THE PROFESSION OF PHYSICAL THERAPY

INTRODUCTION TO PART I

Part I of this textbook, "The Profession of Physical Therapy," is divided into three chapters:

- **Chapter 1:** Development of the Physical Therapy Profession
- **Chapter 2:** The Physical Therapist Assistant as a Member of the Health Care Team
- Chapter 3: Physical Therapy Clinical Practice

In these three chapters, we will discuss the history of rehabilitation treatments including therapeutic exercises, and the organization, history, values, and culture of the profession of physical therapy. We will also explore the differences in role, function, and supervisory relationship of the physical therapist (PT), the physical therapist assistant (PTA), and other health care practitioners and ancillary personnel.



OBJECTIVES

After studying Chapter 1, the reader will be able to:

- Discuss the history of rehabilitation treatments (including therapeutic exercises) from ancient times through the 1900s.
- Describe the history of the physical therapy profession and its five cycles of growth and development.
- Understand the values and culture of the physical therapy profession.
- Consider the American Physical Therapy Association's mission and its goals (especially goals two and six) in regard to physical therapists and physical therapist assistants.
- Explain the organizational structure of the American Physical Therapy Association.
- Discuss the benefits of belonging to a professional organization.
- Name the other organizations involved in the physical therapy profession.

Development of the Physical Therapy Profession

HISTORY OF REHABILITATION TREATMENTS INCLUDING THERAPEUTIC EXERCISES

It may be difficult to believe that some types of treatments utilized in physical therapy today, such as therapeutic massage, hydrotherapy (water therapy), and therapeutic exercises, were used in antiquity—around 3000 BC by the Chinese and around 400 BC by the Greeks and Romans. Therapeutic exercise and massage with aromatic oils were probably the first therapeutic modalities applied by the Greeks and Romans in a purposeful way to cure health problems. Written and pictorial records from the ancient civilizations of China, Japan, India, Greece, and Rome also contain descriptions and depiction of massage and exercise. Researchers have found evidence that the application of heat, cold, water, exercise, massage, and sunlight was often used to abate physical afflictions even during prehistoric times.

Ancient China, India, and Greece

Writings about therapeutic exercises came from the Taoists priests in China and originated sometime before 1000~BC. These writings describe a type of exercise called Cong Fu that was able to relieve pain and other symptoms. The Cong Fu exercises consisted of body positioning and breathing routines. They had very little motion and were unrelated to modern concepts of exercises. In India, the ancient Hindus also used certain types of body positioning as exercises to cure chronic rheumatism (arthritis).

Later, around 500 BC in ancient Greece, Herodicus, a Greek physician, wrote about an elaborate system of exercises called *Ars Gymnastica*¹ or

The Art of Gymnastics. Herodicus¹ tried gymnastic exercises for his own health problems. He believed that he was able to treat febrile conditions by using wrestling, walking, and massage. In the time of Herodicus, Greeks performed exercises such as wrestling, walking long distances, using a type of weights called halters (that resembled dumbbells), or riding (sitting or lying down) in a horse-drawn carriage over rough roads. In ancient Greece around 400 BC, Hippocrates, who is considered the father of medicine, recognized the value of muscle strengthening using exercises (Figure 1-1). Hippocrates¹ was the first physician in his time to recommend therapeutic exercises to his patients because he understood the principle of muscle, ligament, and bone atrophy (wasting) due to inactivity. In regard to rehabilitation treatments, Hippocrates wrote about the utility of friction after ligament tears and dislocations, and recommended abdominal kneading massage and chest clapping massage to improve digestion and relieve colds. Hippocrates was the first to use electrical stimulation, applying torpedo-fish poultices for headaches. The torpedo fish has an electrical charge of approximately 80 volts to stun its prey. Also in the area of treatments, the Greek philosopher Aristotle¹ recommended rubbing massage using oil and water as a remedy for tiredness (Figure 1-2).

Around 180 BC, the ancient Romans¹ adopted a form of therapeutic exercises that they called gymnastics. The Roman gladiators and athletes used gymnastics in the Roman arenas and in popular exhibitions of athletics. Later, in the second century AD, Galen, the renowned physician of ancient Rome, believed that moderate exercises strengthened the body, increased body temperature, allowed the pores of the skin to open, and improved a person's spiritual well-being (Figure 1-3). Galen¹ was also an authority on trauma surgery and musculoskeletal injuries. His extensive writings, advanced for his era, describe from a kinetic principle the roles of anatomy and physiology in human movement.

Europe and America from the 1500s to the 1900s

In Europe around the 1400s, after the Middle Ages, therapeutic exercises² were introduced in schools as physical education courses. During the 1500s, the first printed book on exercise, entitled Libro del Exercicio and written by Christobal Mendez of Jaen,² was published in Spain. During the 1600s and 1700s, more books were written about exercises. These works promoted moderate exercises, stating that exercises give the body agility and vigor

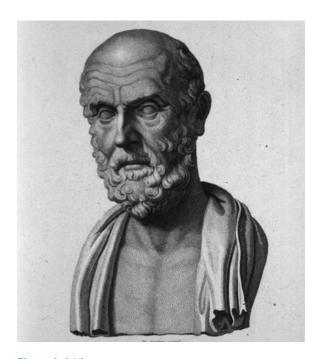


Figure 1-1 Hippocrates Source: © National Library of Medicine



Figure 1-2 Aristotle Source: © National Library of Medicine



Figure 1-3 Galen Source: © National Library of Medicine

and also have the ability to cleanse the muscles and ligaments of waste.2

In the United States, massage, hydrotherapy, and exercises were first introduced around the year 1700. These rehabilitation treatments were based on ideas originating mostly in England. They were further developed in the 1800s and early 1900s.

In Europe in 1723, Nicolas Andry,³ a professor at the Medical Faculty in Paris, was the first scientist to relate the movements created by exercises to the musculoskeletal system. Andry is considered to be the "grandfather" of orthopedics. He believed that exercises are able to cure many infirmities³ of the body. Nicolas Andry also postulated that fencing was one of the few exercises that contributed to the development of all muscles, especially the muscles of the arms and legs. In Europe during the 1700s, attention was given to the invention of exercise equipment. One piece of equipment described around 1735 was a suspended rocking horse that had the same therapeutic benefits as a living horse, which few could afford to ride.

During the 1800s, Per Henrik Ling, ⁴ a Swedish poet, fencing master, playwright, and educator, contributed to the growth of physical exercise by initiating the gymnastic movement. Ling was famous in Europe for developing, with the help of Sweden's King Charles XIII, a training school in gymnastics for the Swedish army. Ling's therapeutic exercise, known as Swedish exercise, Swedish gymnastics, or Swedish movement, spread throughout Europe and America. Ling's Swedish gymnastics movement included techniques of Chinese martial arts called Tuina.4 These gymnastic

techniques, similar to Chinese manipulative therapy, were adopted in the 1800s by Dr. Johan Georg Mezger of Holland⁴ (a Dutch practitioner). Dr. Mezger gave this type of manipulative therapy French names such as "effleurage," "petrissage," and "tapotement." These techniques (describing some of Ling's movements) became known as the Swedish massage.

Around the 1860s, George H. Taylor, an American physician⁵ from Vermont who was the medical director of the Remedial Hygienic Institute in New York, introduced Ling's Swedish gymnastics for the first time in America. Swedish gymnastics became very popular in American public schools and had a significant impact upon physical education classes. Ling's exercises, consisting of passive and active movements, were also used to treat chronic disease conditions. In addition, Henrik Ling's medical gymnastics contributed to the development of Swedish massage as a therapeutic activity. Although Ling's system of exercise was effective, it required the continuous personal attention of a gymnast. This was expensive for the patient because the gymnast could work with only one person at a time. To solve this problem of economics, in 1864 Gustav Zander,6 a Swedish physician, invented different exercise machines that offered assistance and resistance to the patient. These machines eliminated the need for a gymnast except for getting the patient started and for infrequent supervision. Zander developed 71 different types of apparatus for active, assistive, and resisted exercises, and for application of massage. Zander Institutes were opened throughout Europe and the United States.

Later, at the beginning of the 1900s, with the advent of the First World War (1917), "reconstruction aides" (who began physical therapy in the United States) used Zander's machines as well as Ling's Swedish movement for the rehabilitation of disabled soldiers. In those early times, physical therapy was performed in various specialized rooms; one of the rooms was for "mechanotherapy" and contained Zander's exercise machines. Zander's apparatus seemed to work very well during the war.

