

What Is Physical Therapy?

Physical therapy is a dynamic profession with an established theoretical and scientific base and widespread clinical applications in the restoration, maintenance, and promotion of optimal physical function. For more than 750,000 people every day in the United States, physical therapists:

- Diagnose and manage movement dysfunction and enhance physical and functional abilities.
- Restore, maintain, and promote not only optimal physical function but optimal wellness and fitness and optimal quality of life as it relates to movement and health.
- Prevent the onset, symptoms, and progression of impairments, functional limitations, and disabilities that may result from diseases, disorders, conditions, or injuries.

The terms “physical therapy” and “physiotherapy,” and the terms “physical therapist” and “physiotherapist,” are synonymous.

As essential participants in the health care delivery system, physical therapists assume leadership roles in rehabilitation; in prevention, health maintenance, and programs that promote health, wellness, and fitness; and in professional and community organizations. Physical therapists also play important roles both in developing standards for physical therapist practice and in developing health care policy to ensure availability, accessibility, and optimal delivery of physical therapy services. Physical therapy is covered by federal, state, and private insurance plans. The positive impact of physical therapists’ services on health-related quality of life is well accepted.

As clinicians, physical therapists engage in an examination process that includes taking the patient/client history, conducting a systems review, and performing tests and measures to identify potential and existing problems. To establish diagnoses, prognoses, and plans of care, physical therapists perform evaluations, synthesizing the examination data and determining whether the problems to be addressed are within the scope of physical therapist practice. Based on their judgments about diagnoses and prognoses and based on patient/client goals, physical therapists provide interventions (the interactions and procedures used in managing and instructing patients/clients), conduct reexaminations, modify interventions as necessary to achieve anticipated goals and expected outcomes, and develop and implement discharge plans.

The American Physical Therapy Association (APTA), the national membership organization representing and promoting the profession of physical therapy, believes it is critically important for those outside the profession to understand the role of physical therapists in the health care delivery system and the unique services that physical therapists provide. APTA is committed to informing consumers, other health care professionals, federal and state governments, and third-party payers about the benefits of physical therapy—and, more specifically, about the relationship between health status and the services that are provided by physical therapists. APTA actively supports outcomes research and strongly endorses all efforts to develop appropriate systems to measure the results of patient/client management that is provided by physical therapists.

The patient/client management elements of examination, evaluation, diagnosis, and prognosis should be represented and reimbursed as physical therapy *only when they are performed by a physical therapist*. Physical therapists are the only professionals who provide physical therapy examinations, evaluations, diagnoses, prognoses, and interventions. Physical therapist assistants, under the direction and supervision of physical therapists, are the only paraprofessionals who assist in the provision of physical therapy interventions. Intervention should be represented and reimbursed as physical therapy *only when performed by a physical therapist or by a physical therapist assistant under the direction and supervision of a physical therapist*.

APTA recommends that federal and state government agencies and other third-party payers require physical therapy to be provided *only by physical therapists or under the direction and supervision of physical therapists*.

Conceptualizing Disability

Demetra John PT, PhD

Several conceptual frameworks or models have been developed to define or conceptualize disability. There is some controversy over the definitions of disability provided in these models, as well as how statistics are collected that describe the prevalence of disability. One has to be able to define disability and define the target population in order to study health promotion issues in adults with disabilities.

Disability is a complex physical and psycho-social phenomenon, which is difficult to conceptualize and define. The Americans with Disabilities Act of 1990 defined disability broadly as a “physical or mental impairment that substantially limits one or more of the major activities” of an individual. Multiple individuals and organizations have struggled with developing models that help one to conceptualize or classify disability (Nagi, 1991; Pope and Tarlov, 1991; Jette, 1994; Jette and Verbrugge, 1994; and Gill, 1994). In this section, some of the more common disability models found in the literature are reviewed, and the benefits and limitations of these models are discussed.

One of the earliest models was developed by the World Health Organization (Pope and Tarlov, 1991 and Jette, 1994). This classification was called the International Classification of Impairments, Disabilities, and Handicaps (ICIDH), (Figure 2) (Jette, 1994). This model shows the progression from disease to impairment to disability. Disability is seen as the loss of function such as the inability to perform activities of daily living (ADL's) and instrumental activities of daily living (IADL's). Handicaps result when the person has difficulty in performing his or her societal role. Handicaps result from problems in the interaction of the individual with

society and the environment. This model has been criticized because of the use of the term handicap which has negative connotations in American society (Pfeiffer, 1998).

