= CHAPTER 2 =

The Changing World and the Future of Physical Therapy

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In the past two decades, there have been widespread changes in the health care delivery system in the United States. Managed health care has changed reimbursement mechanisms and mandated widespread cost containment across all levels of care. The roles and practice parameters of the physical therapist and physical therapist assistant continue to evolve in response to these changes.

Cost-Containment… Everywhere!

Elaine started her new position as a graduate physical therapist assistant and found that there were 5 staff members called "Patient Care Associates" who worked side by side with the licensed staff members in the department. She talked with one associate

who told her that he was trained on the job to perform gait training and therapeutic exercise. She wondered how his training differed from hers.

The changing mechanisms of payment for services have forced health care organizations to develop numerous cost-containment strategies. For example, most physical therapy practice settings operate in an environment that is largely funded by a prospective payment system. Payments are adjusted for the health condition and the projected care needs of the beneficiary. Prospective payment systems provide payments with fixed limits or fixed amounts that are determined by the diagnosis of the patient, rather than by the actual time spent or the individual needs of the patient.[1]

Health care providers often experience strict utilization management, with increased accountability to third-party payers and health maintenance

organizations. This requires an extra burden of paperwork, which can be greatly simplified with use of computerized resources.

To manage costs, many health care institutions use on-the-job trained multiskilled workers for physical therapy-related functions and/or to reduce the time or number of treatments that patients receive. These workers are sometimes given job titles within an institution of "physical therapy aide," "rehab tech," or "patient care associate."

Physical therapists must therefore be able to prioritize and manage care while providing direction and supervision for other members of the health care delivery team. State licensure laws vary considerably with regard to specific supervision requirements. In addition, reimbursement guidelines often determine what services will be covered in the delivery of physical therapy intervention by support personnel.

It is the *physical therapist assistant* who is exclusively qualified and, in almost all states and the District of Columbia, licensed to specifically assist the physical therapist in the delivery of physical therapy treatments to patients/clients. Regardless of reimbursement challenges, it is unacceptable to permit unsupervised support personnel to perform entire treatment interventions. It is illegal for support personnel to represent themselves as physical therapists or physical therapist assistants. Furthermore, it is considered unethical (and in most states illegal) for the physical therapist assistant to work under the supervision of anyone besides a licensed physical therapist.

Cost-Effective and Efficient Outcomes

Frank was in disbelief at the volume of documentation required to be reimbursed for physical therapy services in the skilled nursing facility. His patient was anticipated to be there for only 2 weeks, and it was essential to show the outcomes of the physical therapy intervention.

The focus of physical therapy is to improve the physical performance and functional independence that is meaningful to the patient. This may include a person's ability to move about the environment, perform self-care, successfully complete job tasks, and enjoy leisure activities. Third-party payment systems require documentation of functional

outcomes of physical therapy treatment, especially in relation to costs. Physical therapists must be able to efficiently and reliably evaluate a person's function and underlying impairments, develop meaningful physical therapy interventions, and objectively measure and document the effectiveness of their physical therapy interventions over time.[2]

The *Guide to Physical Therapist Practice*[3] outlines practice patterns that are indicated for various diagnostic groups. The practice patterns in the *Guide* include patterns for musculoskeletal, neuromuscular, cardiovascular and pulmonary, and integumentary diagnoses.[3] The *Guide* also describes objective tests and measures used to obtain information about the conditions included within the practice pattern. The patient information that results from the tests and measures assists the physical therapist in determining interventions or treatment procedures

that may be appropriate for the patient.[3] Tests, measurements, and interventions that result in efficient and cost-effective patient outcomes may give physical therapy an advantage in competing for the limited health care dollars available. The *Guide* is available online at the American Physical Therapy Association website (http://guidetoptpractice.apta.org/).

Shift to Prevention and Wellness

The second-year physical therapist assistant students were assigned a class project to assist the district physical therapy association with preparing an exhibition on computer workstation ergonomics for the Physical Therapist Month health fair at the mall. The project was approached scientific-

ally, incorporating theories of behavioral change with simple, clear messages about body mechanics, posture, and exercise to prevent repetitive stress disorders.

With diminishing financial resources for the treatment of existing illnesses and injuries, attention has been shifted to health promotion, wellness, and prevention of disease and disability.

The *Guide to Physical Therapist Practice* describes the types of prevention in which physical therapists are involved, including primary, secondary, and tertiary prevention. Prevention strategies utilized by physical therapists generally involve screening of individuals of different age groups to determine their risk for health problems, such as falls in the elderly and developmental delay in babies. Prevention strategies also involve physical therapists developing exercise or activity programs that are often carried out by the physical ther-

apist assistant. Examples of prevention screenings and interventions in which physical therapists and physical therapist assistants are involved are outlined in Table 2-1.

In addition to the previous activities, let us also take a look at the most prevalent chronic diseases and how physical therapists and physical therapist assistants can help.

