

How the ADA and Research Define Psychiatric Disabilities 3

What is a disability? Being in a wheelchair? Not being able to see or hear? At first blush, the term may seem self-evident, conjuring up familiar images. But, in fact, disability is complex and much misunderstood. Various models and definitions of disability can be confusing (box 3-1). Stigmatizing stereotypes and misperceptions attached to disability further obscure its meaning. Finally, a disability is not simply what a person has, but reflects an individual's functional limitations and abilities, as well as the supports and demands of the environment in which that person lives and works.

Defining the disabilities that result from mental disorders may be even more difficult. Dubbed "invisible," psychiatric disabilities often are not obvious. Mental disorders engender such difficulties as problems in concentration or social interactions, which are usually not readily apparent. And public perceptions are even more fallacious and cruel: People with psychiatric disabilities often are considered dangerous, morally corrupt, inept, weak, or even fakes.

Clearly, the first order of business with the Americans With Disabilities Act (ADA) is the task of ensuring that all people who are affected by the law understand its definition of disability. Furthermore, implementing the ADA requires a nexus between the legal definitions and regulations and the true nature of these conditions. This chapter describes the ADA's definition of disability, along with relevant regulations and guidelines from the U.S. Equal Employment Opportunity Commission (EEOC), and how research characterizes these conditions.



BOX 3-1: Tower of Disability Babel

The endeavor to define disability in the ADA is not unprecedented. As noted in chapter 2, the ADA's specifications stem from a series of disability laws, regulations, and court decisions. Definitions of disability have evolved over the course of the 20th century, reflecting program, policy, and research needs. This box describes various models and definitions of disability as well as inconsistencies that flag the potential for conflict among disability programs and policies.

A recent study by the Institute of Medicine (IOM) described two major models for defining disability: the functional limitation model, developed by Nagi, and the World Health Organization (WHO) model. Both acknowledge three critical factors in disability: underlying impairment, functional result, and environmental influences. But they differ in their terminology and application.

The functional limitation model includes four stages on the path toward disability: pathology, impairment, functional limitation, and disability (figure 3-1). The concept of pathology refers to an abnormal change in a normal bodily process or structure that results from such factors as infection, trauma, or developmental process. *Impairment* reflects functional restrictions at the organ level, stemming from either pathologies or other mental, emotional, physiological, or anatomical losses or abnormalities. For example, symptoms such as hallucinations in schizophrenia represent an impairment in this framework. Restrictions on an individual's actions or activities—such as lifting a heavy weight or carrying on a coherent conversation—form *functional limitations*. *Disability* refers to impaired performance of a socially defined role, reflecting an impairment or functional limitation and environmental supports and demands. This model notes that a variety of factors, such as treatment, financial resources, or personal expectations, can impinge on any stage. The model also asserts that disability is not the inevitable result of a pathological condition, impairment, or even functional limitation.

The WHO model for defining disability—WHO's 1980 International Classification of Impairments, Disabilities, and Handicaps (ICIDH)—is a taxonomy or classification system. Currently under revision, it is the most widely used system for classification in the world. Like the functional limitation model, the WHO model builds on four concepts: disease, impairment, disability, and handicap. The concept of *disease* stems directly from the medical model, referring to pathology in an individual. *Impairment* is any loss or abnormality of physiological, psychological, or anatomical structure or function. *Disability* results from impairment, referring to the inability or restricted ability to perform activities considered within the range normal for humans. Finally, a person is said to have a *handicap* when an impairment or disability limits or prevents role performance for that individual in society. Note that IOM's concept of disability is equivalent to handicap in WHO's model. Some, including the IOM, have criticized the ICIDH because of internal inconsistencies and the use of the term handicap, which generally is rejected as stigmatizing in the United States.

Public health entities are not the only ones to define disability. In fact, the first definitions of disability came from rehabilitation, compensation, and insurance programs. Three programs, with differing definitions of disability, may be particularly relevant to the ADA's implementation:

Social Security Disability Programs: The U.S. Social Security Administration (SSA) operates two disability income maintenance programs. The Social Security Disability Insurance (SSDI) program is an insurance program for those who have become disabled. The Supplemental Security Income (SSI) program is a social welfare program for people who are blind, aged, or disabled. In both SSDI and SSI, people with psychiatric disabilities form the largest portion of beneficiaries. In 1991, 24 percent of SSDI beneficiaries received financial support on the basis of mental disorders. In that same year, 27.4 percent of SSI beneficiaries with disabilities received financial support on the basis of mental disorders. Eligibility for these income-support programs hinges on the strictest of all definitions of vocational disability. As detailed in the Federal Social Security Act, disability is "the inability to engage in any substantial gainful

