Table 1-1. Comparison of Mental Health Worldviews

ATTRIBUTE	MEDICAL MODEL	REHABILITATION MODEL	SOCIAL MODEL
Power	Hierarchical	Collaborative partnership	Individual (service user)
Focus	Illness and symptoms	Function	Wellness, hope, and justice
Knowledge base	Pathology	Pathology and strengths; context	Lived experience, context
Techniques	Component based	Skill development in vivo	Support, inclusion
Outcomes	Clinical recovery (remission and management)	Functional recovery (adaptation)	Personal recovery (acceptance)

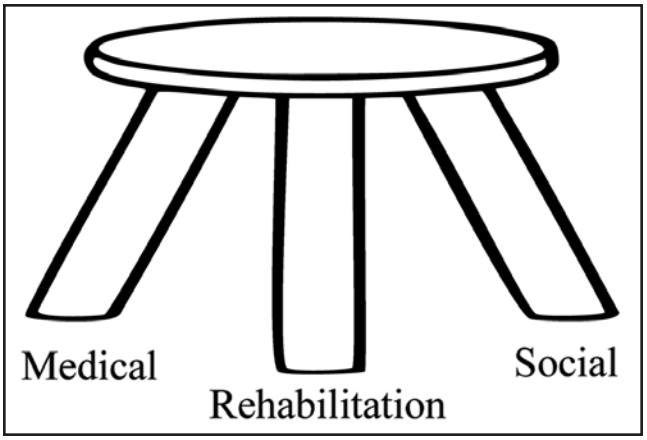

Figure 1-1. The three pillars of comprehensive mental health care.

Medical Model

As is outlined in Table 1-1, the medical model is focused on illness and symptoms, necessitating a strong knowledge base in pathology. Therefore, the process of intervention is to determine a diagnosis and then consider the appropriate interventions. Practitioners most closely aligned with the medical model are physicians, nurses, pharmacists, and psychologists. Also, clinicians or counselors who use clinical approaches are essentially medical in nature because of their defined scope of practice and reimbursement schemas that focus on diagnostic assessment with the desired outcome to manage the related symptoms. Despite the obvious medical orientation in these practitioners' training and scope of practice, it should also be acknowledged that many medical clinicians actively collaborate with rehabilitative and socially oriented colleagues and embrace their values.

Diagnoses and Symptoms

The determination of a clinical diagnosis in psychiatry is, at best, an inexact process based on both deductive and inductive reasoning, and it often lacks precise data on psychiatric illness. Although knowledge of the structure and chemistry of the brain is growing, it is rare that measurable or visible objective data, such as X-rays and blood tests, as are used in physical diagnosis, can be used in psychiatry. Glackin (2010) suggests that diagnoses may be viewed as a destructive force that serves only to inappropriately label and dehumanize individuals. This sentiment is echoed by many mental health service users. Box 1-1 contains quotes from clients who participated in a focus group that describe their ambivalence regarding psychiatric diagnosis. Case Illustration 1-1 describes Brian's diagnostic history and highlights some of the limitations of psychiatric diagnosis.

Still another significant concern about diagnosis is cultural bias—specifically, a White, male, Judeo-Christian orientation. This issue is beginning to be addressed, but it remains essential that clinicians be aware of the inherent ethnocentrism found in the current diagnostic system (van de Water, Suliman, & Seedat, 2016). According to Alarcón et al. (2009):

> Careful attention to the sociocultural dimensions of mental illness serves both a scientific and social justice agenda. For example, when assessment fails to attend to sociocultural factors, it risks misdiagnosis and the perpetuation of clinical stereotypes based on race, ethnicity, gender, religion, or sexual orientation, among other factors, which can lead to mental healthcare disparities. (p. 559)

It has also been suggested that not taking into account all contextual factors has caused an increase in false positive diagnoses in community-based treatment (Wakefield, 2010). Given these limitations, why are diagnoses used at all? Shortly after the first publication of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) in 1952, justifications for using a diagnostic taxonomy were published, and the reasoning has been generally accepted for decades. As stated by Zigler and Phillips (1961), "a classificatory system in psychiatry serves the same essential purpose as