Chronic diseases cause 7 in 10 deaths each year in the United States and account for more than 75% of health care costs. Examples of chronic diseases include heart disease, cancer, stroke, diabetes, and arthritis. Although these diseases are common and costly, they are also largely preventable by altering controllable behaviors, such as tobacco use, insufficient physical activity, poor eating habits, and excessive alcohol use.[4]

One in 3 adults (77.9 million) in the United States has high blood pressure (hypertension), and only 3 in 4 are

aware of their condition. Less than half of those who have been diagnosed with high blood pressure have it adequately controlled.[5] This is an especially serious problem in the African American community, where 43% of men and 45.7% of women have hypertension.[6] Researchers estimate that the annual cost of high blood pressure in 2010 was $93.5 billion in direct and indirect costs.[7]

Diabetes is another serious chronic disease that affects a large proportion of our population. Almost 24 million children and adults, and 1 in 4 (25.9%) of adults age 65 and older have been diagnosed with diabetes. The complications of this disease are the leading cause of kidney disease and new cases of blindness, neuropathy, and amputations. Diabetes costs over $200 billion per year. Diabetes disparately impacts the Hispanic, African American, and American Indian populations.[8]

These 2 diseases alone are major causes of morbidity and mortality. Both are leading health disparities and both *can be prevented and improved by physical activity*. This is an area where physical therapy must play a key role.

As detailed in the *Guide,* physical therapists not only provide evaluation and treatment but they also provide services that are aimed at preventing illness and disability. Physical therapists are educated about health behavior and related health promotion strategies.[3] Physical therapist assistants frequently assist with various aspects of the planning and implementation of these activities. More than ever before, excellent communication and patient education skills are critical for both the therapist and assistant.

TABLE 2-1

Prevention Screenings and Interventions by Physical Therapists and Physical Therapist Assistants

SCREENING ACTIVITY	*INTERVENTION*
Assessment for a falls risk in members of a senior center	Balance and coordination exercise program for seniors identified as having a risk for falls
Backpack weight screening to assess risk of back pain in middle school children who carry heavy backpacks	Education program for parents about the maximum load that should be carried in a backpack in relation to the child's weight
Assessment of symptoms of neck and arm pain in office workers	Recommendations for ergonomic alterations in the workspace
Assessment of risk in long-term care facility residents for	Collaborate with team members to institute a comprehensive skin

skin breakdown from pressure areas	care program involving periodic weight shifting, turning, and repositioning

These efforts will be enhanced by national efforts to promote health and the prevention of chronic diseases as well. In 10-year cycles, the US Department of Health and Human Services uses available evidence and experience to establish goals, action steps, and indicators for the nation's health. *Healthy People 2020* addresses targets for action to achieve better health by the year 2020, including risks to health and wellness, emerging public health priorities, and critical issues related to preparedness and prevention.[9]

Integrated Service Delivery

Frank looked over his assignment. What do nurses do? What do social workers do? How does occupational therapy differ from physical therapy? When are the services of a speech language pathologist indicated? Does each of these areas utilize licensed assistants? The case study raised all of these questions. What services would be appropriate and most efficiently delivered to an 85-year-old widow who had just returned home from a 3-week stay in a skilled nursing facility while recovering from a stroke?

As our social service and health care systems increase in complexity and the reimbursement dollars shrink, various

health care workers must work together closely to optimally meet each patient's needs. Interdisciplinary case management has been associated with patients reaching higher levels of function in shorter lengths of time.[10] *Integrated service delivery* strategies involve interdisciplinary team interaction, interprofessional collaboration, and coordination among providers to deliver skillful services to clients and patients with multiple needs.[11] Physical therapists must be able to foster the collaboration and coordination of service delivery, in addition to providing unique and specialized health care services. The physical therapist assistant will inevitably play an instrumental role on this interdisciplinary team.

Shift From Hospitals to Other Levels of Care

Frank noticed that discharge planning was a term that came up frequently in classroom discussions this semester, including discussion of terms such as social support, prior level of function, mental status, judgment, and current functional level. It seemed that there were so many things to consider. What determines the level of care that is the most appropriate? Who makes these decisions? What role does the physical therapist assistant play in discharge planning?

Over the past several decades, patient length of stay in hospitals and rehabilitation facilities has decreased markedly, with a shift from inpatient

services to subacute, outpatient, and home health services.[12] Thus, patients are more likely to receive physical therapy services in a skilled nursing facility and in their homes or an outpatient center, rather than in an acute care hospital.

Widespread cost containment strategies are changing the rules rapidly in these treatment settings. This requires health care providers to stay informed and work closely with administrators to provide the necessary patient documentation and service-related information.

Variation in Supply and Demand for Physical Therapists

When Gina had planned on entering the physical therapy field in high school,

physical therapy was forecast as one of the "hottest" professions for the future. Now it seemed like graduates were having difficulty getting full-time positions and were receiving lower salaries than they were several years ago. What happened?

During the late-1980s and into the mid-1990s, there were forecasts of widespread shortages of therapists, given the rapidly expanding role of physical therapists and the growing elderly population. In contrast, during the late-1990s, many organizations actually cut or restructured physical therapist and physical therapist assistant positions in response to cost containment initiatives.[12]

Increases in the number of physical therapist and physical therapist assistant graduates, combined with organizational staffing cuts, led to a surplus of therapists in relation to available positions in some locations for a few

years. This resulted in lower salaries, higher case loads, and increased daily patient volume for physical therapists and physical therapist assistants in some areas of the country. Although the employment outlook for the foreseeable future looks solid, the volatile nature of the health care delivery system requires the physical therapist assistant to become savvy about employment trends and to develop skills that promote locating and retaining satisfying work.