At the beginning of the 1920s, after the passage of the Rehabilitation Bill in New Jersey, orthopedic surgeons⁷ became enthusiastic about the future of rehabilitation and of "reconstruction aides or teachers of vocational and educational forms of work that are therapeutic in purpose." (p.39) An article written in February 1920 in the Journal of the Medical Society of New Jersey described modern developments in rehabilitation, especially for "industrially injured"7(p.43) individuals. It was considered that "the sooner an industrially injured man gets safely back to work" the

better it would be for his morale and physical well-being. In the 1920s, this required the injured worker to receive "active, voluntary joint-motion and muscle-exercises." 7(p.44) It is interesting that in the 1920s, orthopedic surgeons believed that these forms of rehabilitation using active exercises were to be provided by a "reconstruction aide," who was described as a combination of "the school teacher" (p.46) and "the professional nurse." 7(p.46)

In the 1860s, electrical stimulation was first introduced in the United States as a therapeutic modality, having originated in Europe and been used in France, England, and Germany. In the 1890s, the American Electro-Therapeutic Association was formed. Members included interested U.S. practitioners who promoted specialized training in electrotherapy, electrotherapeutic research, and the use of reliable electrotherapeutic equipment. Also in the 1890s, Nikola Tesla⁸ introduced diathermy as an electrotherapeutic modality; however, it was not until the 1900s that diathermy's beneficial role as a deep heating agent for joints and the circulatory system was discovered.

In England around the beginning of the 1950s, a neurophysiologist (physician) named Herman Kabat⁹ utilized newly discovered neurological concepts of stretch reflex, flexion reflex, and tonic neck reflex to develop neurological exercises called "proprioceptive facilitation." Around 1968, Margaret Knott and Dorothy Voss expanded⁹ proprioceptive neuromuscular facilitation (PNF) as a form of physical therapy intervention for patients with paralysis. As is done today, the PNF method was recommended and utilized for patients who had paralysis produced by stroke, cerebral palsy, or another neurological dysfunction. Additionally, regarding neurological exercises and rehabilitation, toward the end of the 1800s, H.S. Frenkel¹⁰ of Switzerland was able to improve an ataxic (unstable) gait resulting from nerve cell destruction by repetitive attempts at supervised ambulation. Frenkel did not rely on equipment, but instead marked the floor for successive placement of the feet in walking (as we do today using Frenkel's exercises). Frenkel advocated walking in groups of three to six patients with similar degrees of ataxia for long walking paths, insisting on repetitions.

In the United States during the 1900s, the area of therapeutic exercises was built up by physicians, physical therapists, surgeons, psychologists, and other scientists. All therapeutic exercises developed at the beginning of the 20th century greatly influenced the growth of physical therapy interventions. Robert Lovett's 11 concept was an example of such growth and development. Lovett, a professor of orthopedic surgery at Harvard, discovered in 1916 that muscle training exercises were the most important early therapeutic measures for polio treatment. Ten years later in 1926, Lovett's idea was put into practice by his senior assistant, Wilhelmine G. Wright. Wright¹² developed the training technique of ambulation with crutches (using the upper extremity muscles) for patients who had paraplegia or paralysis caused by polio. She also introduced the manual muscle testing procedure in physical therapy. In 1928, Wright authored the book 12 Muscle Function (which she started with Dr. Lovett), in which she described the systematic method of manual muscle testing using palpation, gravity, external manual resistance, and the arc of active movement. Wright believed in the importance of muscle testing on polio patients and the use of stronger muscles to compensate for the weakness of muscles affected by polio. Between 1917 and the early 1950s, several physical therapists and rehabilitation clinicians¹² made changes to Wright's method of muscle testing, taking into consideration variables such as a patient's fatigue, body position, and incoordination. These clinicians included Kendall, Brunnstrom, Dennen, and Worthingham.

Another example of the developments made to combat the devastating effects of paralysis caused by the polio epidemic was Charles Leroy Lowman's 13 method of "hydrogymnastics." In California in 1924 he converted a lily pond into two treatment pools for the treatment of spasticity and paralysis caused by cerebral palsy. In the 1920s at Warm Springs, Georgia, Carl Hubbard¹³ (an American engineer) installed the first metal tank (known today as the Hubbard tank) in a hospital for hydrogymnastics use. In 1928, U.S. President Franklin D. Roosevelt, 13 who had polio, used the hydrogymnastics therapy at Warm Springs Institute for rehabilitation. During late 1920s, Roosevelt developed the institute known today as The Georgia Warm Springs Foundation, which has become an international polio treatment facility.

In the area of exercise for vascular disease, in 1924 Leo Buerger (a urologist) and Arthur W. Allen (a surgeon) created the Buerger-Allen exercises 14 for arterial insufficiency in the legs. The exercises used the effects of gravity and posture and applied those to the vascular musculature and blood circulation. Additionally, during the 1900s physicians began to treat back pain more efficiently. This was due to the use of X-rays to visualize and identify bone abnormalities and the dysfunction of curvature of the spine. An example of exercise development for back pain was Joel E. Goldthwait's discovery that the reasons for backaches were faulty posture¹⁵ and habits. As a result, in 1934, Goldthwait and his colleagues wrote the book Essentials of Body Mechanics. In regard to back pain and exercises, in 1953, Paul C. Williams proposed a series of postural exercises, known today as the Williams exercises. These helped to strengthen the spine flexors and extensors and relieve back pain. Still in regard to exercises, around 1934, Ernest A. Codman, a Boston surgeon, introduced shoulder exercises known as Codman pendulum exercises. He pointed out that a diseased supraspinatus muscle could relax if the shoulder is abducted in the stooping position, allowing the arm to be under the influence of gravity. In the 1920s and 1930s, additional developments in the area of exercise were attributed to surgeons' findings that exercises could be helpful after surgery and that customary bed rest should be eliminated.

In 1938, Daniel J. Leithauser, 16 who performed appendectomies, was amazed to see that one of his patients who did not follow the usual bed rest routines was able to rapidly return to daily activities. Leithauser¹⁶ prescribed early rising and physical activity for all postoperative appendectomies and abdominal surgeries. By 1947, there were many "convalescent centers," in the United States where patients were prescribed "convalescent exercises" or "reconditioning exercises" to counteract the deconditioning effect and the abuse of rest. In these centers, patients performed exercises in groups according to the disability. There were ankle classes, shoulder classes, or wheelchair basketball for patients who had paraplegia. Special centers were also created for major disabilities; for example, the centers for patients with amputations required physical therapists to exercise the amputated extremity early and through maximum range of motion to prepare it for the prosthesis.

In 1945, much of the greatest stimuli to the development of exercises came from an Alabama physician, Thomas DeLorme. Following his own knee surgery, DeLorme¹⁷ found that he could rapidly restore his quadriceps muscles to full strength by increasing the resistance applied to the exercising muscles. DeLorme's method first introduced the technique of progressive resistive exercise (PRE),¹⁷ which is still used today.

During the second half of the 1900s, the area of therapeutic exercises in the United States was advanced tremendously by the arrival of isokinetic and biofeedback exercises. For example, in 1967 the Cybex I Dynamometer was introduced based on Hislop and Perrine's concept of isokinetic exercise. Hislop and Perrine found that muscular performance can be reduced to the physical parameters of force, work, power, and endurance, and that specificity of exercise should be determined by an exercise system designed to control each training need. Another type of exercise called

biofeedback was also introduced in the second half of the 1900s as a result of advances in scientific behavioral psychology and clinical electromyography. Furthermore, Williams's back-flexion exercises were complemented in the 1950s and 1960s by Robin McKenzie's back-extension exercises that relieved pressure posteriorly on the spinal disk. Swiss ball exercises, 18 developed by physiotherapists in Switzerland in the 1960s, found their way to the United States in the 1970s and became popular in physical therapy rehabilitation in the 1980s.

HISTORY OF THE PHYSICAL THERAPY **PROFESSION**

The creation of the physical therapy profession centered around two major events in U.S. history: the poliomyelitis epidemics and the negative effects of World War I and World War II. The profession can be compared with a living entity, changing from an undeveloped, young occupation in its formative years (1914 to 1920) to a firm, growing establishment in its development years (1920 to 1940). As a mature profession, during its fundamental accomplishment years (1940 to 1970), physical therapy was able to achieve significant organizational, executive, and educational skills. In the mastery years (1970 to 1996), the profession acquired greater control, proficiency, and respect within the health care arena, growing largely in the areas of education, licensure, specialization, research, and direct access. From 1996 to 2005, in its adaptation years, physical therapy had to adapt, review, and make changes in its objectives and goals due to political, social, and economic changes in the United States. Additionally, the profession went through rapid educational expansion and research growth, and significant developmental and scientific goals were achieved. From 2006 to the present, in its vision and scientific pursuit years, physical therapy has been emerging as a vigorous participant in U.S. health care reform, having large responsibilities in the areas of research, education, and sociopolitical transformations.