Box 1-1. Service User Attitudes About Diagnosis

- It's sort of weird, like a label stuck on my forehead.
- My diagnosis of bipolar disorder seems to make me think that's all of me. It isn't, though. There is so much more to me than my diagnosis of a mental illness.
- I guess there have to be different diagnoses. It gives the doctors something to work on and hopefully prescribe the right medication.
- The diagnosis of a mental illness is not so different than a medical diagnosis. It helps everyone understand his or her disease or problem.
- If only the "normies" could understand that the diagnosis of a mental illness is only a way to figure out how to help the client, just like with a medical diagnosis, then it wouldn't be such a bad thing.
- My diagnosis of schizophrenia has followed me around my entire adult life. It is like a plague. I hate it. It's like being called a wart and having a wart sitting right in the middle of my forehead!
- There are so many different diagnoses. I always wonder how the doctors come up with the right one, or if maybe they just guess.

CASE ILLUSTRATION 1-1: BRIAN'S MANY DIAGNOSES

Brian is a 58-year-old man who was first diagnosed with depression in his senior year of high school after fracturing his neck. With the physical pain, he remembers that the emotional pain that had been hidden suddenly rushed to the surface and he could no longer control it. His diagnosis of depression was only the first of many more diagnoses to come. Over the years, he recalls being diagnosed with bipolar disorder, borderline personality disorder, schizophrenia, schizoaffective disorder, posttraumatic stress disorder, and others. He isn't sure if any of those diagnoses were correct. Brian has symptoms that fit into just about all of those diagnoses at one time or another, but the diagnoses seemed to change with new psychiatrists and therapists. He now wonders if the different medications prescribed for his various diagnoses were possibly the wrong ones. He'll never know, but he still thinks about what would have happened if he had one psychiatrist, one therapist, and one (correct) diagnosis.

Discussion

There are many reasons why a diagnosis may change, including the differing theoretical perspectives of the primary clinician. However, diagnoses may also change because of the adopting of new criteria and diagnostic procedures by the psychiatric establishment, changing environmental stressors of the client, the development of new symptoms, or even new information coming to light within the therapeutic relationship. Regardless of the reasons for changing a client's diagnosis, this story demonstrates the need for caution against over-reliance or interpretation based on diagnosis alone.

taxonomy in science in general, and that a simple, coherent, and meaningful system of classification based on behavioral correlates of psychiatric syndromes is possible" (p. 607). Despite legitimate controversy, the diagnostic process helps facilitate interdisciplinary communication and fosters research, both of which are essential for high-quality mental health care. It is hoped that as research continues, the process of diagnosing will become increasingly objective, culturally sensitive, and accurate.

The most commonly used instrument to record diagnoses, disorders, and symptoms is the World Health Organization's (WHO's) *International Classification of Diseases*, currently in its 11th edition (ICD-11; WHO, 2018). WHO also publishes a companion document known as the *International Classification of Functioning, Disability and Health* (ICF), which not only covers the diagnostic concerns of body structure and functions but also includes ratings of activities and participation and contextual factors such as the influence of personal causation and environment (WHO, 2001).

The ICD and the ICF are not limited to mental illness and do not contain the diagnostic specificity found in the American Psychiatric Association's (APA's) DSM, which is currently in its fifth edition (APA, 2013).

This manual is a significant part of the academic curricula of mental health professionals, especially in the United States. Furthermore, according to Hebebrand and Buitelaar (2011):