Key Trends and Statistics That Influence Physical Therapy Practice

Throughout its history, physical therapy has been shaped by the changes in the number and distribution of individuals with disabilities and older adults, as well as the prevalence of the

most common public health problems. As mentioned in Chapter 1, widespread outbreaks of poliomyelitis in the 1950s and the passage of the Social Security Act of 1965 each created a strong demand for physical therapy services.

These factors influenced the need for formally educated support personnel. The role of the physical therapist assistant, as an entity within the physical therapy profession, was established in 1967.[13]

Similarly, legislation affecting access to and reimbursement for physical therapy services has played a major role in practice. Let us look at the recent trends and legislation that have influenced the profession of physical therapy.

Changes in Population Demographics

Changes in population demograph-

ics are important for physical therapy. Currently, there are 3 major changes ongoing in the United States that characterize our population:

1. The population size is increasing, due to declining mortality rates, neutral fertility rates, and increases in international migration. Growth in immigration has a marked impact on certain areas of the country, as 65% of legal immigrants live in California, New York, Texas, Florida, New Jersey, and Illinois.[14]
   ◊ *Why is this important? As population size increases, the need for physical therapists and physical therapist assistants increases. Health care delivery systems are often unable to keep up with population needs, especially when those with the highest needs lack access to care due to health insurance issues and maldistribution of providers.*

2. The population is getting older, with an increase in the proportion of persons aged 65 years and older. However, even with decreasing mortality rates, US life expectancy at birth (77.5 years in 2003) continues to fall short of that attained by a number of other countries, including Japan (81.9 years), Iceland (80.6), and Switzerland (80.4).[14] Even so, the percentage of the population that is 65 years and older will increase from 12.4% in 2000 to 18.2% in 2025, and by 2050 it is estimated to account for 20.6% of the total population.[14]
   ◊ *Why is this important? Even if the proportion of older adults in poor health does not increase, the number will certainly increase. The proportion of the working age population that is available to become health professionals*

will shrink in comparison. Thus, it becomes increasingly important that physical therapists and physical therapist assistants develop models of care that emphasize prevention and health promotion activities.

3. The population is becoming more racially and ethnically diverse, partially due to the influence of immigration. Of particular importance is the population of Hispanic or Latino origin, which is projected to almost double as a percentage of the total US population through 2050, rising from 12.6% in 2000 to 24.4% in 2050.[14]

   ◊ *Why is this important? Health disparities are often experienced by individuals from Hispanic, African American, and American Indian populations, resulting in poorer health status. Social determinants of health, such as*

education, income, and access to the best health care services, partially account for these differences. There are marked mismatches between the racial and ethnic composition of the physical therapy workforce and that of the US population. It is increasingly important that physical therapists and physical therapist assistants develop the skills to work with individuals from all cultures. Chapter 17 will discuss this in greater detail.

Globalization

The growing telecommunications infrastructure and the development of the Internet have created unprecedented connectivity and interdependence among the world's businesses and markets. Both national governments and corporate policies influence the flow of capital, trade, and investment

across borders and continents. The Internet helps to spread the influence of culture and religious and nationalistic ideologies.

Members of the physical therapy workforce are also impacted by globalization. Health technologies, pharmaceutical advances, and scientific discoveries are communicated more easily through our digital world. Directly or indirectly, we all experience the effects of epidemic diseases, toxic wastes, global warming, and the depletion of our natural resources.

The health care workforce of poor countries is often depleted as health care providers move to richer countries. Immigrating health professionals often serve as the safety net for widespread workforce shortages in many areas of the United States; yet, they cause a "brain-drain" in the country from which they emigrate.[15]

Helena, a first-year physical therapist assistant student, who has been hard of hearing since childhood, sat in the first row of the classroom so that she could read the instructor's lips. She listened to the presentation about the Nagi and World Health Organization models of disablement. She wondered if her hearing problems would count as a disability.

Disability Statistics

The most recent estimates reflect that 51.2 million people (18.1% of the population) have some level of disability, and 32.5 million (11.5% of the US population) have a severe disability.[16]

This may be due to a chronic disease process, such as heart disease, sickle cell anemia, epilepsy, or cancer; a sensory disability, such as deaf or

hard of hearing, a visual impairment; a physical disability, such as an amputation, paralysis, or problem with pain or movement; a learning disability, such as dyslexia or attention deficit disorder; a cognitive disability, such as Alzheimer's disease; or a disability related to a mental health condition. Some disabilities are not visible to the casual observer, whereas others are obvious. Some are stable; some are progressive or intermittent in nature.

What Constitutes a Disability?