The Formative Years: 1914 to 1920

Division of Special Hospitals and Blcal Reconstruction

In the United States, physical therapy had its beginnings between 1914 and 1919, in a time known as the Reconstruction Era. Prior to the "Great War" (World War I),

most Americans regarded disability as irreversible, requiring little or no medical intervention. The war changed this concept of irreversibility because of the large number of young U.S. men returning home as disabled veterans. As mentioned prior, physical therapy was created because of World War I and the poliomyelitis epidemics. These two devastating events in U.S. history brought a great degree of disease and disability to U.S. society. The first major outbreak of poliomyelitis occurred in New York State in 1916.¹⁹ The methods of treatment at that time¹⁹ were bed rest, isolation, and splinting and casting of the person's legs. Unfortunately, these forms of healing increased the individual's weakness in the legs and back, and as a result, the person required some form of exercise and physiotherapy.

Prior and during World War I, support for people with disabilities had been growing gradually. 19 For example the Medical Department of the U.S. Army had two divisions that influenced the growth of physical rehabilitation in the United States, the Division of Orthopedic Surgery and the Division of Physical Reconstruction. The newly created Division of Physical Reconstruction was needed to apply physiotherapy treatments such as massage and mechanical hydrotherapy to wounded soldiers. The Division of Physical Reconstruction drew its "training corps" personnel from schools of allied health therapies and physical training. 19 The Division of Physical Reconstruction had three sections¹⁹: surgery (including general, orthopedic, and head surgery) and neuropsychiatry, education, and physiotherapy (including gymnasiums and equipment).

In April 1917, the United States entered World War I. The U.S. Congress authorized the military draft and passed legislation to rehabilitate all servicemen permanently disabled from war-related injuries. In August 1917, the Surgeon General of the United States, William Gorgas, authorized the creation of the Division of Special Hospitals and Physical Reconstruction.²⁰ The role of the division was to give soldiers who were disabled "reconstruction therapy." The people involved in the reconstruction therapy were newly trained physical reconstruction aides. They consisted of a handful of physicians called orthopedists and 1200 young women called reconstruction aides. These people were the physical therapy and occupational therapy pioneers²⁰ who treated the injured soldiers from World War I. The division included two different groups of reconstruction aides. One group who assisted physicians was to become today's physical therapists. They provided exercise programs, massage, hydrotherapy, and other forms

of therapeutic modalities including patient education. The other group of reconstruction aides was to become today's occupational therapists. They provided training in the vocational skills that would help wounded soldiers return to work.

These forms of rehabilitation enabled soldiers to return either to combat or to their civilian prewar lives.²⁰ The division had almost a dozen small facilities set up in Europe and more extensive centers and hospitals in New York Harbor; Lakewood, New Jersey; Tacoma Park, Maryland (a suburb of Washington, D.C.); Fort McPherson, Georgia; and San Francisco, California. Each hospital had a physical therapy unit containing a gymnasium, a whirlpool room, a massage room, a pack room, and other rooms for mechanotherapy²⁰ and "electricity" (electrotherapy). The mechanotherapy room was an exercise room equipped with various apparatuses such as pulley-and-weight systems, trolleys, and ball-bearing wheels.

From its creation, the division recruited unmarried women between the ages of 25 and 40 to be trained as reconstruction aides. Applicants who had certificates showing practical and theoretical training in any of the treatments performed such as hydrotherapy, electrotherapy, mechanotherapy, or massage received priority and were accepted first. Nevertheless, they still were given additional preparation in all other necessary treatments.

First PhysicalThempists:Marguerite Sanderson and May McMillan

The first reconstruction aides who made big contributions to the physical therapy profession during the Reconstruction Era were Marguerite Sanderson and Mary McMillan. Marguerite Sanderson was a physiotherapist who graduated from the Boston Normal School of Gymnastics and used to work with Dr. Joel Goldthwait, an orthopedic surgeon, who later became the chairman of the War Reconstruction Committee of the American Orthopedic Association. Because of her prior physiotherapy experience, in 1917, Dr. Goldthwait appointed Sanderson as the first Supervisor of Reconstruction Aides. Her role was to recruit and arrange for training of reconstruction aides and also send them to Europe to help the wounded soldiers. In 1922, Sanderson married and withdrew from active participation in the

The training program for the reconstruction aides took place at Walter Reed General Hospital. The program at Walter Reed was assigned to a reconstruction aide named



Figure 1-4 Mary McMillan, one of the founders and the first president of the American Physical Therapy Association (WWI Era/1918/1919)

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Mary Livingston McMillan (Figure 1-4). Mary McMillan was a mature, educated woman who was born in the United States from Scottish ancestry. When she was 5 years old, her mother and sister died of consumption (tuberculosis). Mary was sent to live with relatives in Liverpool, England. Although acquiring a higher education was unusual at that time for a young woman, as an avid and eager learner Mary received a college degree in physical education and a postgraduate degree in her chosen career, the science of physical therapy. Mary McMillan's physical therapy degree included topics such

as corrective exercises, massage, electrotherapy, aftercare of fractures, dynamics of scoliosis, psychology, neurology, and neuroanatomy.²⁰ In 1910, McMillan took her first professional position in Liverpool, England, working with Sir Robert Jones, nephew and professional heir of the great orthopedist Hugh Owen Thomas. Jones, an orthopedic physician, was renowned for using the Thomas splint (invented by his famous uncle) and performing progressive massage and orthopedic manipulations (invented by the French orthopedist Lucas-Championniere and British surgeon James B. Mennell). Lucas-Championniere and Mennell were pioneers of the principle that following an injury, early movement can enhance healing and prevent disability.

In 1916, McMillan returned home to her family in Massachusetts. Because of her education and experience, she was hired immediately at the Children's Hospital in Portland, Maine, where for 2 years she was director of massage and medical gymnastics, treating children with scoliosis, congenital hip dislocations, and other childhood orthopedic bone and joint abnormalities.²⁰ In 1918, at the recommendation of Sir Robert Jones, Elliott Bracket, a Boston orthopedist and one of the organizers of the army's Reconstruction Program, asked McMillan to consider service with the U.S. Army. In February 1918, McMillan was sworn in as a member of the U.S. Army Medical Corps. As a reconstruction aide she was assigned to Walter Reed General Hospital in Tacoma Park, Maryland. Shortly after, in June 1918, due to her experience and education in England, McMillan was asked to go to Reed College in Portland, Oregon, to train reconstruction aide applicants in the practical, hands-on segment of the War Emergency Training Program. With her contribution, Reed College's physical therapy curriculum became the standard by which other emergency war training programs were measured. In January 1919, Mary McMillan was awarded the position of Chief Reconstruction Aide²⁰ in the department of physiotherapy at Walter Reed General Hospital.

Between 1919 and 1920, the number of physical therapy reconstruction aides was reduced primarily because of a major postwar decrease in military hospitals (at home and overseas). The number of hospitals shrank from 748 to 49. Despite this cutback, the army's commitment to maintain physical therapy as an important part of its medical services was established (Figure 1-5). In 1920, Mary McMillan resigned her duties in the army because she felt her work was essentially completed. She returned to civilian life in Boston as a staff therapist in an orthopedic office. In 1921, McMillan published her book, *Massage and Therapeutic Exercise.*



Figure 1-5 Reconstruction aides treat soldiers at Fort Sam Houston, Texas in 1919 (WWI Era)

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The Development Years: 1920 to 1940

The Development of Perfessional **Organization**

During her work as a reconstruction aide, Mary McMillan was convinced that physical therapy had a vital future role in America's health care. Before resigning her duties in the army, McMillan wanted to maintain a nucleus of trained people who were capable of carrying out such a role. She contacted 800 former reconstruction aides and civilian therapists and received 120 enthusiastic responses. On January 15, 1921, at Keene's Chop House, an eatery in Manhattan, New York, ²⁰ Mary McMillan and 30 former reconstruction aides organized themselves into the first association of physical therapists. The organization was called the American Women's Physical Therapeutics Association (AWPTA). Mary McMillan was elected president. The role of the AWPTA was to establish and maintain professional and scientific standards for individuals who were involved with the profession of physical therapeutics. 19 The members of the AWPTA¹⁹ were graduates of recognized schools of physiotherapy and of physical education programs trained in massage, therapeutic exercises, electrotherapy, and hydrotherapy. The executive committee of the AWPTA represented geographically diverse

reconstruction aides; the first year there were 274 members coming from 32 states.