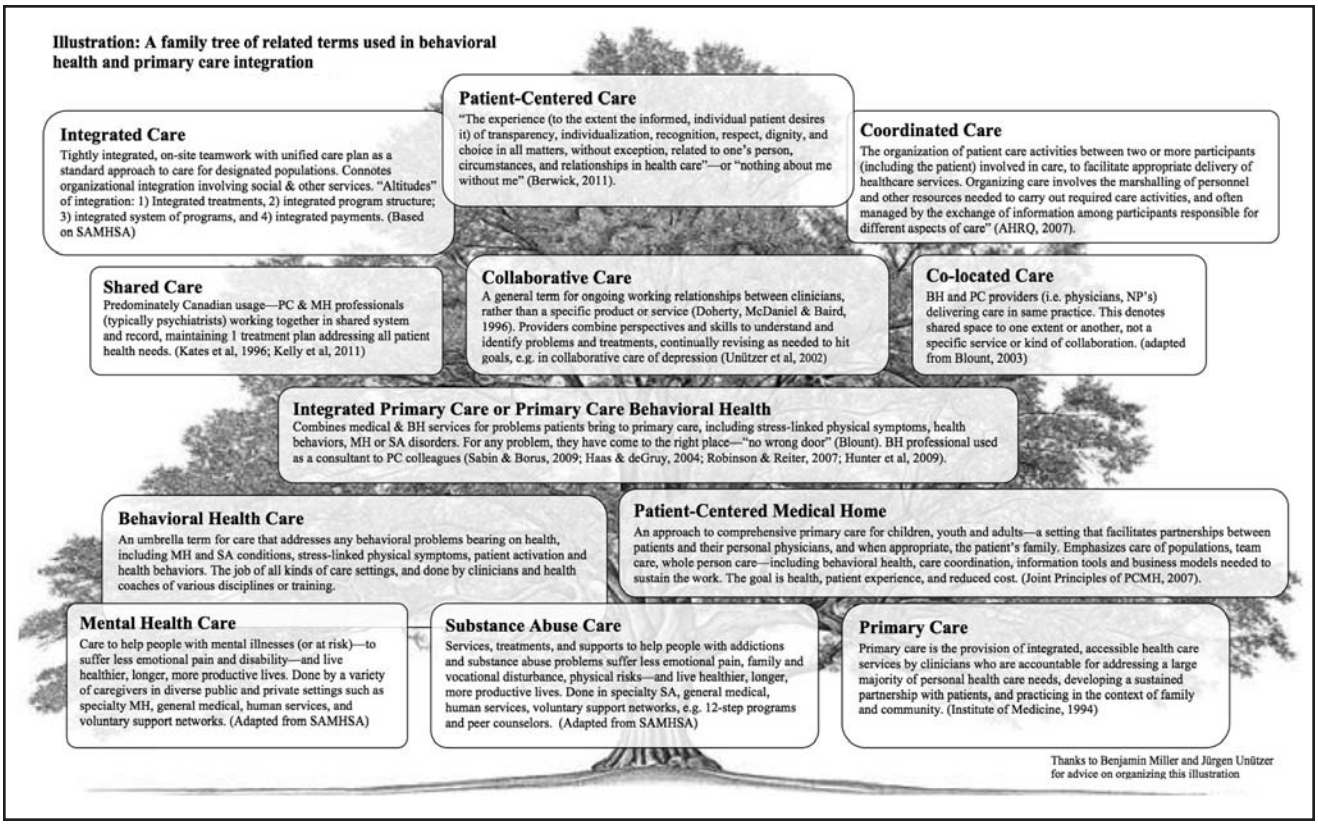

Figure 3-1. Related terms used in behavioral health and primary care integration. (Reprinted from Peek, C. J., & the National Integration Academy Council. [2013]. *Lexicon for behavioral health and primary care integration* [AHRQ Publication No.13-IP001-EF]. Rockville, MD: Agency for Healthcare Research and Quality. Retrieved from http://integrationacademy.ahrq.gov/sites/default/files/Lexicon.pdf)

approach" (2011, p. 1). Nevertheless, SAMHSA suggests that such centers can sometimes benefit from outside training and technical support. Therefore, there is a potential role for a behavioral health service provider as a consultant. (See Chapter 5 for further discussion of consultation.)

Integrated Primary Care

For the purpose of this chapter, primary care is 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 in the context of family and community" (Institute of Medicine, 1994, p. 1). Reimbursement systems heavily influence the model of service provision, and as these systems change, they create opportunities as well as challenges for both the recipients of the services and for health care providers.

The emergence of alternative payment models that give added incentive payments to encourage the provision of high-quality, cost-efficient care related to client outcomes has provided important opportunities for occupational therapy to have a key role in primary care (Halle, Mroz, Fogelberg, & Leland, 2018).

Although the term *primary care* has been used since the early 1960s, interest in the primary care model, especially as it relates to behavioral health needs, was renewed with the implementation of the ACA because primary health care was specifically identified as a key avenue of service delivery. This model of health care provision is designed around the concept of providing integrated care from a team of professionals that addresses health care needs in collaboration with the client in the context of their family and community. Outcomes emphasize prevention, wellness, and the empowerment of individuals to manage their conditions (Dahl-Popolizio, Manson, Muir, & Rogers, 2016). The ACA provides financial incentives to health care providers and support for the development of innovative models of service delivery of care that emphasize improving health care outcomes and client experiences.