For the purposes of identification by the US Census Bureau, a person is considered to have a "*disability*" if he or she has difficulty performing certain functions (seeing, hearing, talking, walking, climbing stairs, and lifting and carrying), has difficulty performing activities of daily living, or has difficulty with certain social roles (for children,

doing school work; for adults, working at a job and around the house).[16]

A person who is unable to perform one or more activities, who uses an assistive device to get around, or who needs assistance from another person to perform basic activities is considered to have a *severe disability.*[16]

The *Guide to Physical Therapist Practice* contains a definition for disability that is similar to that of the US Census Bureau. The *Guide* defines *impairments* as "an abnormality of structure of function" and states that these impairments can lead to a disability.[3]

Some important facts about people with disabilities in the United States are as follows:

- Of people 6 years and older, 11.0 million (4.1%) needed personal assistance with one or more activities of daily living or instrumental activities of daily living.
- Among the population 15 years and older, 3.3 million (1.4%)

used a wheelchair. Another 10.2 million (4.4%) used an ambulatory aid, such as a cane, crutches, or walker.[16]

- Approximately 7.8 million people 15 years and older had difficulty seeing words and letters in ordinary newspaper print, including 1.8 million people who reported being unable to see.[16]
- An estimated 7.8 million people 15 years and older had difficulty hearing a normal conversation, including approximately 1 million who reported being unable to hear.[16]
- The poverty rate for people aged 25 to 64 years with no disability was 9.1%; the rate was 12% for people with a nonsevere disability, and 27.1% for people with a severe disability.[16]

Table 2-2 demonstrates the prevalence of disability and related activity limitations.

Disabilities and Employment

The most recent Survey of Income and Program Participation[16] showed the following:

- 17% of working-age wheelchair users have jobs.
- 21.2% of cane, crutch, or walker users have jobs.
- 18.2% of people with severe difficulty climbing stairs have jobs.
- 19.5% of those with severe difficulty walking have jobs.
- 26.7% of those unable to lift and carry 10 pounds have jobs.

TABLE 2-2

SELECTED DISABILITY MEASURES BY SELECTED AGE GROUPS: 2005

(Number in thousands)

CATEGORY	NUMBER		PERCENTAGE	
	ESTIMATE	90-PERCENT C.I. (±)[1]	ESTIMATE	90-PERCENT C.I. (±)[1]
ALL AGES	291,099	497	100.0	(x)
WITH A DISABILITY	54,430	936	18.7	0.3
SEVERE DISBILITY	34,953	779	12.0	0.3
AGED 6 AND OLDER	266,752	803	100.0	(x)
NEEDED PERSONAL ASSISTANCE WITH AN ADL OR IADL	10,999	456	4.1	0.2
AGED 15 OR OLDER	230,391	1,047	100.0	(x)
WITH A DISABILITY	49,073	898	21.3	0.4
SEVERE DISABILITY	32,776	757	14.2	0.3
DIFFICULTY SEEING	7,794	386	3.4	0.2
SEVERE DIFFICULTY SEEING	1,783	186	0.8	0.1
DIFFICULTY HEARING	7,809	386	3.4	0.2
SEVERE DIFFICULTY HEARING	992	139	0.4	0.1
AGED 21 TO 64	170,349	1,212	100.0	(x)
WITH A DISABILITY	28,145	708	16.5	0.4
EMPLOYED	12,836	491	45.6	1.3
NONSEVERE DISABILITY	9,435	423	5.5	0.2
EMPLOYED	7,099	369	75.2	2.0
SEVERE DISABILITY	18,710	587	11.0	0.3
EMPLOYED	5,737	332	30.7	1.5
NO DISABILITY	142,204	1,219	83.5	0.4
EMPLOYED	118,702	1,191	83.5	0.4
AGED 65 AND OLDER	35,028	780	100.0	(x)
WITH A DISABILITY	18,133	578	51.8	1.2
SEVERE DISABILITY	12,943	493	36.9	1.1

For those who do work, the chances that they will earn an equitable wage are slim. Individuals with disabilities are often unemployed and live in poverty. The median annual earnings reported by individuals with severe disabilities was $13,000 less per year ($17,456 median earnings per year)

than that reported by their counterparts without disabilities ($30,468 median earnings per year). Even the median annual earnings for those with nonsevere disabilities ($27,000) were substantially less than that of individuals without disabilities.