BOX 3-1: Tower of Disability Babel (cont'd.)

activity by reason of any medically determinable physical or mental impairment(s) which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months. "Guided by the statutory language, SSA developed an administrative procedure to determine disability status, based on medical and nonmedical evidence,

Vocational Rehabilitation The Rehabilitation Services Administration (RSA) administers vocational rehabilitation (VR) services, including employment potential assessment, vocational training, job placement, and followup support, under a Federal-State program. The Rehabilitation Act originally authorized the VR program in 1920 to help injured workers return to their jobs. Since 1975, amendments to the Rehabilitation Act gives priority of services to people with severe disabilities—"persons who need multiple services over an extended period of time"—but who had demonstrable employment potential. The 1992 reauthorization reconciles the language and ideals of the VR program with those of the ADA. The law also specifies that people with the most severe disabilities should be served, asserting that any individual is employable given the proper support services and technology. Today, people with psychiatric disabilities are the second-largest group of applicants for VR services—17 percent of the client population served. However, experts and advocates claim that these individuals are underserved by this program and that vocational services remain a major need for this population. Data from the RSA indicate that people with psychiatric disabilities have the lowest rate of successful rehabilitation under this program.

Workers' Compensation Lost wages or earning capacity due to an employment-related injury or illness provides evidence of disability in workers' compensation programs. While varying somewhat among jurisdictions, eligibility determinations generally rest on medical documentation and resulting inability to work. Rather than relying on an either/or proposition—disabled or not—information on the relative degree of disability (Is the disability temporary or permanent? partial or complete?) is sought. Benefits in workers' compensation may cover medical care, wage replacement and compensation, and rehabilitation services. In the last 10 years, as wages and medical costs have increased, workers' compensation costs have risen significantly. The changing nature of work and evolving definitions of work-related disorders also have spawned new categories of disabilities. Stress-related disorders represent one example. In California, they account for a 700 percent increase in claims between 1979 and 1988. Much debate surrounds the issue of fraudulent claims, the subjectivity of claims, as well as the difficulty such disorders present in separating job-related causes from aggravating personal factors.

As this review of the programs and academic models reveals, all consider impairment and its functional results as key concepts of disability but their definitions differ. Impairments can mean any impairment, or only those that result from injury on the job. Functional results can mean the inability to work over a long period of time, or refer to a temporary hiatus. Such distinctions are unavoidable with different program goals, and the ADA adds yet another set of definitions.

Confusion, conflict, and inefficiency evolve from this "tower of disability Babel," however. While a common nomenclature may not be possible, given the different policy and program goals, guidance on the jurisdictional overlaps would greatly assist employers, care providers, and those who enforce disability policy.

For example, some experts claim that compliance with the ADA in providing an accommodation for an injured worker can save employers money in workers' compensation, by putting the employee back to work. On the other hand, injured workers with no desire to return to work may use the ADA to increase workers' compensation settlements. Or, employers trying to limit the spiraling costs of workers' compensation, may medically screen out workers who may pose an increased risk of benefit utilization; this practice is forbidden by the ADA. The interplay of these different policies and programs warrants attention, both monitoring and guidance.

(continued)

BOX 3-1: Tower of Disability Babel (cont'd.)

So does determining disability. Many different experts—medical, psychological and rehabilitative—have considerable skill in this area. However, experience has shown that clinicians usually equate disability with a medical diagnosis, a determination that is not necessarily applicable under ADA. The development and dissemination of disability assessment methodologies that apply to different policies and programs may assist clinicians. It would also be helpful if academic models and classification systems better reflected program and policy language to provide a cross-walk between research and public policies, and if disability research reflected the policy definitions in use.