Primary Care and Behavioral Health

Individuals with serious mental illness are at a significantly higher risk for morbidity and mortality than the general population (Bahorik, Satre, Kline-Simon, Weisner, & Campbell, 2017). Failure to recognize and appropriately treat behavioral health conditions has a negative impact on health outcomes and quality of life and significantly increases the overall cost of health care. Individuals with

untreated behavioral and mental health conditions, especially those who also have chronic medical conditions, use more medical resources and are associated with persistent medical illness (Kathol, Patel, Sacks, Sargent, & Melek, 2015). Behavioral health intervention delivered under the primary care model is ideally suited to provide integrated services to this population to improve health and cost outcomes. In primary care, the interprofessional team is responsible for the coordinated treatment of acute conditions, management of chronic illness, prevention of disease, facilitation of wellness, and management of mental and behavioral health issues (Dahl-Popolizio et al., 2016).

Multi-morbidity (the presence of two or more chronic conditions) creates an additional challenge in managing the medical care of individuals, particularly for older adults. As life expectancy increases, so do the number of people with multiple long-term conditions, which includes both physical and mental conditions. Individuals with multimorbidity have the highest risk of safety incidents for many reasons, including more vulnerability due to poor overall health, complications due to difficulties with medication management, cognitive impairment, limited health literacy, and comorbidity of depression and/or anxiety (World Health Organization [WHO], 2018).

Having behavioral health care services available within primary care is crucial. Providing specialized mental health support for those who have mixed physical and mental health issues, as well as those struggling with addiction or those who have developed behavioral health needs as a result of a chronic physical condition, will improve the knowledge and capacity of the other primary care professionals in the practice and result in better health outcomes.

The primary care interprofessional team is responsible for the assessment and treatment of acute conditions, management of chronic conditions, promotion of wellness, and management of mental and behavioral health issues. Behavioral health domains include health behaviors, mental health and substance abuse, life stressors and crises, stress-related physical symptoms, and ineffective patterns of health care utilization. Primary care providers are often the first line of care for individuals with mental health problems. It is estimated that approximately 70% of primary care visits for older adults involve underlying mental health or behavioral health issues (e.g., panic, generalized anxiety, major depression, somatization, stress, adjustment disorders) and behaviors that lead to increased risk of chronic illness (American Psychological Association, n.d.).

Primary Care Models

There are many different models of service delivery that fall under the umbrella of primary care, all having the common theme of providing integrated, team-based, accessible health care services with the goal of promoting and maintaining health and preventing illness and disability. Table 3-1 describes the most commonly cited models.

The patient-centered medical home is a model that is currently envisioned as one of the preferred models of primary care service delivery, at least from a medical perspective. The term *home* does not refer to a place but to a model of care in which the physician is a member of a team who will offer comprehensive care under one roof (Tello, 2017). The physician receives one flat payment from insurance to cover most of the care provided. Services such as therapies, nutrition education, and behavioral health are located within the same building. The goal is to have a centralized setting that fosters partnerships between the client, physician, and clinical care team, where the client can get the care he or she needs and wants in a culturally and linguistically appropriate manner. The physician sees the client and is able to immediately send him or her to the appropriate service to address his or her needs. The goal is to provide better coordinated, more comprehensive and personalized care, improved access to medical care and services, and improved health outcomes, especially for those with chronic conditions.

Federally qualified health centers deliver services from a more social perspective, fitting in better with the recovery and wellness paradigm that is dominant in current behavioral health services. These centers primarily provide social services as well as medical services to low income, homeless, or otherwise designated vulnerable populations, but may also be open to the general population. One such center, the Integrated Care Center, operated by Healthright 360, was opened in San Francisco in 2017 and provides a wide range of services (Box 3-1).

Occupational Therapy in Primary Care Services

Occupational therapy has much to contribute to the team to facilitate positive client outcomes. Interprofessional collaborative practice to improve health and manage chronic conditions (including mental illness), improve access to services, and increase client satisfaction is at the heart of the primary health care model (Fong, 2008; WHO, 2008). A collaborative, client-centered approach that addresses these areas of concern is at the heart of occupational therapy practice and makes for a natural fit between occupational therapy and primary health care.