The P.T. Review and Constitution

The official publication of the Association, which first appeared in March 1921, was called the P.T. Review.²⁰ It was published guarterly and included the Association's constitution and bylaws, professional interest articles, and even a column called "S.O.S." for job classified advertisements. Today, the P.T. Review is called Physical Therapy. It is the official publication of the American Physical Therapy Association (APTA) and is a scholarly, peer-reviewed journal. Also in 1921, the first textbook written by a physiotherapist (Mary McMillan) was published.

The first edition of the P.T. Review reported the full text of the constitution and bylaws of the Association. The basic reasons for the Association's existence, as described in its constitution, 20 were to have professional and scientific standards for its members, to increase competency among members by encouraging advanced studies, to promulgate medical literature and articles of professional interest, to make available efficiently trained members, and to sustain professional socialization.²⁰ The Association's bylaws specified three categories of membership in the Association: charter members, who were the reconstruction aides in physiotherapy; active members, who were graduates of recognized schools of physiotherapy or physical education; and honorary members, who were graduates of medical schools.

American Physiothempy Association

At its first conference in Boston in 1922, the Association changed its name to the American Physiotherapy Association because although its members were all women, they recognized that men also practiced physiotherapy. At that time, there were a few male reconstruction aides who provided physiotherapy services during World War I.

In 1922, new schools of physiotherapy were opened at Harvard Medical School and in New York City. The graduates of these schools were called physiotherapists. By 1923 the membership in the Association had risen appreciably, and Mary McMillan stepped down as president, giving way to a new president, one of the former reconstruction aides, Inga Lohne.²⁰

In 1926, the Committee on Education and Publicity was formed to draft the minimum standard curriculum for schools offering a complete course in physical therapy. The committee's report, which was published in 1928,²⁰ was recommending a 9-month course with 33 hours of physical therapy-related instruction per week for a total of 1200 hours. The entrance requirement was graduation from a recognized school of physical education or nursing. In 1930, there were 11 schools²⁰ that met or exceeded the minimum standards set by the committee. By 1934, there were 14 approved physiotherapy schools²⁰ including higher standard educational institutions such as Harvard Medical School in Boston, Massachusetts, Stanford University Hospital in Stanford, California, and the College of William and Mary in Williamsburg, Virginia.

In the early years, the American Physiotherapy Association tried to stay side by side with the medical profession. During the 1920s and 1930s, physical therapy physicians became organized²¹ in order to belong to the American Medical Association (AMA). The AMA recognized their efforts and educated other physicians about the value of physical therapy in rehabilitating World War I veterans. As a result, in 1925, a group of physical therapy physicians founded²¹ the American College of Physical Therapy (ACPT). Later that year, the ACPT joined the AMA and changed its name to the American Congress of Physical Therapy. Physical therapy physicians decided to call themselves "physiatrists." Although, their name was not officially changed until 1946, the physiatrists established the American Registry of Physical Therapy Technicians to separate the physiotherapists from the medical profession.

In 1930, the American Physiotherapy Association was incorporated and decided to work with the AMA to create standards of education for physiotherapists, to encourage the regulation of physical therapy practice by law, and to cooperate with, or under the direction of, the medical profession to provide a central registry for physiotherapists.²² Consequently, by the 1930s, due to pressure from the AMA, registered physiotherapists were called technicians and settled to work under the referral of physical therapy physicians. It seems, however, that members of the AMA were concerned that the public might consider physiotherapists to be physicians, because their designation as physiotherapists ended in "ists," the same as radiologists, orthopedists, and so on. The AMA wanted no confusion in regard to medical school education of physiatrists as compared to physiotherapists. Finally, in the 1940s the name physiotherapists changed to physical therapists.

Polionyelitis and the Grat Depression

By the 1930s, members of the American Physiotherapy Association were confronted with two calamities²⁰ in U.S.

life—the growing severity of poliomyelitis and its resulting infantile paralysis (which began in the summer of 1916) and the Great Depression of 1929 (Figure 1-6). The poliomyelitis epidemic started in 1916 and continued into the 1930s and 1940s. As an example of the high incidence and magnitude of this disease, between May and November 1934, approximately 2500 cases of poliomyelitis were treated at just one hospital, ¹⁹ the Los Angeles County General Hospital. The fact that the President of the United States, Franklin Delano Roosevelt, was treated for poliomyelitis by physiotherapists generated large public recognition of the physical therapy profession. At that time, physical therapy for poliomyelitis consisted of hydrotherapy, exercises, massage, heat and light modalities, and assistive and adaptive equipment.¹⁹ For home care, especially in rural areas, the physiotherapists provided "homemade" braces and splints.

In 1929, the Depression closed many hospitals and private medical practices, substantially reducing the number of physical therapy services.

Because the country was looking for a cure for poliomyelitis, in 1937, the National Foundation for Infantile Paralysis was founded. The foundation, using federal



Figure 1-6 Physical therapists and physicians work together to treat children at a New York poliomyelitis clinic in 1916 (WWI Era).

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funding and money from charitable organizations such as the March of Dimes, opened new facilities and lent equipment to families and hospitals for polio aftercare. The National Foundation for Infantile Paralysis also financially contributed to the development of physical therapy education and the growth of physical therapy schools. Physical therapists who had no work during the Great Depression were able to pick and choose positions. They were needed to work in diagnostic clinics, outpatient centers, orthopedic hospitals, convalescent homes, schools for children with disabilities, and restorative services.

In 1937, although the physiotherapists were still dominated by their technician mindsets, their plans for the future were progressive, and included unity, research, and provision of educational standards. For example, the aims of the American Physiotherapy Association in 1937 were 19:

- To form a nationwide organization that would establish and maintain professional and scientific standards for its members
- To promote the science of physical therapy
- To aid in the establishment of educational standards and scientific research in physical therapy
- To cooperate with, and to work only under the prescription of members of the medical profession
- To provide available information to those interested in physical therapy
- To unite several chapters
- To create a central registry (available for the medical profession) that will make physiotherapists the only "trained assistants" ^{19(p.6)} in physical therapy

The Fundamental Accomplishment Years: 1940 to 1970

The Pofessional and Educational Developments of PysicalThempy

During World War II, the American Physiotherapy Association continued to grow under its experienced president, Catherine Worthingham.²⁰ She was the first physical therapist to hold a doctoral degree in anatomy and served as president of the Association from 1940 to 1945. The governance of the American Physiotherapy Association changed substantially to accommodate increased growth and responsibilities and a more national approach. In the summer of 1941, six months before the bombing of Pearl Harbor, the first War Emergency Training Course of World War II was initiated at Walter Reed General Hospital. Emma Vogel²⁰ directed the Walter Reed General Hospital program to train physical therapists (Figure 1-7).



Figure 1-7 Emma Vogel directed the Walter Reed General Hospital program for physical therapists. After the outbreak of World War II, Vogel was deployed to direct the War Emergency Training courses at 10 Army hospitals (Post WWI through WWII Era).

Source: Reprinted from Murphy W: Healing the Generations: A History of Physical Therapy and the American Physical Therapy Association. Alexandria, American Physical Therapy Association, 1995; Commemorative Photographs; APTA—75 Years of Healing the Generations, with permission of the American Physical Therapy Association. This material is copyrighted, and any further reproduction or distribution is prohibited.

The course at Walter Reed consisted of six months of concentrated didactic instruction followed by six months of supervised practice at a military hospital.

The physiotherapists graduating from the Emergency Training Course were no longer called reconstruction aides but instead were physiotherapy aides. In 1943, the U.S. Congress passed a bill stating that graduates of the Emergency Training Course should be called physical therapists. Inadvertently, with the change of their titles, physical therapists started to have increased recognition and wideranging responsibilities. These new tasks were related to the treatment of wounded veterans including rehabilitation

for amputations, burns, cold injuries, wounds, fractures, and nerve and spinal cord injuries. Additionally, immediately after the war, the U.S. government allocated \$1 million for the enhancement of prosthetic services. This gave physical therapists the opportunity to participate in the teaching and training programs of the 25-year-old Artificial Limb Program at the University of California at Berkeley, New York University, and the University of California at Los Angeles. Furthermore, in 1946, because of the passing of the Hill-Burton Act and founding of a nationwide hospitalbuilding program, physical therapists increased their hospital-based¹⁹ practice. The work of physical therapists expanded even more in the 1950s with the outbreak of the Korean War.

In 1944, the American Physiotherapy Association membership voted for a separate internal legislative branch called the House of Delegates.²⁰ The House of Delegates had the same legislative powers as it does today-to amend or repeal the bylaws of the Association. In 1946, physical therapy physicians practicing physical medicine officially changed their specialty name to physiatrist. In the same year, the American Physiotherapy Association changed its name to its current one, the American Physical Therapy Association (APTA). By 1959, membership in the American Physical Therapy Association had increased to 8,028 physical therapists.