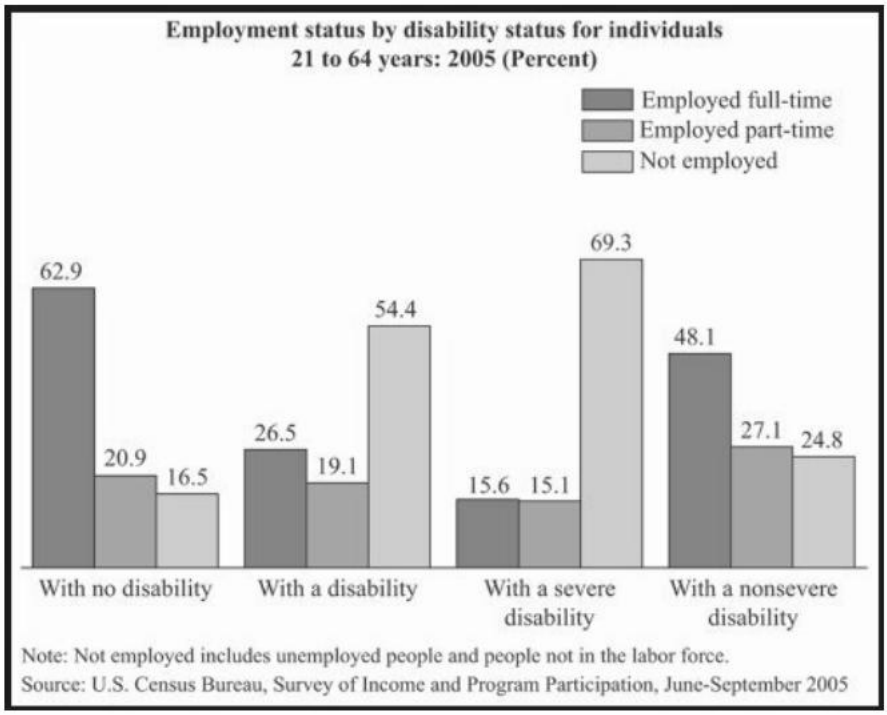

Figure 2-1. Employment status by disability.

Figure 2-1 shows the prevalence of employment among individuals with disabilities.

Legislative and Economic Aspects of Disability

Before beginning her physical therapist assistant education, Irene worked part-time in the Center for Independent Living. One of the Center's clients told her about his recent experience in seeking employment. He had been selected for a position that matched perfectly with his qualifications. He wondered whether he should have mentioned his need for a wheelchair-accessible restroom during the interview. Irene informed him that such accommodation was his right under the provisions of the American Disabilities Act.

In the past 30 years, we have seen many legislative acts which affect the quality of life of individuals with disabilities. Table 2-3 shows a few ex-

amples of the major pieces of legislation that provide the basis for the rights of persons with disabilities in the United States.

Unfortunately, although there is legal protection in many situations, we still have a long way to go in changing public beliefs that it serves *all* people to make entrances to buildings barrier-free, to actively foster opportunities for employment for individuals with disabilities, and to provide diagnostic and treatment services to the millions of children and adults with disabilities who live in poverty.

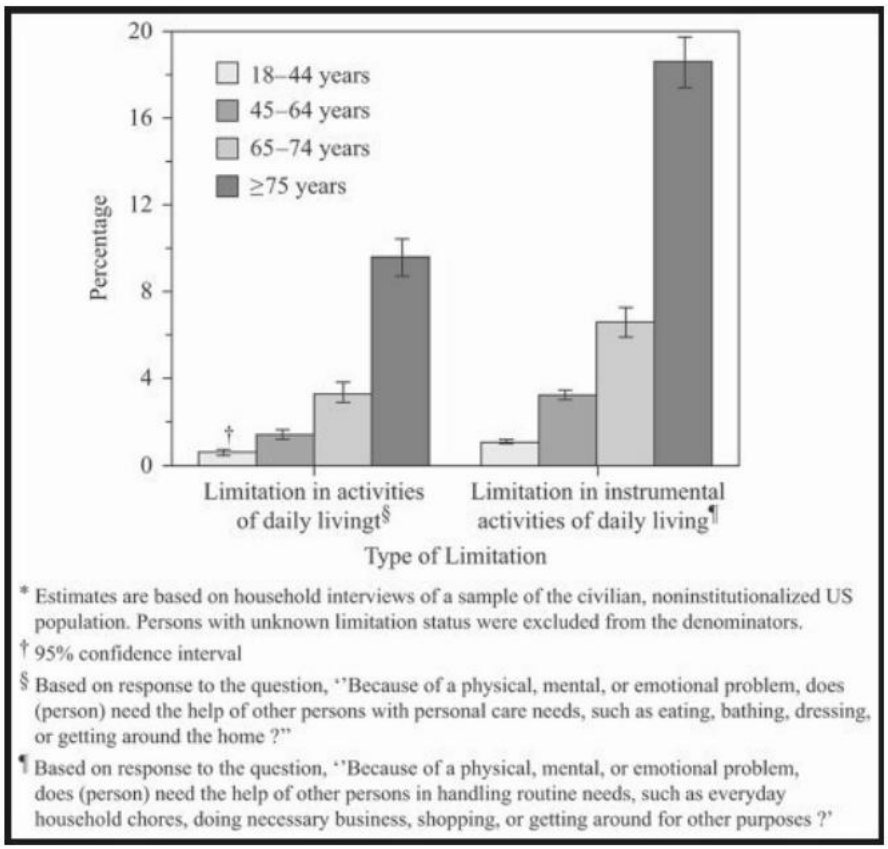

Figure 2-2. Adults with daily activity limitations. Source: Centers for Disease Control and Prevention, 2007.

The Aging of America

Jason, home on spring break, visited his elderly grandparents in their re-

tirement community. He was amazed to read their activity calendar. He remarked, "There's more going on here than at my college. Now I see why you're never home!"

The population of older adults is growing in the United States and worldwide.