Since the passage of the ACA in 2010, various models of primary care service delivery have emerged to innovatively meet the need to provide integrated, comprehensive care. Occupational therapy has been actively involved in defining the role of the occupational therapist on the primary care team and has been working to ensure that occupational therapy is included in state and federal policies that dictate the provision of care.

Having professionals on the team who have experience in behavioral health is necessary to address these needs. Occupational therapy education and clinical training

Table 3-1. Primary Care Service Delivery Models

COMPREHENSIVE PRIMARY CARE PLUS	NEXT-GENERATION ACCOUNTABLE CARE ORGANIZATIONS
• 5-year multi-payer initiative (began January 2017) • Regionally based multi-payer payment reform and delivery care transformation program • Offers incentives based on quality and utilization metrics • Targets 20 U.S. geographic regions • Involves 20,000 doctors and practitioners • Provides practices with learning systems, patient cost, and utilization data feedback to guide their decision making (Patient-Centered Primary Care Collaborative, 2018)	• Groups of doctors, hospitals, and other health care providers and suppliers who come together voluntarily • Provide coordinated care to Medicare patients • Offer Medicare beneficiaries better control over their health care • Provide opportunities for shared savings to create increased incentives (Centers for Medicare & Medicaid Services, 2018b)
FEDERALLY QUALIFIED HEALTH CENTER	**PATIENT-CENTERED MEDICAL HOME**
• Reimbursement designation from Centers for Medicare & Medicaid Services for safety net providers who provide comprehensive services to medically underserved populations or areas • Have ongoing quality assurance programs (Centers for Medicare & Medicaid Services, 2018a)	• A model for the organization and delivery of primary health care • Focused on reducing costs by providing care that is comprehensive, coordinated, patient- and family-centered, accessible, and accountable • Committed to quality and quality improvement using evidence-based medicine and clinical decision support tools (U.S. Department of Health and Human Resources, Agency for Health Care Research and Quality, n.d.)

Box 3-1. Range of Services Offered at a Federally Qualified Health Center: Integrated Care Center in San Francisco, California

- Primary medical care
- Mental health counseling and medication management
- Dental care
- Substance use disorder treatment
- Pharmacy
- Housing referrals
- Employment counseling and training referrals
- Provided lunches
- Charter high school for adults
- Residential detox
- Computer literacy classes
- Chiropractic medicine and acupuncture

Adapted from Healthright 360. (2017, August 29). *California's first integrated health care center for low-income and homeless people opens in San Francisco* [Press release]. Retrieved from https://www.healthright360.org/news/californias-first-integrated-health-care-center-low-income-and-homeless-people-opens-san

Box 3-2. Food, Mood, and Move Group

The Food, Move, and Mood group was a 12-week program that was held two times per week in 2-hour sessions. The impetus for developing this program was twofold. First, service users of the community behavioral health services agency were asked to complete satisfaction and feedback surveys on a quarterly basis. These surveys repeatedly showed a strong interest in having groups on both exercise and nutrition. Furthermore, the surveys also showed a strong preference for activity-based, rather than verbal, groups. The second impetus came directly from the staff and administration, who expressed concern that most of the staff did not have the necessary expertise. The occupational therapist was then asked to develop a program to address these agency needs while providing reimbursable service—specifically, a group that addressed symptoms of mental illness through the use of exercise and diet/nutrition.

The group was purposely not limited to service users with specific diagnoses (such as mood disorders) because depression is a common symptom of many different disorders. Using a wellness perspective with diet and exercise, the goal was to minimize or prevent episodes of depression but also to prevent or manage chronic physical conditions, especially diabetes, heart disease, chronic pain syndromes, and arthritis. Therefore, this wellness- and prevention-oriented program addressed the interrelationship between physical and mental health.

The program used a variety of psycho-educational techniques to inform participants of the relationship between psychiatric symptoms management (especially mood stabilization), nutritional practices, and movement. In addition, practice-based skill development for improving diet and exercise (activities of daily living) were incorporated into every session as tolerated by the individual (based on baseline data and self-reported health history). A key feature of the design of this group was for participants to take responsibility for incorporating new learning into their daily routines. Guidelines were provided at the start of the program, and progress was discussed at every meeting.