In 1947, the length of physical therapy schools' curricula increased from 9 months to 12 months. By the 1950s, there were 31 accredited schools in the United States, 19 of them offering 4-year integrated bachelor degree programs. By 1959, most of the states had licensure laws adopting the Physical Therapy Practice Act. In 1951, the Joint Commission on Accreditation of Hospitals was formed, raising the standards for institutional staffing and health care.

The Polid/accine and the Journal of the American PhsicalThempy Association

Because new cases of polio were seen every year, physical therapists were called upon from all over the country to help either part-time or full-time as volunteers dealing with polio epidemics. In 1952, there were 58,000 cases of poliomyelitis in the United States. Between 1948 and 1960 nearly 1000 physical therapists participated in the polio volunteer program. In 1954, 63 physical therapists were dispatched to 44 states to help with clinical studies of the polio vaccine developed by Jonas Salk. After successful clinical trial inoculations of 650,000 children,

the Salk vaccine was determined to be safe and was approved for commercial production in 1955 by the Food and Drug Administration. Finally, in 1955, a massive national vaccination program started using the Salk vaccine. As a result, poliomyelitis cases were virtually eradicated.

Jessie Wright, PT, MD, was one of the physical therapists who helped with polio clinical studies by evaluating patients' strength. In 1954, Wright and her staff introduced the abridged muscle grading system. Wright, who specialized in physical medicine and rehabilitation at the University of Pittsburgh, Pennsylvania, was a visionary in regard to helping patients achieve function. Wright believed that "the first goal of physical therapy was to relax tight muscles" 11 (p.77) allowing complete range of motion in the joints and as a result giving the patient "functional use of residual power, helpful body mechanics and assistive devices." 11 (p.78)

The role of the physical therapist in the 1950s expanded19 from a technical position to that of a professional practitioner. Private practices expanded and, in 1957, the Physical Therapy Fund was established to foster scientific, literary, and educational programs.²⁰ Physical therapists' licensure started in 1913 in Pennsylvania and in 1926 in New York; it expanded during the 1950s and by 1959,²⁰ 45 states and the territory of Hawaii offered licensure.

In 1964, the APTA formed a committee on research in order to improve the development of scientific inquiry. In regard to dissemination of information (including scientific discovery) among the members of physical therapy profession, just 2 years earlier (1962), the APTA changed the name of the official journal, the P.T. Review to the Journal of the American Physical Therapy Association. In 1963 the journal modified its format and expanded its content with the help of its editor, Helen Hislop.²⁰ In 1964 the journal changed its name to the Journal of Physical Therapy. Later, the name was change to Physical Therapy.

The Beginning of PhicalThempy Assistants

In the 1960s the U.S. population was changing, primarily because of the doubling of the number of elderly, but also because people were becoming more health conscious. As with other health professions, physical therapy was expanding rapidly with a high demand for physical therapy services. In addition, the change in physical therapy insurance reimbursement (through diagnostic related groups introduced by Medicare) and the enactment in 1965 and

1966 of Medicare and Medicaid programs created an even greater demand for physical therapists. As a result, in 1967 the American Physical Therapy Association adopted a policy statement that set the foundation for the creation of the physical therapy assistant and the establishment of educational programs for the training of physical therapy assistants. The policy statement adopted by the House of Delegates recommended the following²⁰:

- The American Physical Therapy Association had to establish the standards for physical therapy assistant education programs.
- A supervisory relationship existed between the physical therapist and the physical therapy assistant.
- The functions of assistants were to be identified.
- Mandatory licensure or registration was encouraged.
- Membership in the American Physical Therapy Association was to be established for the assistants.

By 1969, the occupational title changed from physical therapy assistant to physical therapist assistant. Also, training programs were to be called physical therapist assistant programs. At that time there were already two colleges in the country that enrolled students in their programs: Miami Dade Community College in Miami, Florida, and St. Mary's Campus of the College of St. Catherine in Minneapolis, Minnesota.

Mastery Years: 1970 to 1996

The Societal Deelopments of Physical Therpy

In 1969, the first 15 physical therapist assistants graduated with associate degrees from Miami Dade College and College of St. Catherine. By 1970 there were nine physical therapist assistant education programs, mostly due to federal financial assistance to junior colleges. In the same year, the American Physical Therapy Association offered temporary affiliate membership to physical therapist assistants. By 1973, eligible physical therapist assistants were admitted as affiliate members in the national association, having the right to speak and make motions, to hold committee appointments, and to chapter representation in the House of Delegates. In 1983, physical therapist assistants formed the Affiliate Special Interest Group, and in 1989 the House of Delegates approved the creation of the Affiliate Assembly, which gave physical therapist assistants a formal voice in the Association. The first president of the Affiliate Assembly was Cheryl Carpenter-Davis, PTA, MEd.

The Expansion of the Phical Therapy Profession

During the 1970s and 1980s, the physical therapy profession continued to grow and expand. Because of the establishment of the Occupational Safety and Health Administration (OSHA) by the Department of Labor, physical therapy practices related to prevention, work management, and job injuries and compensation also developed. This contributed to physical therapists' advancement of practice from hospitalbased to private. In 1972, Congress added physical therapy services to the Social Security Act as services that were to be reimbursed²⁰ when they were furnished by an individual physical therapist in his or her office or in the patient's home. In 1975, the Individuals with Disabilities Education Act (IDEA) was passed. This helped physical therapy expand into treatment of children with disabilities in public schools.

In 1971, the AMA dissolved the American Registry, and by 1976, all states had physical therapy licensure laws in place. In 1981 and 1982, the House of Delegates adopted the policy that physical therapist practice that was independent of practitioner referral was ethical¹⁹ (as long as it was legal in that specific state). This separated physical therapists from the physician's control, giving them the right to practice without a physician's referral.

During the early 1970s, the American Physical Therapy Association formed sections for state licensure and regulations, sports physical therapy, pediatrics, clinical electrophysiology, and orthopedics. The state licensure and regulations section later became the health policy, legislation, and regulation section. In 1976, the first combined sections meeting took place in Washington, D.C. In 1977, the American Physical Therapy Association, through the Commission on Accreditation in Physical Therapy Education, became the sole accrediting agency for all educational programs for physical therapists and physical therapist assistants in the United States, Canada, and Europe.

In 1978, the American Board of Physical Therapy Specialties was created by the American Physical Therapy Association to allow members a mechanism to receive certification and recognition as a clinical specialist in a certain specialty area. During the late 1970s, the sections on obstetrics and gynecology (now called women's health) and on geriatrics were created. By 1985, the American Board for Physical Therapy Specialties-Certified Cardiopulmonary Specialists was formed, giving cardiopulmonary specialist certifications. Shortly, other specialty certifications followed such as orthopedic, pediatric, electrophysiology, neurology, and sports. In 1983, the APTA purchased its first four-story building in Alexandria, Virginia.

In 1990, the Americans with Disabilities Act assured the involvement of physical therapists as consultants to guarantee every individual with disabilities rightful access to all aspects of life. Many major changes occurred during the 1990s; managed care, point of service plans, and other alternative organizational structures such as health economics resources also impacted physical therapy delivery. Nevertheless, physical therapy practice developed in the areas of work conditioning, women's health, and work hardening. 19

During the last two decades of the 20th century, the following major developments occurred in the physical therapy profession:

- In 1980, the House of Delegates established its goal to raise the minimum entry-level education in physical therapy to a postbaccalaureate degree.
- During the early 1980s, the sections on veterans affairs, hand rehabilitation, and oncology were established.
- In 1986, the PT Bulletin was initiated. In the same year, setting goals and objectives became part of the American Physical Therapy Association's annual self-review process.
- In 1989, the House of Delegates approved the formation of the Affiliate Assembly, composed entirely of physical therapist assistant members. In this way, physical therapist assistants had a formal avenue to come together and discuss issues that directly concerned them.
- By 1988, direct access was legal in 20 states, providing patients and clients the ability to seek direct physical therapy services without first seeing a physician.
- The academic preparation of physical therapists changed from a bachelor's degree to postbaccalaureate degrees. By January 1994, 55 percent of physical therapy education programs were at the master's level.
- In 1995, the American Board of Physical Therapy Specialties inaugurated nationwide electronic testing and the American Physical Therapy Association celebrated the 75th anniversary of the association and the physical therapy profession.
- Also in 1995, the APTA hosted the 12th World Confederation for Physical Therapy Congress in

- Washington, D.C. The Congress had recordbreaking crowds. 19
- In 1995, the American Physical Therapy Association received representation on the AMA Coding Panel, facilitating a better development of physical therapist practice codes.