Figure 1: International Classification of Impairments, Disabilities, and Handicaps (ICDIDH), (WHO, 1980)

Disease - Impairment - Disability - Handicap

Figure 2: Nagi Model, 1991

Active pathology - Impairment - Functional - Disability
Limitation

Figure 3: National Center for Medical Rehabilitation Research (NCMRR)

Pathophysiology - Impairment - Functional - Disability - Societal
Limitation Limitation

Figure 4: Verbrugge and Jette, 1994

Pathology - Impairments - Functional - Disability
Limitations
^ ^
Risk factors Extra- and intra-individual factors

Figure 5: Gill, 1994

Two Models of Disability: A Contrast

Medical Model:

Disability is a deficiency or an abnormality

Being disabled is negative

Interactional Model:

Disability is a difference

Being disabled, in itself is neutral

Disability resides in the individual

The remedy for disability-related problems is cure or normalization of the individual

The agent of remedy is the professional

Disability derives from the interaction between the individual and society

The remedy for disability-related problems is a change in the interaction between the individual and society

The agent of remedy can be the individual, an advocate, or anyone who affects the arrangements between the individual and society

Figure 6: International Classification of Functioning, Disability, and Health (ICF), WHO, 2001

specify the extent or the magnitude of the functioning or disability in that category, or the extent to which an environmental factor is a facilitator or barrier.

Table 1. An overview of ICF

	Part 1: Functioning and Disability		Part 2: Contextual Factors	
Components	Body Functions and Structures	Activities and Participation	Environmental Factors	Personal Factors
Domains	Body functions Body structures	Life areas (tasks, actions)	External influences on functioning and disability	Internal influences on functioning and disability
Constructs	Change in body functions (physiological) Change in body structures (anatomical)	Capacity Executing tasks in a standard environment Performance Executing tasks in the current environment	Facilitating or hindering impact of features of the physical, social, and attitudinal world	Impact of attributes of the person
Positive aspect	Functional and structural integrity	Activities Participation	Facilitators	not applicable
	Functioning			
Negative aspect	Impairment	Activity limitation Participation restriction	Barriers / hindrances	not applicable
	Disability			

Another model that has had wide acceptance was developed by Nagi (Pope and Tarlov, 1991). This model (Figure 3) is similar to the ICIDH in that it shows a progression from the disease state (active pathology) to a level of disability. Functional limitations in the Nagi model are similar to disability in the ICIDH model, and disability is defined similarly to handicap. Nagi proposes that disability results from the interaction of the individual and society. Disability does not reside in the individual, but is a result from a lack of social support or environmental barriers. One can begin to understand that disability is socio-politically constructed. Theoretically, if these barriers were eliminated, an individual would have functional limitations, but not be disabled.

A third model has been developed by the National Center for Medical Rehabilitation Research (NCMRR) which is similar to the Nagi and WHO models (National Institutes of Health, 1993) (Figure 4). The difference with this model is that it adds a category labeled societal limitation. This category denotes limitations resulting from structural or attitudinal barriers or social policies.

Verbrugge and Jette (1994) built on the Nagi model in order to develop their own model called the disablement process (Figure 5). They incorporated the element of risk factors as contributors to impairments. They added categories of extra-individual factors and intra-individual factors at the level of functional limitations to more clearly and fully illustrate mediators in the pathway to disability. Issues such as medical care, external and social support, environmental issues, and personal attributes were taken into consideration in this model. They proposed that disability could have further outcomes including lessening of the quality of life, creation of secondary conditions, and secondary disability processes. They also proposed prevention strategies that can be instituted at four levels: primary (avert pathology), secondary

(avert impairments), tertiary (avert secondary conditions and death), and quaternary (maintain and restore function).