The older adult population in the United States (age 65 years and older) is estimated at 41.4 million (2011)—more than 1 in 8 Americans.[18]

Table 2-4 shows the rates of growth that are anticipated for all segments of the elderly population through 2050.[18]

Further, population statistics indicate that in the coming decades, the age 65+ population will be much more racially and ethnically diverse than it is today. Projections estimate that there will be 88.5 million older adults in the United States by 2050. It is estimated that approximately 9.9 million will be

African American and 17.5 million will be Hispanic.[19]

Increasing age heightens the probability of functional limitations and disability. In 2006, national statistics showed that individuals over the age of 75 were nearly 3 times as likely as those in the 65 to 74 age range to need assistance in performing activities of daily living (eg, eating, dressing, or bathing) and instrumental activities of daily living (eg, household chores or shopping).[20] Figure 2-2 shows the increasing prevalence of limitations in activities of daily living as age increases.[21]

TABLE 2-3

KEY LEGISLATIVE ACTIVITY AND DISABILITY ISSUES

LEGISLATION AFFECTING PERSONS WITH DISABILITIES

The Rehabilitation Act of 1973 mandated no discrimination by federally funded agencies against workers and students with disabilities and affirmative action requirements for federally funded employers.

The Americans with Disabilities Act (ADA) of 1990 mandated reasonable accommodations to ensure the integration of people with disabilities in the private sector, including employment, telecommunications, and transportation; and public services and accommodations.

The Workforce Investment Act of 1998 focused on training, educating, and employing skilled workers to meet the needs of businesses. One-stop career centers (workforce centers) serve to meet job seekers' needs by providing an integrated service model to offer many work-related programs.

The New Freedom Initiative 2001 was part of a nationwide effort to remove barriers and facilitate full participation in community life for people with disabilities. The initiative increased access to assistive and universally de-

signed technologies, expanded educational and employment opportunities, and promoted increased access into daily community life. This act supported the integration of people with disabilities into the workforce through implementation of the *Ticket to Work and the Work Incentives Improvement Act of 1999* and the *New Freedom Commission on Mental Health.*

The Americans with Disabilities Act Amendments Act of 2008 emphasized that the definition of disability should be recasted to make it easier for an individual seeking protection under the ADA to establish that he or she has a disability. The ADA defined "disability" as an impairment that substantially limits one or more major life activities, a record of such an impairment, or being regarded as having such an impairment.

LEGISLATION AFFECTING CHILDREN WITH DISABILITIES

PL 94-142: The Education for All Handicapped Children Act of 1975 mandated a

free and appropriate education and the least restrictive environment (ie, mainstreaming). Annual Individual Educational Plans are developed for all children with disabilities.

PL 101-476: revised provisions of PL 94-142 to include children with autism and brain injury and included training and technology provisions for education of children with disabilities

The IDEA Improvement Act of 1997 allowed parents and school districts more autonomy in determining children's needs for special education services through a mediation process, further defines services available to infants and toddlers, and provides disciplinary sanctions for students who engage in criminal misconduct, unrelated to disability.

LEGISLATION AFFECTING OLDER ADULTS

PL 101-234 The Omnibus Reconciliation Act (OBRA) of 1987 was a major piece of legislation that set standards for nursing home personnel, set the rights of nursing home

residents, and set standards for home health agencies.

The 1990 Nursing Home Reform Amendments of OBRA. Required nursing homes by law to focus on each resident's highest potential for physical, mental, and psychosocial well-being by assessing these abilities and developing individualized care plans. These care plans must be reassessed for any change in function at least quarterly. This created numerous employment opportunities for therapists in the nursing home setting.

The Health Care and Education Affordability Reconciliation Act of 2010. This legislation reformed the Medicare payment policy so it more equitably reimbursed those who care for older adults. In addition, it established mechanisms to develop new payment and promising models of care, including comprehensive geriatric assessments and care coordination for older patients with multiple chronic illnesses and cognitive impairment. It supported the expansion of geriatrics training programs, including those designed to prepare specialists to meet the needs of the most

complex, frailest older patients, as well education for the direct-care workers and family caregivers who provide day-to-day care for millions of America's seniors.[17]

Recent evidence indicates that 80% of older adults, more than 70 million Americans aged 50 years and older, report having at least one chronic condition, with 11 million reporting 5 or more conditions.[22] In fact, the prevalence of chronic conditions, such as diabetes, high cholesterol, mental illness, cancer, hypertension, and heart disease, seems to have increased between 1997 and 2006 among Medicare beneficiaries.[22]

The link between advancing age, prevalence of chronic disease, and increasing functional limitations has enormous implications for long-term care and the need for physical therapy.