Adaptation Years: 1996 to 2005

The Balanced Budgetct and the APTA Events

In August 1997, President Clinton signed the Balanced Budget Act (BBA) to eliminate the Medicare deficit. The Balanced Budget Act, which took effect in January 1999, applied an annual cap of \$1500 (for both physical therapy and speech therapy services) per beneficiary for all outpatient rehabilitation services. As an effect of the Balanced Budget Act and its resultant reduction in rehabilitation services to Medicare patients, many new graduate physical therapists and physical therapist assistants could not find jobs. Also, some experienced physical therapists and physical therapist assistants suffered an appreciable decrease in income and in the number of working hours. Due to pressure from the Association, its members, patients, and the general public, in November 1999 President Clinton signed the Refinement Act, which suspended the \$1500 cap for 2 years in all rehabilitation settings starting on January 3, 2000. Nonetheless, the Balanced Budget Act was detrimental to the treatment of many Medicare patients and also created a hardship for physical therapists and physical therapist assistants for at least 3 years. An American Physical Therapy Association survey²³ in October 2000, found that as a result of the Balanced Budget Act, physical therapist assistants were hurt the most, with an unemployment rate of 6.5 percent. The physical therapists also reported that their hours of employment had been involuntarily reduced. In March 2001, the same survey discovered that the unemployment rate among physical therapist assistants had improved, going down to 4.2 percent. Physical therapists also reported an improvement, with the reduction in working hours only 10.8 percent. The reduction in the number of working hours for physical therapist assistants was even greater than the physical therapists, at 24.5 percent in October 2000; in March 2001 it went down to 19.8 percent.

During 2005, the effects of the Balanced Budget Act of 1997 were still influencing the future of rehabilitation services. On February 17, 2005, the American Physical Therapy Association stated in a news release that "Senior citizens across the country are looking to the 109th

Congress to keep much needed rehabilitation services available under Medicare."24 Rehabilitation providers and patients urged Congress to pass the Medicare Access to Rehabilitation Services Act of 2005 to eliminate the threat that seniors and individuals with disabilities would have to pay out of pocket for rehabilitation or to alter the course of their rehabilitation care. This act was considered significant to repeal the cap that was originally instituted through the Balanced Budget Act (BBA) of 1997. From 1997 to the beginning of 2005, Congress enforced a moratorium three times that delayed implementation of the cap. On December 31, 2005, the moratorium expired. As a result, on January 1, 2006, the Medicare cap was reimplemented by the Centers for Medicare and Medicaid Services (CMS). From January 1, 2006, to December 31, 2006, the dollar amount of the therapy cap was \$1,740 for physical therapy and speech language pathology combined and \$1,740 for occupational therapy.

The American Physical Therapy Association has been working diligently during each Congressional session to reduce the drastic impact the BBA has had on patient care. Although the therapy cap went into effect in 2006, because of the pressure from the American Physical Therapy Association, clinicians, and consumer groups, Congress authorized Medicare to allow exceptions for beneficiaries who needed additional rehabilitation services based on diagnosis and clinicians' evaluations and judgments. Consequently, Congress acted to extend these exceptions through December 31, 2009. On January 1, 2010, without Congressional action, authorization for exceptions to the therapy caps expired. The American Physical Therapy Association states on its website that "on March 23rd, 2010, President Obama signed H.R. 3590, the Patient Protection and Affordable Care Act, making it law." This Act includes a health care reform package that extends the therapy cap exception process until December 31, 2010. For details of the Act and more information, visit the APTA's website at: www.apta.org

APTA Events

In 1999, two significant events affected the American Physical Therapy Association: the suspension of the \$1500 Medicare cap and the publication of the Normative Model of Physical Therapist Assistant Education: Version 1999, which guides physical therapist assistant education programs. In 2000, the Association adopted the new "Evaluative Criteria for the Accreditation of Education for Physical Therapist Assistants," launched PT Bulletin online, and published the Normative Model for Physical Therapist

Professional Education: Version 2000. In 2001, the Association introduced the second edition of the Guide to Physical Therapist Practice and worked hard to maintain physical therapists' rights in certain states to perform manipulations and provide orthotics and prosthetics within the scope of physical therapy practice. The Association launched Hooked on Evidence on the Web in 2002 to help clinicians review the research literature and utilize the information to enhance their clinical decision making and practice. In January 2002, all physical therapy educational programs changed to the master's level. In the same year, Pennsylvania became the 35th state to achieve direct access, and the American Physical Therapy Association released the Interactive Guide to Physical Therapist Practice. In 2003, the Association built support in Congress for the Medicare Patient Access to Physical Therapists Act to allow licensed physical therapists to evaluate and treat Medicare patients without a physician's referral.

Vision and Application of Scientific Pursuit Years: 2006 to Today

From 2006 to today, the roles of physical therapists have become more dependent on the application of the scientific method in clinical practice and finding new evidence-based approaches for disease prevention and health promotion. Physical therapist assistants were delegated with important responsibilities as the only individuals permitted to assist physical therapists in selected interventions (under the direction and supervision of physical therapists).

The American Physical Themapy Association Vision 2020

The American Physical Therapy Association's 2020 Vision includes the following²⁵:

By 2020, physical therapy will be provided by physical therapists who are doctors of physical therapy, recognized by consumers and other health care professionals as the practitioners of choice to whom consumers have direct access for the diagnosis of, interventions for, and prevention of impairments, functional limitations, and disabilities related to movement, function, and health.

APTA Vision Statement for Physical Therapy 2020 includes the following²⁵:

- > "Physical therapy will be provided by physical therapists who are doctors of physical therapy and who may be board-certified specialists.
- > Consumers will have direct access to physical therapists in all environments for patient/client management, prevention, and wellness services.

- > Physical therapists will be practitioners of choice in patients/clients' health networks and will hold all privileges of autonomous practice.
- > Physical therapists may be assisted by physical therapist assistants who are educated and licensed to provide physical therapist directed and supervised components of interventions.
- > Guided by integrity, life-long learning, and a commitment to comprehensive and accessible health programs for all people, physical therapists and physical therapist assistants will render evidencebased services throughout the continuum of care and improve quality of life for society.
- Physical therapists and physical therapist assistants will provide culturally sensitive care distinguished by trust, respect, and an appreciation for individual differences.
- While fully availing themselves of new technologies, as well as basic and clinical research, physical therapists will continue to provide direct patient/client care.
- > Physical therapists and physical therapist assistants will maintain active responsibility for the growth of the physical therapy profession and the health of the people it serves."

The terminology used in the vision sentence/statement relate to the following²⁵:

- Autonomous physical therapy practice environments include all physical therapy practice settings where physical therapists accept the responsibility to practice autonomously and collaboratively to provide best practice to the patient/ client. Such physical therapist practices are characterized by independent, self-determined, professional judgments and actions.
- Direct access means that throughout his or her lifetime, every consumer has the legal right to directly access a physical therapist for the diagnosis of, interventions for, and prevention of impairments, functional limitations, and disabilities related to movement, function, and health.
- The Doctor of Physical Therapy (DPT) is a clinical doctorate degree (entry-level) that reflects the growth in the body of knowledge and expected responsibilities that a professional physical therapist must master to provide best practice to the consumer. All physical therapists and physical therapist assistants are obligated to engage in the continual acquisition of knowledge, skills, and abilities to advance the science of physical therapy and its role in the delivery of health care.

- Practitioner of choice means physical therapists who personify the elements of the Vision 2020 and are recognized among consumers and other health care professionals as the preferred providers for the diagnosis of, interventions for, and prevention of impairments, functional limitations, and disabilities related to movement, function, and health.
- Evidence-based practice means access to, and application and integration of evidence to guide clinical decision making to provide best practice for the patient/client. Evidence-based practice includes the integration of best available research, clinical expertise, and patient/client values and circumstances related to patient/client management, practice management, and health care policy decision making. Plans for evidence-based practice include enhancing patient/client management and reducing unwarranted variation in the provision of physical therapy services.
- Professionalism means that physical therapists and physical therapist assistants consistently demonstrate core values by aspiring to and wisely applying principles of altruism, excellence, caring, ethics, respect, communication, and accountability, and by working together with other professionals to achieve optimal health and wellness in individuals and communities.