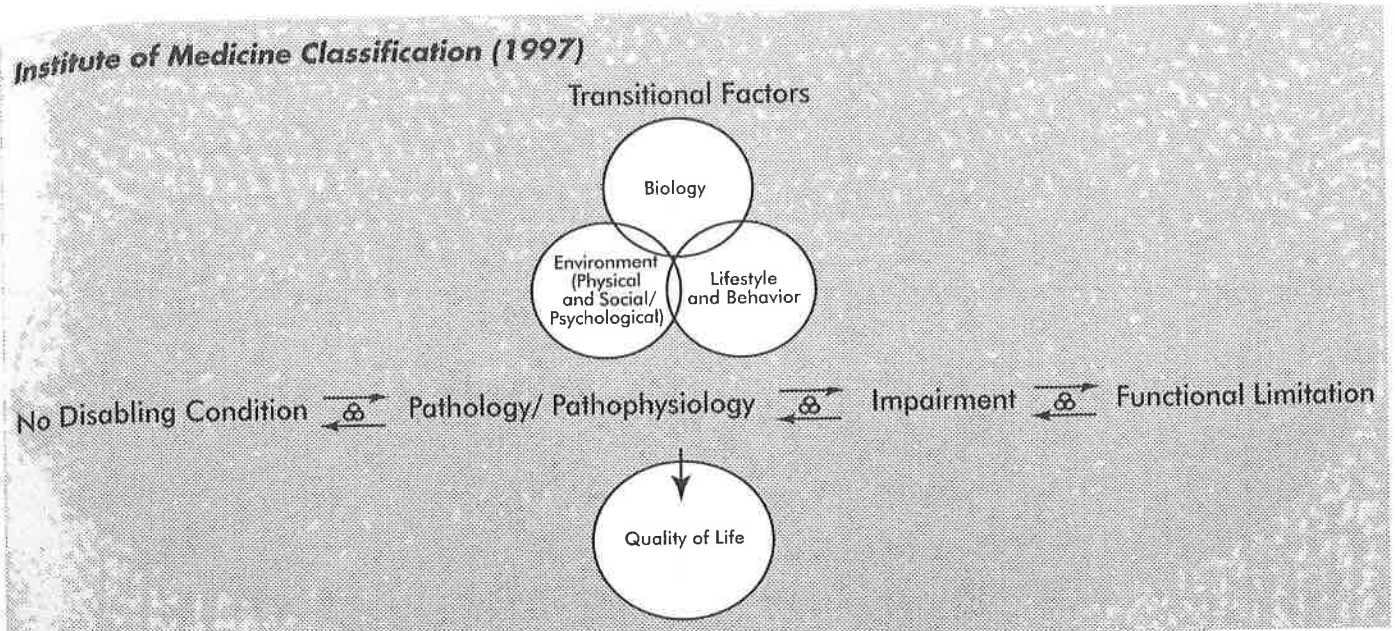
A different view has emerged from the writings of disabled persons (Oliver, 1998). This is called the social model, which attempts to destigmatize disability and conceptualize that disability does not lie within the individual, but is instead socio-politically constructed. The remedy or intervention for disability-related problems lies in changing or supporting the interaction of the individual with society. The extent of disability that a person experiences is due to unmet social and/or environment support for activities of daily living and social roles. An illustration of this model has been presented by Gill, 1994 (Figure 6). Gill contrasts her model with the medical model that views disability as an abnormality that must be cured, or normalized. The medical model can easily lead to stigmatization of those with disabilities.

A recent model that has wide exposure is the WHO revised model of the ICDH, now called the International Classification of Functioning, Disability, and Health (ICF). The ICF was developed after a long series of revision efforts, which sought input from persons with a variety of perspectives. The current version of the ICF was introduced in 2001 (World Health Organization, 2001). This version seeks to further consider the role of the social and political environment in disability. However, it still largely maintains a health and physical functioning perspective in its framing of disability. The main components of this model are considered “domains for a person in a given health condition”: body functions and structures, activity and participation, and environmental factors (Figure 7). Functioning refers to the ability to fully perform in these domains, while disability is conceptualized as limitations in these domains such as activity limitations and participation restrictions. These limitations are thought to occur

because of deficits in environmental supports, in addition to the person's body functions and structures.

All the above models are helpful in conceptualizing disability and a potential disablement process. They form a basis for a dialogue on disability issues and further definitions of disability. However, these models are not in full agreement, and the definitions are currently poorly operationalized. The Nagi, WHO, and Jette and Verbrugge models are also based on a medical model that presupposes that disability is an outcome of disease or pathology (Nagi, 1991; Pope and Tarlov, 1991; Jette, 1994; Jette and Verbrugge, 1994). This has the potential of stigmatizing disability as a negative disease outcome as opposed to the "neutral", "difference" proposed by Gill, 1994. These models could be improved by incorporating more of a disability community perspective; discussing similarities and differences between models; expanding models to include intervention strategies; and further operationalization of terminology.

Figure 3. The Enabling-Disabling Process^a



^aAdapted with permission of the Institute of Medicine from Brandt EN Jr, Pope AM. Enabling America: Assessing the Role of Rehabilitation Science and Engineering. Washington, DC: Institute of Medicine, National Academy Press; 1997:68.

Disability

The Guide defines *disability* broadly as the inability or restricted ability to perform actions, tasks, and activities related to required self-care, home management, work (job/school/play), community, and leisure roles in the individual's sociocultural context and physical environment.

Disability refers to patterns of behavior that have emerged over periods of time during which functional limitations are severe enough that they cannot be overcome to maintain "normal" role performance. Thus, the concept of disability includes deficits in the performance of ADL and IADL that are broadly pertinent to many social roles. If a person has limited range of motion at the shoulder but bathes independently by using a shower mitt and applies the available range of motion at other joints to best mechanical advantage, that person is not "disabled," even though functional performance may be extremely limited without the use of an assistive device and altered movement patterns.

Disability is characterized by discordance between actual performance in a particular role and the expectations of the community regarding what are "normal" behaviors in that role. Labeling a person as "disabled" requires a judgment, usually by a professional, that an individual's behaviors are somehow inadequate, based on that professional's understanding of community expectations about how a given activity should be accomplished (eg, in ways that are typical for a person's age, sex, and cultural and social environment).