TABLE 2-4

History and Projected Growth of the Older Adult Population (1900-2050)

CENSUS YEAR	AGE 60 TO 64	AGE 65 TO 74	AGE 75 TO 84	AGE 85 AND OLDER	AGE 60 AND OLDER	AGE 65 AND OLDER
1900	2.4%	2.9%	1.0%	0.2%	6.4%	4.1%
1910	2.5%	3.0%	1.1%	0.2%	6.8%	4.3%
1920	2.8%	3.3%	1.2%	0.2%	7.5%	4.7%
1930	3.1%	3.8%	1.3%	0.2%	8.5%	5.4%
1940	3.6%	4.8%	1.7%	0.3%	10.4%	6.8%
1950	4.0%	5.6%	2.2%	0.4%	12.2&	8.1%
1960	4.0%	6.1%	2.6%	0.5%	13.2%	9.2%
1970	4.2%	6.1%	3.0%	0.7%	14.1%	9.9%
1980	4.5%	6.9%	3.4%	1.0%	15.7%	11.3%
1990	4.3%	7.3%	4.0%	1.2%	16.8%	12.6%
2000	3.8%	6.5%	4.4%	1.5%	16.3%	12.4%
2010	5.4%	6.9%	4.2%	1.9%	18.4%	13.0%
2020	6.2%	9.5%	4.7%	1.9%	22.2%	16.1%
2030	5.4%	10.4%	6.6%	2.3%	24.7%	19.3%
2040	5.1%	9.1%	7.4%	3.5%	25.1%	20.0%
2050	5.4%	9.1%	6.7%	4.3%	25.5%	20.2%

National Legislation With a Direct Influence on the Profession of Physical Therapy

Social Security Act of 1965

With the passage of the Social Security Act of 1965, the government began to subsidize 2 health care plans: the *Medicare* and *Medicaid* programs. This legislation resulted in marked changes in access to health care for older adults and the population with a very low income. For example, during the late 1950s, less than 15% of the elderly population had health insurance. The enactment of the Medicare and Medicaid programs helped to provide health insurance to nearly 85% of all Americans by 1966.[23]

To be eligible for *Medicare*, an individual must be a citizen or permanent resident of the United States who has worked and contributed to Social Security for at least 10 years and must be at least 65 years of age. Some people with severe disabilities under the age of 65 years are entitled to Medicare if they have been receiving Social Security benefits for 24 months or if they have end-stage renal disease. A person can

also be eligible if his or her spouse has met the employment requirement.[23] *Medicaid* (*MediCal* in California) is a state-administered program that provides medical assistance to the population with a very low income, and it is financed through both state and federal taxes. Eligibility is determined by income and other requirements.

Health Care Reform—National Health Insurance Initiative Defeated

In the subsequent decades, as health costs increased logarithmically, it became clear that large groups of the population had no medical insurance and they were not eligible for either of these public programs. In fact, almost 20% of the US population is currently uninsured. This led to efforts in the early 1990s to create a system of national health insurance. Bitter conflicts erupted among leaders in Congress and

the Clinton Administration regarding the scope and content of this health care initiative.

In the mid 1990s, following the failure of the national health insurance to be adopted by Congress, there was growing concern that the Medicare system would soon have no money, given the aging population demographics and the escalating costs of health care. This led to further cost containment in the Medicare System.

The Balanced Budget Amendment of 1997

President Clinton signed H.R. 2015, the Balanced Budget Act of 1997, on August 5, 1997.[24] This legislation, intended to eliminate the federal deficit, created widespread cuts in the Medicare and Medicaid systems, intended to reduce entitlement spending by $115 billion in Medicare over 5 years and

$13.6 billion in Medicaid over 5 years. Reductions in hospital payments, home health services, and skilled nursing facility payments also reduced reimbursement for physical therapy services. Since then, the physical therapy profession has struggled with caps imposed to limit reimbursements for physical therapy in Medicare recipients.

The Patient Protection and Affordable Care Act

The Patient Protection and Affordable Care Act was signed into law in March 2010, following months of debate. This legislation, the most sweeping health reform measure in decades, improves conditions for almost 50 million people who lack health insurance coverage. The law addresses the expansion of Medicaid eligibility, provides subsidies for insurance premiums, provides incentives for busi-

nesses to provide health care benefits, prevents the denial of coverage based on preexisting conditions, establishes health insurance exchanges, and imposes tax penalties for citizens who do not obtain health insurance. Although it is unclear how the law will specifically impact the physical therapy practice, it is likely that the battle to exempt physical therapy services from caps on Medicare reimbursement will continue.[25]

The physical therapy profession is profoundly influenced by health systems legislation. An appreciation of the effectiveness and efficiency of physical therapy by legislators plays a key role in favorable legislation being passed. Physical therapist assistants must recognize that political action has marked implications for the physical therapy profession and that one's membership in the American Physical Therapy Association is critical to keep informed.

Summary

Changes in the health care delivery system and the changing population demographics have forced a shift in physical therapy practice. Increased accountability, growing demand for physical therapists and physical therapist assistants, and changing priorities in public health will continue to influence the future of the physical therapy profession.

References

1. CMS.gov. Centers for Medicare and Medicaid Services. *Prospective payment systems-general information.* https://www.cms.gov/ProspMedicareFeeSvcPmtGen. Accessed July 4, 2013.

2. Cech D, Martin S. *Functional Movement Development Across the Lifespan.* Philadelphia, PA: W.B.Saunders; 2002:118-119.
3. American Physical Therapy Association. *Interactive Guide to Physical Therapist Practice.* Alexandria, VA: American Physical Therapy Association; 2003. doi:10.2522/ptguide.2_2. http://guidetoptpractice.apta.org. Accessed July 14, 2013.
4. Centers for Disease Control and Prevention. Chronic diseases the power to prevent, the call to control: at a glance 2009. http://www.cdc.gov/chronicdisease/resources/publications/AAG/chronic.htm. Accessed July 10, 2013.
5. American Heart Association. Statistical Fact Sheet 2013 Update High Blood Pressure. http://www.heart.org/idc/groups/heart-public/@wcm/@sop/@smd/documents/down-loadable/

ucm_319587.pdf. Accessed June 15, 2013.