It is also notable that psychiatric disability has not always had an easy fit with disability models and programs. In each program discussed in this section—Workers' Compensation, SSDI and SSI, and VR—psychiatric disabilities have led, at one time or another, to controversy, fraudulent claims and abuse, and/or people being undeserved. The debate surrounding workers' compensation and stress-related conditions was mentioned above. SSI and especially SSDI still pose work disincentives for people with psychiatric disabilities, although there have been some recent improvements. Also, experiences with SSI and SSDI in the early 1980s, and continuing in the VR program, show significant gaps in the service provided people with psychiatric disabilities. Not only are people with psychiatric disabilities among the largest constituencies in these programs, they are also among the most vulnerable because of stigma, the nature of their impairments, and service and support needs. These conditions also raise complex questions because of their behavioral manifestations and subjectivity of claims. This suggests that effective implementation of the ADA will hinge on accurate information on psychiatric disabilities and consideration of the special issues raised by this population. Advance attention to problems that occurred in other programs could prevent them in the ADA,

SOURCES: H. Andrews, J. Barker, J. Pittman et al., "National Trends in Vocational Rehabilitation: A Comparison of Individuals With Physical Disabilities and Individuals With Psychiatric Disabilities," *Journal of Rehabilitation* January-March 7-16, 1992, California Workers' Compensation Institute, *Mental Stress Claims in California Workers' Compensation—Incidence* (San Francisco, CA California Workers' Compensation Institute, 1990); Institute of Medicine, *Disability in America: Toward A National Agenda for Prevention*, AM, Pope and A R Tarlov (eds) (Washington, DC: National Academy Press, 1991); C Kennedy, and E.M Gruenberg, "A Lexicology for the Consequences of Mental Disorders," *Psychiatric Disability: Clinical, Legal and Administrative Dimensions*, A T Myerson and T Fine (eds) (Washington, DC: American Psychiatric Press, 1987), C Kennedy and R.W Manderscheid, "SSDI and SSI Disability Beneficiaries With Mental Disorders," *Mental Health, United States, 1992*, R.W Manderscheid and M A. Sonnenschein (eds), DHHS Pub No. (SMA) 92-1942 (Washington, DC: Superintendent of Documents, Government Printing Office, 1992), J G Kilgour, "Workers' Compensation Problems and Solutions. The California Experience," *Labor Law Journal* February :84-96, 1992, J C McElveen, Jr, "Recent Trends in Workers' Compensation," *Employee Relations Law Journal* 18 255-271, 1992, M D Tashjian, B J Hayward, S Stoddard et al, *Best Practice Study of Vocational Rehabilitation Services to Severely Mentally Ill Persons, Volume I Study Findings* (Washington, DC: Policy Study Associates, 1989); World Health Organization, *International Classification of Impairments, Disabilities, and Handicaps* (Geneva, Switzerland, World Health Organization, 1980)

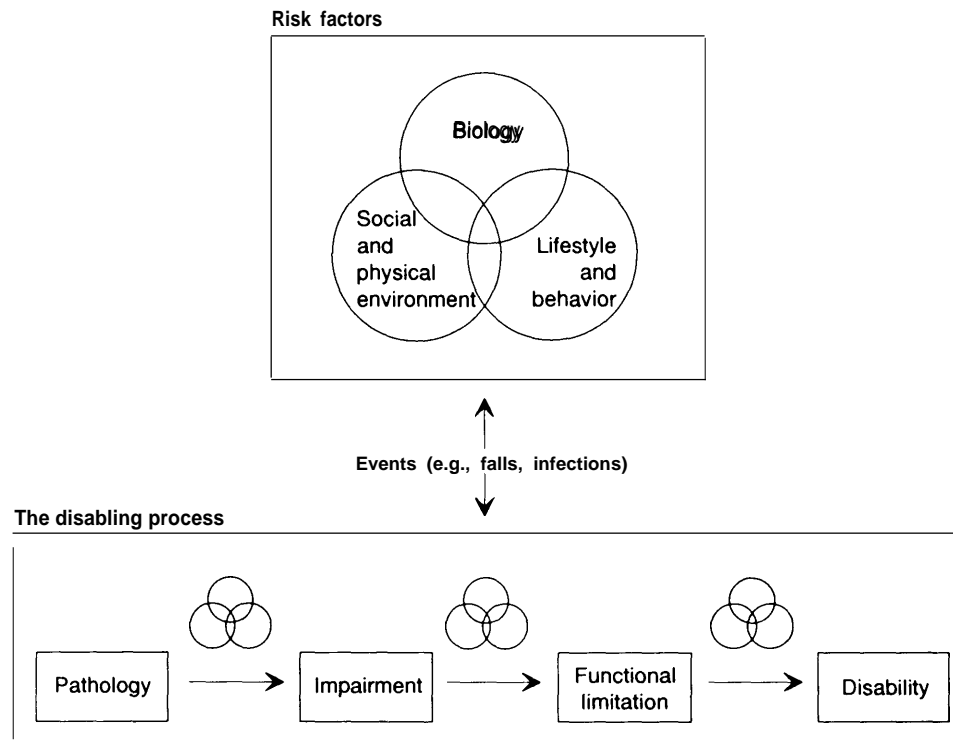
THE ADA'S DEFINITION OF DISABILITY

Chapter 2 of this report introduces the ADA's three-pronged definition of disability: individuals with a current impairment that substantially limits a major life activity, those with a history of such

impairment, or those perceived as having such an impairment. Regulations and interpretive guidelines from the EEOC¹ expound on this approach to disability, and draw from the ADA's legislative