Disability depends on both the capacities of the individual and the expectations that are imposed on the individual by those in the immediate social environment, most often

family and caregivers. Changing the expectations of a patient, family, or caregiver in a social context—for example, the physical therapist explaining to family members the level of assistance that is needed for an elder following stroke—may help to diminish disability as much as supplying the patient with assistive devices or increasing the patient's physical ability to use them.

Interrelationships Among Disease, Impairments, Functional Limitations, and Disability

When the physical therapist has determined which impairments are related to the patient's functional limitations, the therapist must determine which impairments may be remedied by physical therapy intervention. If they cannot be remedied, the physical therapist can help the patient compensate by using other abilities to accomplish the intended goal. The task or the environment also may be modified so that the task can be performed within the restrictions that the patient's condition imposes. These two approaches focus on "enablement" rather than remediation of "disablement," and they may be characterized as the classical physical therapist response to the disablement process.^{3,13-17}

Disablement models have always included the concept of preventing progression toward disability. "Unidirectional," causal progression—from disease to impairment to functional limitation to disability, handicap, or societal limitation—"inexorably...without the possibility of reversal"—should not be assumed.⁵ In 1997, IOM revised its disablement model to show both the interactions of the person with the environment and the "potential effects of rehabilitation and the 'enabling process'" (Fig. 3). The

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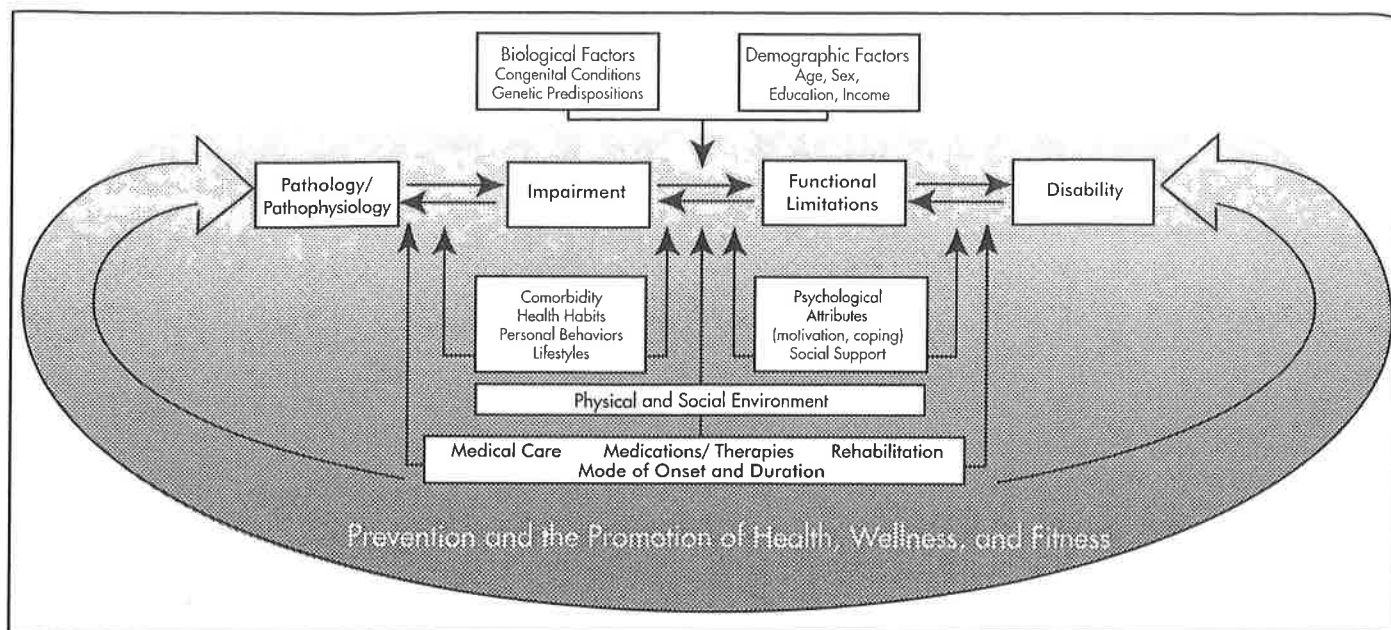
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Figure 4. An Expanded Disablement Model, Showing Interactions Among Individual and Environmental Factors; Prevention, and the Promotion of Health, Wellness, and Fitness^a



^aAdapted with permission of the American Physical Therapy Association from Guccione AA. Arthritis and the process of disablement. *Phys Ther.* 1994;74:410.

model suggests a bidirectional interaction among the components, in which improvement in one component has an effect on the development or progression of a preceding component. Disability was not included in the model because disability “is not inherent in the individual but, rather, a function of the interaction of the individual and the environment.”⁵ The “enabling–disabling process,” therefore, recognizes that functional limitations and disability may be reversed.⁵