6. Centers for Disease Control and Prevention. High Blood Pressure Facts Web page. http://www.cdc.gov/bloodpressure/facts.htm. Accessed June 22, 2014.

7. Heidenreich PA, Trogdon JG, Khavjou OA, Butler J, Dracup K, Ezekowitz MD, et al. Forecasting the future of cardiovascular disease in the United States: a policy statement from the American Heart Association. *Circulation*. 2011;123:933-44. Epub 2011 Jan 24.

8. American Diabetes Association. Statistics about Diabetes. http://www.diabetes.org/diabetes-basics/statistics. Accessed June 22, 2014.

9. US Department of Health and Human Services. Healthy People.gov. *Healthy People 2020*. http://www.healthypeople.gov/2020. Accessed December 29, 2010.

10. Erickson B, Perkins M. Interdisciplinary team approach in the rehabilitation of hip and knee arthroplasties. *Am J Occup Ther*. 1994;48(5):429-441.
11. Hilton RW, Morris DJ, Wright AM. Learning to work in the health care team. *J Interprof Care.* 1995;9(3):267-274.
12. Lopopolo RB. The effect of hospital restructuring on the role of physical therapists in acute care. *Phys Ther.* 1997;77(9):918-932.
13. Wojciechowski, M. Celebrating a Milestone: 35 Years of PTAs. *PT-Magazine of Physical Therapy.* Feb 2004; 12(2);42-49. Available at: http://www.apta.org/PTA/History. Accessed July 18, 2011.
14. Shrestha LB. *The Changing Demographic Profile of the United States*. Congressional Research Service. Library of Congress. 2006. Available at http://www.fas.org/sgp/crs/misc/RL32701.pdf. Accessed July 10, 2010.

15. Pang T, Lansang MA, Haines A. Brain drain and health professionals. *BMJ.* 2002;324(7336):499-500.
16. Brault MW. Americans with disabilities: 2005. *Current Population Reports.* Washington, DC: US Census Bureau; 2008. http://www.census.gov/prod/2008pubs/p70-117.pdf. Accessed July 4, 2013.
17. The American Geriatrics Society. Health Care Reform. President Signs Final Health Reform Legislation; Reform Enhances Elder Care. http://www.americangeriatrics.org/advocacy_public_policy/health_care_reform/president_signs_final_health_reform_legislation_reform_enhances_elder_care. Accessed July 12, 2013.
18. US Department of Health and Human Services. Administration on Aging. Aging statistics. http://www.aoa.gov/aoaroot/aging_statistics/index.aspx. Accessed July 17, 2013.

19. US Department of Health and Human Services. Administration on Aging. Minority aging. http://www.aoa.gov/AoARoot/Aging_Statistics/Minority_Aging/index.aspx. Accessed July 10, 2013.
20. Adams PF, Lucas JW, Barnes PM. Summary health statistics for the U.S. population: National Health Interview Survey, 2006. National Center for Health Statistics. *Vital Health Stat.* 2008;10(236). http://www.cdc.gov/nchs/data/series/sr_10/sr10_236.pdf. Accessed August 15, 2010.
21. Centers for Disease Control and Prevention. QuickStats: Estimated Percentage of Adults with Daily Activity Limitations, by Age Group and Type of Limitation—National Health Interview Survey, United States, 2006. *MMWR Weekly*. 2007;56(40):1058. http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5640a7.htm. Accessed July 14, 2013.

22. AARP. Chronic Conditions Among Older Americans. *Chronic Care: A Call To Action for Health Reform.* 2009;March. http://www.aarp.org/health/medicare-insurance/info-03-2009/beyond_50_hcr.html. Accessed July 14, 2013.
23. Relman AS. Assessment and accountability: the third revolution in medical care. *NEJM.* 1988;319(18):1220-1222.
24. American Physical Therapy Association. The Balanced Budget Act- How It Affects Physical Therapy. http://www.apta.org/Advocacy/national/National16. Accessed July 30, 2000.
25. American Physical Therapy Association. History of medicare therapy caps. http://www.apta.org/AM/Template.cfm?Section=Home&Template=/CM/HTMLDisplay.cfm&ContentID=20959. Accessed August 14, 2010.

Putting It Into Practice

1. Interview a person with a disability or a person over the age of 65 about their recent experiences in accessing health care services.

   Briefly describe the person you interviewed:

   What has been this person's experience in finding health care providers to provide services covered by their insurance plan?

What has been this person's experience in finding health care providers who are able to meet their needs?

What health care needs are currently unmet?

2. Interview a physical therapist assistant who has been in practice for more than 5 years. What changes has he or she seen in the profession during that time? How has the field differed from his or her expectations before entering the profession? How has practice changed since the implementation of recent legislation?