Every group meeting began with simple stretching or other movement activity. There was also a check-in for each participant to share his or her related triumphs and struggles and to provide mutual support. Examples of the main activities included having game days in the park, using the Nintendo Wii, cooking healthy group lunches and snacks, playing self-designed games to explore calories and nutritional content of food items, grocery shopping, and creating an agency kitchen garden.

A self-designed set of scales were used to collect baseline data on awareness of mood, as well as both knowledge and practice of nutrition and exercise. Participants were informed that the scales would also be readministered at the end of this 12-week group to chart progress. At the end of the 12-week program, the scales were readministered. Significant progress was made in awareness of mood triggers and increase in movement activities. There was also an overall increase in nutrition awareness, but only minimal changes in actual dietary practices. At the participants' request, an ongoing support group was established at the adjacent wellness center.

includes behavioral health, and the occupational therapist has unique skills for understanding the impact of habits, roles, and routines that affect mental health. Consider the individual who is given a prescription for depression by his or her physician. Successfully taking this prescription requires that this individual change approximately seven health behaviors: he or she must fill the prescription, take it home, read the directions, and build it into his or her daily routine. The individual may or may not have to modify his or her diet. These steps all require significant health behavior change. The occupational therapist understands the importance of establishing new habits and routines and can work with the client on all aspects of achieving a positive outcome for effective medication management. Occupational therapy brings skills and expertise to contribute to the effectiveness of the primary care team in the care for clients with behavioral and mental health issues.

In the United States, the reported involvement of occupational therapists in primary care is so far minimal and primarily limited to university-based programs (Murphy, Griffith, Mroz, & Jirikowic, 2017). However, in Canada, the number of occupational therapists currently working in a primary care model appears to be growing (Donnelly, Leclair, Wener, Hand, & Letts, 2016). There are also reports of occupational therapy working in primary care elsewhere in the world (Fong, 2008), but actual statistics regarding prevalence could not be found. Regardless of the current status of occupational therapists in primary care, it is important to recognize that the practice of occupational therapy is historically and philosophically well aligned with the principles of the current primary care models, especially the focus on the provision of holistic and integrated services. Box 3-2 provides a description of group that was developed by the first author and co-led with a

Occupational Performance. This model explains that the physical, cultural, institutional, and social components of environment can influence occupational performance in a multitude of different ways. The Kawa Model (Iwama, 2006) also provides an excellent metaphoric and culturally sensitive framework for understanding the relationship between an individual and the social and physical environment. As discussed in Chapter 4, the Kawa Model can be used not only as a conceptual model, but also as an assessment and starting point of intervention in collaboration with service users.

An overarching conceptualization of the environment that can be used with other models is the occupational justice perspective. At the very heart of this perspective is an understanding of the relationship between a person and society and the interrelatedness of all aspects of humanity, both individual and community. Furthermore, an occupational justice perspective is not limited to observing and understanding the environment, but rather focuses on the actions required to empower individuals and communities to create or facilitate positive change in their environments (Standnyk, Townsend, & Wilcock, 2010).

Environmental Sustainability

Occupational therapy has traditionally focused primarily on individual occupational needs and has only recently considered broadening that focus to include families, significant others, communities, and other stakeholders. However, there is a growing awareness that occupational therapists also need to be involved in a political global effort to protect the environment in which we all engage in occupations. The World Federation of Occupational Therapists produced a position paper (2012a) declaring a core role for occupational therapists in working towards environmental sustainability. Simó Algado and Townsend (2015) proposed an ecosocial occupational therapy that connects the concepts of occupational justice to ecological issues. They called for occupational therapists to engage not only in dialogue, but also in action directed at helping communities achieve economic and environmental sustainability. Rushford and Thomas (2016) also called for occupational therapists to be actively involved with environmental sustainability, specifically focusing on "rising disaster risk and the consequences of human occupations on the environment" (p. 295).