Prevention and the Promotion of Health, Wellness, and Fitness in the Context of Disablement

Progression from a healthy state to pathology—or from pathology or impairment to disability—does not have to be inevitable. The physical therapist may prevent impairments, functional limitations, or disabilities by identifying disablement risk factors during the diagnostic process and by buffering the disablement process (Fig. 4). The patient/client management described in the Guide includes three types of prevention:

- **Primary prevention.** Prevention of disease in a susceptible or potentially susceptible population through specific measures such as general health promotion efforts.
- **Secondary prevention.** Efforts to decrease duration of illness, severity of disease, and sequelae through early diagnosis and prompt intervention.
- **Tertiary prevention.** Efforts to decrease the degree of disability and promote rehabilitation and restoration of function in patients with chronic and irreversible dis-

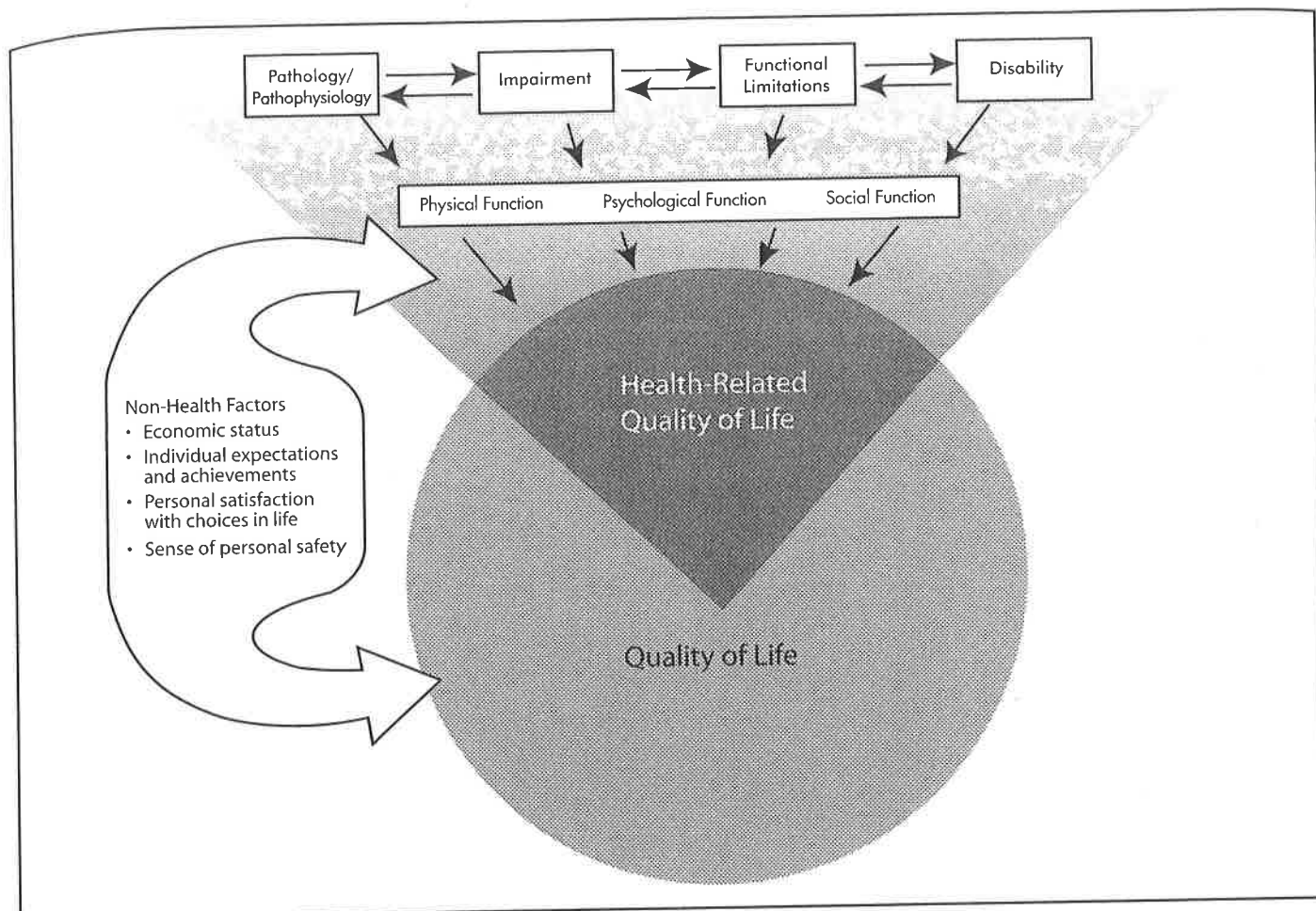
eases. In the diagnostic process, physical therapists identify risk factors for disability that may be independent of the disease or pathology.

