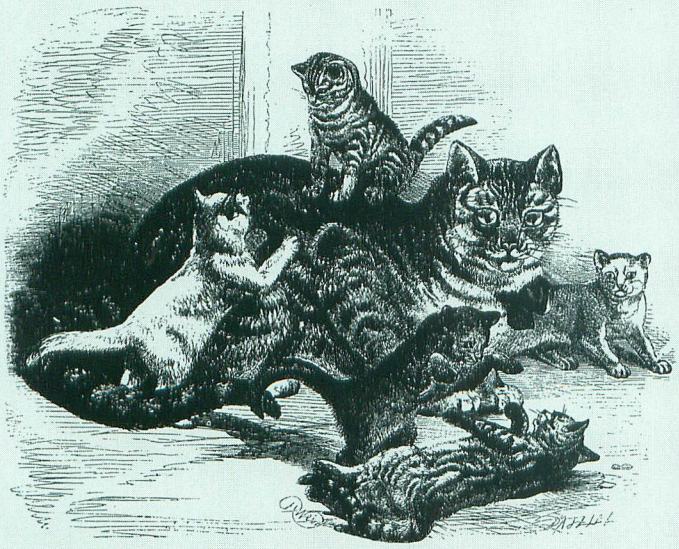
- Ultrasound
- Ice or cold water baths
- Magnetic field therapy
- Orthotics
- Prosthetics
- Laser
- Postural drainage and percussion
- Craniosacral therapy
- Myofascial release

Application of PT to Animals

- Postsurgical recovery: orthopaedic, neurological
- Muscle injury, ie, sprains, spasms, tendonitis, bursitis
- Disc problems, back pain
- Gait abnormalities, ie, lameness, asymmetry
- Joint injury, contractures, arthritis
- Wound healing
- Pain management
- Performance problems in the equine and canine athlete
- Edema and circulation problems
- Respiratory complications

A FINAL THOUGHT... ARE YOU A MODALITY OR A CLINICIAN?

As we explore the field of veterinary physical therapy it is clear that some veterinarians think of physical therapy as a group of modalities that are used in human medicine to treat injury. For example, a veterinarian learns how to operate an ultrasound machine, then advertises that he/she can provide physical therapy. This is our challenge-do we want to be perceived as a group of modalities or do we want to be valued for our skills in assessment, diagnosis, and prognosis? This is our opportunity-as we educate and collaborate with veterinarians and veterinary technicians we find a way to relate the total value of our profession and its potential impact on veterinary medicine. When you discuss veterinary physical therapy with veterinarians and veterinary groups, remember to relate all your skills, especially the ability to assess and treat with your hands. There is so much more we have to offer than simple machines.



Veterinary Physical Therapy Survey

If you have continued interest in veterinary physical therapy, please fill out this brief form and return to:
Cheryl Riegger-Krugh ScD, PT,
8453 Ault Lane, Morrison, CO 80465
clriegger-krugh@ski.uhcolorado.edu

Name _____

Agency/Affiliation _____

Complete address _____

Phone _____

FAX _____

E-mail _____

1. In what way(s) do you think physical therapists could contribute to rehabilitation for animals?
2. What additional knowledge/skills do you think physical therapists need to be able to contribute to rehabilitation for animals?
3. Have you worked in collaboration with a veterinarian for the purpose of animal rehabilitation? Describe.
4. Physical therapists presently are dealing with identification of functional limitations/disabilities and related goals (eg, related to walking speed, ADLs, stair climbing, dressing, etc.) in addition to relevant impairments and related goals (eg, related to strength, flexibility, posture, etc.). If you have worked with animals, what would you consider relevant function limitations/disabilities?

Example

Animal	Functional limitations/Disabilities
Dog	Walks on slopes with difficulty or avoids this task

5. Would you like to be on the mailing list to receive information about Veterinary Physical Therapy?
   __Yes, I am already on the list
   __ Yes, I am new to the list
   __ No
   Would you like to have your name listed on a national or regional Veterinary Physical Therapy Network?
   __Yes __ No
6. Do you know of any legal issues in your state regarding veterinary physical therapy?
7. Any additional comments/questions

THANK YOU FOR YOUR TIME!

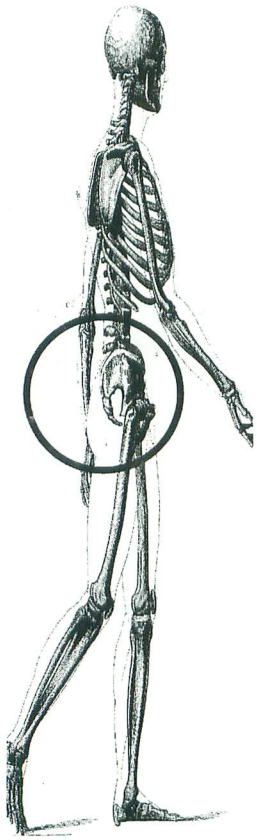
UPCOMING ISSUES:

- State Practice Acts
- Practice Opportunities
- Market Analysis
- Featured Clinician

EARN • • • CEUs • • • AT • • • HOME

LEARN TO EFFECTIVELY MANAGE THE SPINE

Jim Porterfield
PT, MA, ATC
Carl DeRosa
PT, PhD



An opportunity for Professional Development that integrates Textbook reading, Videotape viewing and written examination into an effective learning experience.

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BACK
The Lumbopelvic Region

• • •

Spine Care Series II:
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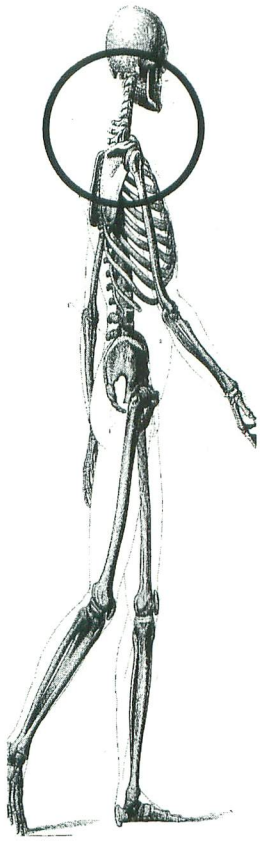

Cost: $475 each
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20 Contact Hours
2.0 CEU's awarded for each

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