Achieving DiectAccess

Direct access means the ability of the public to directly access a physical therapist's services such as physical therapy evaluation, examination, and intervention. Direct access eliminates the patient's need to visit his or her physician to ask for a physician's referral. Licensed physical therapists are qualified to provide physical therapy services without referrals from physicians. Direct access decreases the cost of health care and does not promote overutilization. The American Physical Therapy Association assigned direct access to physical therapists as a high priority in the Association's federal government affairs activities. In 2005, the Medicare Patient Access to Physical Therapists Act was introduced in the House of Representatives, and its companion bill in the Senate. The act and the bill recognized the ability of licensed physical therapists to evaluate, diagnose, and treat Medicare beneficiaries requiring outpatient physical therapy services under Part B of the Medicare program, without a physician referral.

PTA Caucus

In June 2005, the National Assembly of Physical Therapist Assistants (PTAs) was dissolved and the Physical Therapist Assistant (PTA) Caucus was formed. The National Assembly of PTAs was formed in 1998 as the Affiliate Assembly. The PTA Caucus's purpose was to more fully integrate PTA members into the APTA's governance structure and increase PTAs' influence in the Association.²⁶ The PTA Caucus represents the physical therapist assistants' interests, needs, and issues in the APTA governance. ²⁶ The caucus includes a chief delegate and four delegates representing five regions.²⁶ Additionally, there are 52 PTA Caucus members representing 52 chapters. 26 Each PTA Caucus representative is elected or selected by their state chapter. The PTA Caucus also elects one chief delegate and four delegates (representing five regions) to the APTA's House of Delegates (HOD). The PTA Caucus representatives work with their chapter delegates and provide input to the delegates to the HOD and the advisory panel of PTAs. Each delegate has the ability to speak, debate, and make and second motions providing representation in the HOD for a particular region of the country.

MEMBERSHIP IN THE APTA

The American Physical Therapy Association (APTA) is the national organization that represents the profession of physical therapy. Membership in the Association is voluntary. Active members of the Association are physical therapists, physical therapist assistants (also called affiliate members), and physical therapist and physical therapist assistant students. Other Association members are retired members. honorary members (people who are not physical therapists or physical therapist assistants but who made remarkable contributions to the Association or the health of the public), and Fellow members (called a Catherine Worthingham Fellow of the American Physical Therapy Association). The Fellow member is an active member for 15 years who has made notable contributions to the profession. As of 2010, the American Physical Therapy Association membership consisted of approximately 72,000 physical therapists, physical therapist assistants, and students members. The APTA includes 52 chapters operating in the United States and its territories. Each chapter offers a variety of events, professional development activities, and other opportunities for members' interaction.

The requirement for membership in the American Physical Therapy Association is to be a graduate of an accredited physical therapist or physical therapist assistant program or to be enrolled in an accredited physical therapist or physical therapist assistant program. Physical

therapist or physical therapist assistant students are welcome as student members of the Association.

> The Association describes the following 12 specific benefits for student members²⁷:

How Will APTA Membership Jump-Start Your Career?

- I. Enjoy significant members-only savings on APTA's products, services, and conferences.
- 2. Explore new topics and research you won't find in the classroom through podcasts, newsletters, and more.
- 3. Get solid advice from people who have been in your shoes through APTA's mentoring programs.
- 4. Find the right job—studies have shown that when they have the option, employers prefer to hire APTA members.
- 5. Become involved in professional issues and debates by participating in the Student Assembly and student special-interest groups.
- 6. Stay current through News Now, PT in Motion, PTJ Online, Student Assembly Pulse, and other publications.
- 7. Connect with students, educators, and clinicians now and build lifelong contacts and friendships you can rely on for years.
- **8.** Explore APTA's 18 special-interest sections now and know exactly where your interests lie when you embark on your new career.
- 9. Build leadership skills and make a difference take on active volunteer roles in the Student Assembly and your state chapter.
- 10. Protect your future with APTA-endorsed plans and programs for professional liability, education loans, and more.
- 11. Save 50% upon graduating when you convert to PT or PTA membership—APTA's graduation gift to you.
- 12. Do your part to ensure the best possible future for the profession. APTA is the voice of physical therapy, actively representing the profession on Capitol Hill, in state legislatures, and with regulators.

The American Physical Therapy Association. Membership & Leadership. 12 Great Reasons to Be a Member! The American Physical Therapy Association Web site. Available at: http://www.apta.org.Accessed March 2010.

As of 2008, most members of the American Physical Therapy Association were females, with an average age of 42.9 years.²⁸ Members averaged 17.4 years working as a physical therapist, with some members practicing for up to 31 years and some for less than 1 year.

As of 2007, the American Physical Therapy Association's demographic profiles²⁹ for physical therapist assistant (PTA) members indicate that most of the PTAs were female (78.5 percent). In regard to age, in 2007, the highest percentage (16.4 percent) were between 35 and 39 years old, the second highest (15 percent) were between 45 and 49, and the lowest percentage (0.4 percent) were over 65 years of age.²⁹ In 2007, 73.3 percent of all PTA members were working full-time, and 11.5 percent were working part-time.²⁹ Others were either full-time or part-time self-employed (6.4 percent), seeking full-time or part-time employment (5.6 percent), or retired (0.3 percent). In regard to education, in 2007, 68.2 percent of PTAs had associate degrees, 26.7 percent had baccalaureate degrees, 3.7 percent had master's degrees, and 0.2 percent had doctorate degrees (not DPTs or tDPTs).

The APA's Mission

The Association is the principal membership organization that stands for and promotes the profession of physical therapy. Its mission is to "further the profession's role in the prevention, diagnosis, and treatment of movement dysfunctions and the enhancement of the physical health and functional abilities of members of the public."³⁰ As of October 2009, the American Physical Therapy Association amended its goals to eight encompassing the Association's major priorities toward realization of the ideals set forth in Vision 2020. Although the Association's goals are not ranked, goals one and two state the significance of physical therapists being universally recognized and promoted as the "practitioners of choice for persons with conditions that affect movement and function,"31 and "providers of fitness, health promotion, wellness, and risk reduction programs to enhance quality of life for persons across the life span."31 Physical therapist assistants' roles are included in the Association's goal six, which states that physical therapists and physical therapist assistants "are committed to meeting the health needs of patients/clients and society through ethical behavior, continued competence, collegial relationships with other health care practitioners, and advocacy for the profession."31

APTA Components

The components of the American Physical Therapy Association are chapters, sections, and assemblies. The Association has 52 chapters including chapters in the 50 states, the District of Columbia, and Puerto Rico. Membership in a chapter is automatic. Members must belong to the chapter of the state in which they live, work, or attend school (or of an adjacent state if more active participation is possible). Chapters are significant for governance at the state level and for contributing to a national integration of members in the Association. The American Physical Therapy Association has 18 sections. They are organized at the national level, providing an opportunity for members with similar areas of interest to meet, discuss issues, and encourage the interests of the respective sections. The sections usually have an annual combined sections meeting in February.

The Association has two assemblies: the PTA Caucus (which was the National Assembly for the PTAs) and the Student Assembly. The assemblies are composed of members from the same category and provide means for members to communicate and contribute at the national level to their future governance. One of the important positions expressed in 2004 by the National Assembly for the Physical Therapist Assistants was that the physical therapist assistant is the only educated individual whom the physical therapist may direct and supervise for providing selected interventions in the delivery of physical therapy services. The PTA Caucus is benefiting from and also reinforcing the PTA role in the APTA. A recent meeting in 2009³² identified the PTA members as a valuable resource of the Association, allowing for further leadership.

The House of Delegtes and the Boat of Directors

The House of Delegates (HOD) is the highest policymaking body of the APTA. It is composed of delegates from all chapters, sections, and assemblies, as well as the members of the board of directors. The HOD is composed of chapter voting delegates; section, assembly, and PTA caucus nonvoting delegates; and consultants. The number of voting chapter delegates is determined each year based on membership numbers as of June 30. The annual session of the APTA is the meeting of the House of Delegates. It usually takes place every year at the Association's Annual Conference and Exhibition in June.

The role of the board of directors is to carry out the mandates and policies established by the House of Delegates and to communicate issues to internal and external personnel, committees, and agencies. The board of directors of the APTA is composed of 15 members—6 officers and 9 directors. Members of the board assume office at the close of the House of Delegates at which they were elected. A complete term for a board member is 3 years. Only active members of the American Physical Therapy Association in good standing for at least 5 years can serve on the board of directors. No member is allowed to serve more than three complete consecutive terms on the board or more than two complete consecutive terms in the same office. The board meets at least once a year, and the executive committee meets at least twice a year.