The Individual, the Environment, and Health-Related Quality-of-Life Factors

Many factors may have an impact on the disablement process (Fig. 4). These factors may include individual and environmental factors that predispose or interact to create a person’s disability.^{2,5} Individual factors include biological factors (eg, congenital conditions, genetic predispositions) and demographic factors (eg, age, sex, education, income). Comorbidity, health habits, personal behaviors, lifestyles, psychological traits (eg, motivation, coping), and social interactions and relationships also influence the process of disablement. Furthermore, environmental factors—such as available medical or rehabilitation care, medications and other therapies, and the physical and social environment—may influence the process of disablement. Each of these factors may be modified by prevention and the promotion of health, wellness, and fitness.

Health-related quality of life (HRQL) can be said to represent the total effect of individual and environmental factors on function and health status. Three major dimensions of HRQL have been described in the literature: the *physical function component*, which includes basic activities of daily living (ADL) (eg, bathing) and instrumental activities of daily living (IADL) (eg, shopping); the *psychological component*, that is, the “various cognitive, perceptual, and personality traits” of a person; and the *social component*, which involves the interaction of the person “within a

Figure 5. Relationship Among the Disablement Model, Health-Related Quality of Life, and Quality of Life



larger social context or structure.”¹⁸ As shown in Figure 5, the broad concept of HRQL encompasses the disablement model. Other “non-health” factors that typically are not included in definitions of functional limitation or disability contribute to an individual’s sense of well being—and to both overall quality of life and health-related quality of life. Such factors include economic status, individual expectations and achievements, personal satisfaction with choices in life, and sense of personal safety.

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CHAPTER 1

Who Are Physical Therapists, and What Do They Do?

Education and Qualifications

Physical therapists are professionally educated at the college or university level and are required to be licensed in the state or states in which they practice. Graduates from 1926 to 1959 completed physical therapy curricula approved by appropriate accreditation bodies. Graduates from 1960 to the present have successfully completed professional physical therapist education programs accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE). As of January 2002, CAPTE accreditation is limited to only those professional education programs that award the postbaccalaureate degree.

Physical therapists also may be certified as clinical specialists through the American Board of Physical Therapy Specialties (ABPTS).

Practice Settings

Physical therapists practice in a broad range of inpatient, outpatient, and community-based settings, including the following:

- Hospitals (eg, critical care, intensive care, acute care, and subacute care settings)
- Outpatient clinics or offices
- Rehabilitation facilities
- Skilled nursing, extended care, or subacute facilities
- Homes
- Education or research centers
- Schools and playgrounds (preschool, primary, and secondary)
- Hospices
- Corporate or industrial health centers
- Industrial, workplace, or other occupational environments
- Athletic facilities (collegiate, amateur, and professional)
- Fitness centers and sports training facilities

Patients and Clients

Physical therapists are committed to providing necessary and high-quality services to both patients and clients. *Patients* are individuals who are the recipients of physical

therapy examination, evaluation, diagnosis, prognosis, and intervention and who have a disease, disorder, condition, impairment, functional limitation, or disability. *Clients* are individuals who engage the services of a physical therapist and who can benefit from the physical therapist's consultation, interventions, professional advice, prevention services, or services promoting health, wellness, and fitness. Clients also are businesses, school systems, and others to whom physical therapists provide services. The generally accepted elements of patient/client management typically apply to both patients and clients.

Scope of Practice

Physical therapy is defined as the care and services provided by or under the direction and supervision of a physical therapist. Physical therapists are the only professionals who provide physical therapy. Physical therapist assistants—under the direction and supervision of the physical therapist—are the only paraprofessionals who assist in the provision of physical therapy interventions. APTA therefore recommends that federal and state government agencies and other third-party payers require physical therapy to be provided only by a physical therapist or under the direction and supervision of a physical therapist. Examination, evaluation, diagnosis, and prognosis should be represented and reimbursed as physical therapy only when they are performed by a physical therapist. Intervention should be represented and reimbursed as physical therapy only when performed by a physical therapist or by a physical therapist assistant under the direction and supervision of a physical therapist.

Physical therapists:

- *Provide services to patients/clients who have impairments, functional limitations, disabilities, or changes in physical function and health status resulting from injury, disease, or other causes.* In the context of the model of disablement¹⁻⁴ on which this Guide is based, *impairment* is defined as loss or abnormality of anatomical, physiological, mental, or psychological structure or function; *functional limitation* is defined as restriction of the ability to perform, at the level of the whole person, a physical action, task, or activity in

an efficient, typically expected, or competent manner; and *disability* is defined as the inability to perform or a limitation in the performance of actions, tasks, and activities usually expected in specific social roles that are customary for the individual or expected for the person's status or role in a specific sociocultural context and physical environment.