¹The EEOC published regulations and interpretive guidelines for Title I of the ADA on July 26, 1991. The guidelines reflect the EEOC's interpretation of the ADA; it will serve as the EEOC's guide when resolving charges of employment discrimination.

FIGURE 3-1: The Path to Disability



This model of disability endorsed by the Institute of Medicine in 1991, includes a progression from pathology and impairment to functional limitation and ultimately disability a state in which socially defined role performance is hampered. A variety of risk factors may affect various stages in the process.

SOURCE Adapted from Institute of Medicine, *Disability in America Toward a National Agenda for Prevention* (Washington, DC: National Academy Press, 1991).

history and regulations, and case law from section 504 of the Rehabilitation Act.

After repeating the ADA's disability definition, the EEOC expands on the first prong to include explicitly mental disorders: "Physical or mental impairment mean(s). . . [a]ny mental or psychological disorder, such as. . . emotional or mental illness. . . (56 FR 35735)." Note that the EEOC

does not equate mental impairments with a particular diagnostic framework (e.g., the Diagnostic and Statistical Manual, third edition, revised--or DSM-III-R) (2).² However, many experts contend that as a practical matter, a DSM-III-R diagnosis will be necessary if not sufficient to cross the impairment threshold in the first prong of the ADA

² The DSM-III-R, published by the American Psychiatric Association, is the most widely used mental health diagnostic manual in the world (2). The classification of mental disorders in the DSM-III-R is mostly based on symptoms, such as expressed mood or thought processes or on observed behaviors. In most cases, a DSM-diagnosable disorder is required for third-party reimbursement of treatment costs.

definition (12).³ The EEOC further delimits the notion of impairment and specifies that an impairment exists even when the condition is completely controlled by medications or other devices (56 FR 35741). Distinguishing between “impairments and physical, psychological, environmental, cultural and economic characteristics that are not impairments” is, however, considered paramount. For example, normal traits, such as poor judgment or a quick temper, are deemed distinct from impairments (56 FR 35741).

ADA and EEOC regulations do not explicitly protect people genetically predisposed to a disease under this prong of the definition. Indeed, the EEOC’s guidelines explicitly exclude “predisposition to illness or disease” in defining impairment.⁴ Because some mental disorders have a genetic component and genetic tests for predisposition may become possible, this distinction could have future ramifications for people with psychiatric disabilities (19,46). Given concerns about employment and insurance discrimination against people with genetic diseases, some experts and advocates have urged the EEOC to delineate such coverage (51). However, others concerned about simplistic and discriminatory perceptions of genetic predisposition to illness maintain that it is critical to distinguish between such predisposition and the illness itself (10,37).

Two recent analyses note that courts rarely disputed whether an individual had a mental impairment under the Rehabilitation Act (19,40). According to Haggard, “the impairments to qualify for protection under the Rehabilitation Act [have included]: paranoid schizophrenia, manic-depression, depression, post-traumatic stress disorder, borderline personality disorder, schizoid personality disorder, passive aggressive personality disorder, kleptomania, apraxia, transsexual disorder,

and mental retardation” (19). The ADA excludes some of these and other disorders—specifically, transvestism, transsexualism, pedophilia, exhibitionism, voyeurism, gender identity disorders not resulting from physical impairments, other sexual behavior disorders, compulsive gambling, kleptomania, pyromania, or psychoactive substance use disorders resulting from current illegal use of drugs—as noted in chapter 2. While these restrictions are decried as stigmatizing (40), or at least detrimental to treatment (23), they reflect the contentious issues surrounding substance abuse and various DSM-III-R diagnoses (46).