The six officers of the APTA are the president, vice president, secretary, treasurer, speaker of the House of Delegates, and vice speaker of the House of Delegates. The president of the APTA presides at all meetings of the board of directors and the executive committee and serves as the official spokesperson of the Association. The president is also an ex officio member of all committees appointed by the board of directors except the ethics and judicial committee. The vice president of the APTA assumes the duties of the president in the absence or incapacitation of the president. In the event of vacancy in the office of president, the vice president will be the president for the unexpired portion of the term. In this situation, the office of the vice president will be vacant. The secretary of the APTA is responsible for keeping the minutes of the proceedings of the House of Delegates, the board of directors, and the executive committee; for making a report in writing to the House of Delegates at each annual session and to the board of directors on request; and for preparing a summary of the proceedings of the House of Delegates for publication. The treasurer of the APTA is responsible for reporting in writing on the financial status of the Association to the House of Delegates and to the board of directors on request. The treasurer also serves as the chair of the finance and audit committee. The speaker of the House of Delegates presides at sessions of the House of Delegates, serves as an officer of the House of Delegates, and is an ex officio member of the reference committee. The vice speaker of the House of Delegates serves as an officer of the House of Delegates and assumes the duties of the speaker of the House of Delegates in the absence or incapacitation of the speaker. In the event of a vacancy in the office of the speaker of the House of Delegates, the vice speaker succeeds to the office

of the speaker for the unexpired term. In this situation, the office of the vice speaker will be vacant.

APTA's Headquaters

The Association's headquarters are in Alexandria, Virginia. The Association's personnel are available online at www.apta.org and at the toll-free number (800) 999-2782. The address of the Association is 1111 North Fairfax Street, Alexandria, VA, 22314-1488. In 2003 the American Physical Therapy Association's headquarters in Virginia was named by Washingtonian magazine as "One of the Best Places to Work."

Other Organizations Involved with Physical Therapy

Commission or Accreditation in Pysical Therapy Education

The Commission on Accreditation in Physical Therapy Education (CAPTE) grants specialized accreditation status to qualified entry-level education programs for physical therapists and physical therapist assistants. The commission is a national accrediting agency recognized by the U.S. Department of Education and the Council for Higher Education Accreditation. The APTA and CAPTE work together to ensure that persons entering educational programs for physical therapists and physical therapist assistants receive formal preparation related to current requirements for professional practice. CAPTE accredits professional (entry-level) programs in the United States for the physical therapist at the master's and doctoral degree levels and programs for the physical therapist assistant at the associate degree level. CAPTE also accredits two physical therapist education programs in Canada and one in Scotland.

CAPTE states that its mission is "to serve the public by establishing and applying standards that assure quality and continuous improvement in the entry-level preparation of physical therapists and physical therapist assistants, and that reflect the evolving nature of education, research, and practice."33 CAPTE consists of three panels: the Physical Therapist Review Panel, Physical Therapist Assistant Review Panel, and Central Panel. Appointment to CAPTE is done through the APTA staff, who provides the APTA board of directors with a list of all individuals³³ qualified for open positions who consent to serve. CAPTE reviews the list and makes recommendations of those individuals who best meet CAPTE's needs. The board of

directors considers the recommendations of CAPTE and makes final decisions 33 for appointments to CAPTE. The term of appointment is 4 years.

American Boat of PhysicalTherapy **Specialties**

The American Board of Physical Therapy Specialties (ABPTS) is the governing body for certification and recertification of clinical specialists by coordinating and supervising the specialist certification process. The ABPTS is composed of nine individuals³⁴: six individuals appointed by the ABPTS for 4-year terms, one member of the APTA board of directors (BOD) appointed by the APTA BOD for a 1-year term, one consumer representative appointed by the BOD for a 2-year term, and one tests and measurement expert appointed by the ABPTS for a 2-year term.

The specialist certification program was established in 1978 by the APTA to provide formal recognition for physical therapists with advanced clinical knowledge, experience, and skills in a special area of practice, and to assist consumers and the health care community in identifying these physical therapists. The APTA describes specialization as a process by which a physical therapist increases his or her professional education and practice and develops greater knowledge and skills related to a particular area of practice. Specialist recertification is a process by which a physical therapist verifies current competence as an advanced practitioner in a specialty area by increasing his or her education and professional growth.

The Specialty Council on Cardiopulmonary Physical Therapy was the first to complete the process, and the cardiopulmonary specialist certification examination was first administered in 1985. Since then, seven additional specialty areas were established: Clinical Electrophysiology, Geriatrics, Neurology, Orthopedics, Pediatrics, Sports, and Women's Health Physical Therapy.

The purposes of APTA's Clinical Specialization Program are as follows³⁴:

- > To contribute to the identification and development of appropriate areas of specialty practice in physical
- > To promote the highest possible level of care for individuals seeking physical therapy services in each specialty area.
- > To promote the development of the science and the art underlying each specialty area of practice.
- > To provide a reliable and valid method for certification and recertification of individuals who have

- attained an advanced level of knowledge and skill in each specialty area.
- > To help the consumers, the health care community, and others in identifying certified clinical specialists in each specialty area.
- > To serve as a resource in specialty practice for APTA, the physical therapy profession, and the health care community.

Federation of State Books of PhysicalThempy

The Federation of State Boards of Physical Therapy (FSBPT) develops and administers the National Physical Therapy Examination (NPTE)³⁵ for both physical therapists and physical therapist assistants in 53 jurisdictions: the 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands. The purpose of the FSBPT is to protect the public by providing leadership and service that encourage competent and safe physical therapy practice. 35 The exams assess the basic entry-level competence for first time licensure or registration as a physical therapist or physical therapist assistant within the 53 jurisdictions. FSBPT's vision³⁵ is that the organization will achieve a high level of public protection through a strong foundation of laws and regulatory standards in physical therapy, effective tools and systems to assess entry-level and continuing competence, and public and professional awareness of resources for public protection.

For physical therapist and physical therapist assistant graduates who are candidates to sit for the NPTE, the federation offers a Candidate Handbook that includes all the necessary information about the exam and exam administration. The handbook can be viewed or downloaded online at www.fsbpt.org. The federation has been working with the state boards within its jurisdiction toward licensure uniformity supporting one passing score on the NPTE. This uniformity in scores assists physical therapists and physical therapist assistants to work across states.

In 2004, the FSBPT developed for purchase an online Practice Exam and Assessment Tool (PEAT) to help physical therapist and physical therapist assistant candidates prepare for the NPTE. The online PEAT allows the candidates to take a timed, multiple-choice exam similar to the NPTE and receive feedback on it. When receiving feedback, the candidates have access to the correct answer rationale and the references used for each question. Physical therapist assistant candidates can purchase a PTA PEAT that has two different 150-question exams.

APTA's Position in Regrd to Licensu€

In regard to licensure, the American Physical Therapy Association (APTA) requires that all physical therapists and physical therapist assistants should be licensed or otherwise regulated in all U.S. jurisdictions. State regulation of physical therapists and physical therapist assistants should require at a minimum graduation from an accredited physical therapy education program (or in the case of an internationally educated physical therapist, an equivalent education) and passing an entry-level competency exam; should provide title protection; and should allow for disciplinary action. In addition, physical therapists' licensure should include a defined scope of practice. Relative to temporary jurisdictional licensure, the APTA supports the elimination of temporary jurisdictional licensure of physical therapists or temporary credentialing of physical therapist assistants for previously non-U.S.-licensed or non-U.S.-credentialed applicants in all jurisdictions.

Political Actio Committee

The physical therapy political action committee (PT-PAC) of the American Physical Therapy Association is a vital aspect of the Association's success on Capitol Hill in Washington, D.C. PT-PAC ensures that future legislative actions on Capitol Hill are helpful to physical therapy practice. Physical therapist and physical therapist assistant members make donations to the political action committee. The PT-PAC committee uses membership donations to influence legislative and policy issues through lobbying efforts directed toward

policy decision makers. The purpose of the PT-PAC is "to further the legislative aims of APTA." The tasks of the PT-PAC are³⁶:

- > "To raise funds to contribute to campaigns of candidates for national and state office with attention to physical therapists as candidates for public office
- > To encourage and facilitate APTA member participation in the political process"

Follow-Up to DiectAccess and Education

As of 2010, 45 states and the District of Columbia allowed direct access. In these states, the advanced professional training and expertise of physical therapists are recognized, allowing patients/clients to visit and receive physical therapy interventions directly from physical therapists without needing a referral.

In regard to physical therapist and physical therapist assistant education, as of January 28, 2010, there were³⁷:

- 203 DPT (Doctor of Physical Therapy) accredited physical therapist education programs
- 9 MS/MPT accredited physical therapist education programs (which are changing to DPT)
- 9 developing DPT physical therapist education programs
- 252 PTA accredited physical therapist assistant education programs
- 46 developing PTA physical therapist assistant education programs

Outside of the United States there were three physical therapist accredited programs, two in Canada and one in Scotland.