- *Interact and practice in collaboration with a variety of professionals.* The collaboration may be with physicians, dentists, nurses, educators, social workers, occupational therapists, speech-language pathologists, audiologists, and any other personnel involved with the patient/client. Physical therapists acknowledge the need to educate and inform other professionals, government agencies, third-party payers, and other health care consumers about the cost-efficient and clinically effective services that physical therapists provide.
- *Address risk.* Physical therapists identify risk factors and behaviors that may impede optimal functioning.
- *Provide prevention and promote health, wellness, and fitness.* Physical therapists provide prevention services that forestall or prevent functional decline and the need for more intense care. Through timely and appropriate screening, examination, evaluation, diagnosis, prognosis, and intervention, physical therapists frequently reduce or eliminate the need for costlier forms of care and also may shorten or even eliminate institutional stays. Physical therapists also are involved in promoting health, wellness, and fitness initiatives, including education and service provision, that stimulate the public to engage in healthy behaviors.
- *Consult, educate, engage in critical inquiry, and administrate.* Physical therapists provide consultative services to health facilities, colleagues, businesses, and community organizations and agencies. They provide education to patients/clients, students, facility staff, communities, and organizations and agencies. Physical therapists also engage in research activities, particularly those related to substantiating the outcomes of service provision. They provide administrative services in many different types of practice, research, and education settings.
- *Direct and supervise the physical therapy service, including support personnel.* Physical therapists oversee all aspects of the physical therapy service. They supervise the physical therapist assistant (PTA) when PTAs provide physical therapy interventions as selected by the physical therapist. Physical therapists also supervise any support personnel as they perform designated tasks related to the operation of the physical therapy service.

Roles in Primary Care

Physical therapists have a major role to play in the provision of *primary care*, which has been defined as

the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing within the context of family and community.⁵

APTA has endorsed the concepts of primary care set forth by the Institute of Medicine's Committee on the Future of Primary Care,⁵ including the following:

- Primary care can encompass myriad needs that go well beyond the capabilities and competencies of individual caregivers and that require the involvement and interaction of varied practitioners.
- Primary care is not limited to the "first contact" or point of entry into the health care system.
- The primary care program is a comprehensive one.

On a daily basis, physical therapists practicing across acute, rehabilitative, and chronic stages of care assist patients/clients in restoring health, alleviating pain, and examining, evaluating, and diagnosing impairments, functional limitations, disabilities, or changes in physical function and health status resulting from injury, disease, or other causes. Intervention, prevention, and the promotion of health, wellness, and fitness are a vital part of the practice of physical therapists. As clinicians, physical therapists are well positioned to provide services as members of primary care teams.

For acute musculoskeletal and neuromuscular conditions, triage and initial examination are appropriate physical therapist responsibilities. The primary care team may function more efficiently when it includes physical therapists, who can recognize musculoskeletal and neuromuscular disorders, perform examinations and evaluations, establish a diagnosis and prognosis, and intervene without delay. For patients/clients with low back pain, for example, physical therapists can provide immediate pain reduction through programs for pain modification, strengthening, flexibility, endurance, and postural alignment; instruction in activities of daily living (ADL); and work modification. Physical therapy intervention may result not only in more efficient and effective patient care but also in more appropriate utilization of other members of the primary care team. With physical therapists functioning in a primary care role and delivering early intervention for work-related musculoskeletal injuries, time and productivity loss due to injuries may be dramatically reduced.

For certain chronic conditions, physical therapists should be recognized as the principal providers of care within the collaborative primary care team. Physical therapists are well

care services and enhance function in patients with cardiovascular/pulmonary disorders

- Exercise programs, cardiovascular conditioning, postural training, and instruction in ADL and IADL to prevent disability and dysfunction in women who are pregnant
- Broad-based consumer education and advocacy programs to prevent problems (eg, prevent head injury by promoting the use of helmets, prevent pulmonary disease by encouraging smoking cessation)
- Exercise programs to prevent or reduce the development of sequelae in individuals with life-long conditions

The Five Elements of Patient/Client Management

The physical therapist integrates the five elements of patient/client management—examination, evaluation, diagnosis, prognosis, and intervention—in a manner designed to optimize outcomes (Fig. 1). Appendix 6 contains a template for documenting the five elements of patient/client management.

Examination, evaluation, and the establishment of a diagnosis and a prognosis are all part of the process that helps the physical therapist determine the most appropriate intervention(s) to address the outcomes that are desired by the patient/client.

Examination

Examination is required prior to the initial intervention and is performed for all patients/clients. The initial examination is a comprehensive screening and specific testing process leading to diagnostic classification or, as appropriate, to a referral to another practitioner. The examination has three components: the patient/client history, the systems review, and tests and measures.