The Built Environment

The *built environment* includes all structures created by human beings. Obviously, there are tremendous variations depending on the purpose and age of the structures, as well as the population density of the town, city, or neighborhood. However, there are some commonalities across different societies and within the spectrum from rural to urban. One of the most essential built environments is housing, but other important buildings include schools, libraries, health care agencies, governmental and private business offices, public service facilities (e.g., police and fire stations), courts and jails, recreation facilities, places of worship, utility services, and commercial businesses and services (e.g., grocery and other stores, restaurants, senior or wellness centers). The built environment also includes the infrastructure needed to connect the buildings, including roads, bridges, tunnels, sewer, and water transport, as well as digital or electrical grids for heating and cooling, light, and a wide range of electronic and communication devices.

As previously mentioned, housing is one of the most important features of the built environment, and it is addressed throughout this book as it relates to behavioral health. However, a particular environmental issue that is garnering significant attention is the perceived increase in homelessness. It is difficult to estimate the number of homeless people with any precision because there are a multitude of different definitions of homelessness. For example, Tipple and Speak (2005) suggest that homelessness is not limited to "rooflessness" or "houselessness" but also includes various short-term (nonpermanent) housing arrangements and people residing in substandard housing. Other confounding issues in determining accurate data on the number of homeless people is the relative mobility of the population, the common desire to stay hidden from authorities, and the inability to access services, particularly in rural areas. Although homeless encampments are often hidden from the public eye, visibility is increasing. In some situations, the increased visibility is because of the overwhelming number of homeless people in areas of extreme poverty or affected by war, genocide, or other societal disruptions. (See Chapter 7 for further discussion.) However, there is also increased visibility of homelessness in high-income nations. For example, in the United States, even in very affluent communities, visible homelessness has increased dramatically partially because of poorly designed safety nets that limit services and minimize social support, but also because the high cost of living in such areas has prevented many people from procuring affordable housing. Figure 6-1 shows an example of a visible homeless encampment, known as a *tent city*, in an affluent American urban area.

Universal Design

Occupational therapists are particularly focused on the ability to perform occupations within the built environment. However, planning for functional buildings is not the sole domain of occupational therapists, or even health care providers. Many non–health-related professionals, such as architects, city planners, and public policy authors, are at least initially involved. The American Occupational Therapy Association (AOTA, 2015) has affirmed the unique

Figure 6-1. Tent city.

Table 6-1. The Seven Principles of Universal Design

PRINCIPLE	TITLE	DESCRIPTION
1	Equitable Use	Useful for people with diverse disabilities; avoids stigmatizing or segregating users
2	Flexibility in Use	Accommodates a wide range of preferences; provides choice and adaptability
3	Simple and Intuitive Use	Easy to understand; accommodates range of literacy and language preferences; provides prompting
4	Perceptible Information	Communicates information using different modes (e.g., pictures, tactile, verbal)
5	Tolerance for Error	Minimizes hazards and provides warnings; also has fail-safe features
6	Low Physical Effort	Comfortable and efficient; minimizes fatigue and repetitive actions
7	Size and Space for Approach and Use	Allows for use regardless of body size and mobility

Adapted from National Disability Authority. (n.d.). *The 7 principles of universal design*. Retrieved from http://universaldesign.ie/what-is-universal-design/the-7-principles/the-7-principles.html

qualifications of occupational therapy practitioners to engage in complex environmental modifications and to be part of interdisciplinary teams addressing such issues. Although occupational therapists have always been and will continue to be involved in adapting existing environments, there is now a trend toward *universal design*, which is "the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability" (National Disability Authority, n.d.).

The benefits of universal design are in its ultimate cost-effectiveness and reduction of stigma often associated with adapted environments for people with disabilities. Occupational therapists are urged to increase their awareness and use of universal design because it "contributes to health and well-being by enabling engagement in self-care, productivity, and leisure" (Canadian Association of Occupational Therapists, 2009, p. 1). The World Federation of Occupational Therapists (2012b) concurs with this position and clarifies the significance of the position to occupational therapy by acknowledging that it is a human rights and occupational justice concern and that occupational therapists are experts in the interaction between the person and the environment and have the skills to maximize inclusion and participation. "Occupational therapy practitioners are particularly qualified and well suited to consult with architects, planners, and community agencies, as well as local, state, and federal policymakers with regard to universal design for livable communities" (Young, 2013, p. 3).

The seven principles of universal design are outlined in Table 6-1. These well-developed universal design concepts, particularly the principles of simple and intuitive use, perceptible information, and tolerance for error, are not limited to the physical needs of individuals; they also take