History. The *history* is a systematic gathering of data—from both the past and the present—related to why the patient/client is seeking the services of the physical therapist. The data that are obtained (eg, through interview, through review of the patient/client record, or from other sources) include demographic information, social history, employment and work (job/school/play), growth and development, living environment, general health status, social and health habits (past and current), family history, medical/surgical history, current conditions or chief complaints, functional status and activity level, medications, and other clinical tests. While taking the history, the physical therapist also identifies health restoration and prevention needs and coexisting health problems that may have implications for intervention.

This history typically is obtained through the gathering of data from the patient/client, family, significant others,

caregivers, and other interested individuals (eg, rehabilitation counselor, teacher, workers' compensation claims manager, employer); through consultation with other members of the team; and through review of the patient/client record. Figure 2 lists the types of data that may be generated from the history.

Data from the history (Fig. 2) provide the initial information that the physical therapist uses to hypothesize about the existence and origin of impairments or functional limitations that are commonly related to medical conditions, sociodemographic factors, or personal characteristics. For example, in the case of a 78-year-old woman who has a medical diagnosis of Parkinson disease and who lives alone, the medical diagnosis would suggest the *possibility* of the following impairments: loss of motor control, range-of-motion deficits, faulty posture, and decreased endurance for functional activities. Epidemiologic research that is available about functional limitations of older women, however, suggests that performance of IADL also may be problematic for that age group. Consequently, in this case, the physical therapist may use the information obtained during the history as well as the epidemiological information to create a "hypothesis" that would require further, in-depth examination during the tests-and-measures portion of the examination.

Systems review. After organizing the available history information, the physical therapist begins the "hands-on" component of the examination. The *systems review* is a brief or limited examination of (1) the anatomical and physiological status of the cardiovascular/pulmonary, integumentary, musculoskeletal, and neuromuscular systems and (2) the communication ability, affect, cognition, language, and learning style of the patient. The physical therapist especially notes how each of these last five components affects the ability to initiate, sustain, and modify purposeful movement for performance of an action, task, or activity that is pertinent to function.

The systems review includes the following:

- For the cardiovascular/pulmonary system, the assessment of heart rate, respiratory rate, blood pressure, and edema
- For the integumentary system, the assessment of skin integrity, skin color, and presence of scar formation
- For the musculoskeletal system, the assessment of gross symmetry, gross range of motion, gross strength, height, and weight
- For the neuromuscular system, a general assessment of gross coordinated movement (eg, balance, locomotion, transfers, and transitions)
- For communication ability, affect, cognition, language, and learning style, the assessment of the ability to make

Figure 2. Types of Data That May Be Generated From a Patient/Client History

General Demographics

- Age
- Sex
- Race/ethnicity
- Primary language
- Education

Social History

- Cultural beliefs and behaviors
- Family and caregiver resources
- Social interactions, social activities, and support systems

Employment/Work (Job/School/Play)

- Current and prior work (job/school/play), community, and leisure actions, tasks, or activities

Growth and Development

- Developmental history
- Hand dominance

Living Environment

- Devices and equipment (eg, assistive, adaptive, orthotic, protective, supportive, prosthetic)
- Living environment and community characteristics
- Projected discharge destinations

General Health Status (Self-Report, Family Report, Caregiver Report)

- General health perception
- Physical function (eg, mobility, sleep patterns, restricted bed days)
- Psychological function (eg, memory, reasoning ability, depression, anxiety)
- Role function (eg, community, leisure, social, work)
- Social function (eg, social activity, social interaction, social support)

Social/Health Habits (Past and Current)

- Behavioral health risks (eg, smoking, drug abuse)
- Level of physical fitness

Family History

- Familial health risks

Medical/Surgical History

- Cardiovascular
- Endocrine/metabolic
- Gastrointestinal
- Genitourinary
- Gynecological
- Integumentary
- Musculoskeletal
- Neuromuscular
- Obstetrical
- Prior hospitalizations, surgeries, and preexisting medical and other health-related conditions
- Psychological
- Pulmonary

Current Condition(s)/Chief Complaint(s)

- Concerns that led the patient/client to seek the services of a physical therapist
- Concerns or needs of patient/client who requires the services of a physical therapist
- Current therapeutic interventions
- Mechanisms of injury or disease, including date of onset and course of events
- Onset and pattern of symptoms
- Patient/client, family, significant other, and caregiver expectations and goals for the therapeutic intervention
- Patient/client, family, significant other, and caregiver perceptions of patient's/client's emotional response to the current clinical situation
- Previous occurrence of chief complaint(s)
- Prior therapeutic interventions

Functional Status and Activity Level

- Current and prior functional status in self-care and home management, including activities of daily living (ADL) and instrumental activities of daily living (IADL)
- Current and prior functional status in work (job/school/play), community, and leisure actions, tasks, or activities

Medications

- Medications for current condition
- Medications previously taken for current condition
- Medications for other conditions

Other Clinical Tests

- Laboratory and diagnostic tests
- Review of available records (eg, medical, education, surgical)
- Review of other clinical findings (eg, nutrition and hydration)