Simply having an impairment—any impairment—does not equal having a disability under the first prong of the definition. The ADA further circumscribes the concept of disability by adding that the impairment must “substantially limit one or more of the major life activities (42 USC 12102 .3(2)(A)).” The EEOC’s spelling out of “substantially limits” and “major life activities” upholds the basic principle that a disability reflects impairment and functional result, although the interpretation of those terms will be difficult. In line with the spirit of the law and the opinion of many advocates, the EEOC’s interpretation also asserts that the ADA’s protection is for those with “significant” or nontrivial impairments. The EEOC’s regulations state:

The term substantially limits means:

(i) *Unable to perform a major life activity that the average person in the general population can perform; or*

(ii) *Significantly restricted as to the condition, manner or duration under which an individual can perform a particular major life activity as compared to the condition, manner or duration under which the average person in the*

³Not all conditions identified by some as psychological disorders are identifiable under the DSM-III-R, such as conditions in the occupational health arena and commonly investigated under the general rubric of “job stress.” Some data suggest that these conditions, such as mood or anxiety disturbances, may limit functioning. However, staff at the EEOC has indicated to OTA that they “do not now, and do not currently plan to categorize ‘stress’ as a category of disability” (48).

⁴However, some interpret the ADA as providing protection for those predisposed to illness under the third prong of the definition (36).

general population can perform that same major life activity. . .

The following factors should be considered in determining whether an individual is substantially limited in a major life activity:

- (i) The nature and severity of the impairment;*
- (ii) The duration or expected duration of the impairment; and*
- (iii) The permanent or long term impact, or the expected permanent or long term impact of or resulting from the impairment (56 FR 35735).*

As noted above, this explanation connotes significant impairment. Certain mental disorders, by their very nature, possibly could be considered a disability under the ADA. The EEOC guidelines state:

The determination of whether an individual has a disability is not necessarily based on the name or diagnosis of the impairment the person has, but rather on the effect of that impairment on the life of the individual. Some impairments may be disabling for particular individuals but not for others, depending on the stage of the disease or disorder, the presence of other impairments that combine to make the impairment disabling or any number of other factors. Other impairments, however, . . . are inherently substantially limiting (56 FR 35741).

Certain mental disorders are, by their nature and definition, chronic and quite disabling. For example, the DSM-III-R diagnostic criteria for schizophrenia include severe symptoms (e.g., hallucinations and catatonic behavior), marked functional impairment, and a duration of at least 6 months (2). People with schizophrenia often suffer a life-long, degenerating course. Certainly the determination of a work accommodation normally requires more information than a diagnosis, for mental disorders or other conditions. And some advocates and experts note that classifying a particular disorder as “severe” or “chronic” can be stigmatizing. Nonetheless, it is clear that the diagnostic criteria for certain mental disorders make them, by definition, “inherently substantially limiting.” Advice to the EEOC on this point from ex-

perts and advocates could assist in delineating diagnoses that fall in this category.

Another point to consider, in regard to the definition of “substantially limiting,” is the duration of an impairment. The EEOC, in its regulations and guidelines, asserts that the duration of an impairment is an important consideration in determining whether it is substantially limiting. The guidelines elaborate: “[T]emporary, non-chronic impairments of short duration, with little or no long term or permanent impact, are usually not disabilities” (56 FR 35741). Department of Justice regulations for Title II also indicate, in slightly different language, that “short-term or transitory illnesses are not disabilities if they do not place a substantial limitation on a person major life activities.” Some mental health advocates and experts object to defining “substantial limitation” in terms of duration or temporal limits (24). While the guidelines do not list a psychiatric impairment as an example (“[S]uch impairments may include, but are not limited to, broken limbs, sprained joints, concussions, appendicitis, and influenza.”), conditions such as short-term depression following the loss of a spouse, which is a temporally delimited mental disorder included in the DSM-III-R, may not be considered disabilities under this rationale.

Mental health experts and advocates have expressed concern over how impairments that episodically remit then intensify fit into the ADA’s definition of disability (40). While many major mental disorders are chronic conditions, like some physical impairments (e.g., multiple sclerosis), symptoms may wax and wane over time. EEOC staff indicated to OTA that a new chapter for the compliance manual on the topic of “Disability” will expressly address this issue. “Episodic disorders, which remit and then intensify, may be ADA disabilities. They may be substantially limiting when active or may have a high likelihood of recurrence in substantially limiting forms. In addition, such conditions may require a substantial limitation of a major life activity to prevent or to lessen the likelihood or severity of recurrence. Fi-

nally, side effects of medications may be substantially limiting in themselves” (48).

“Major life activities” is the other defining term discussed by the EEOC: an impairment rises to the level of disability if it limits a major life activity. The EEOC defines major life activities in its regulations as “functions such as caring for oneself, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working.” The interpretive guidelines provide further details: “Major life activities are those basic activities that the average person in the general population can perform with little or no difficulty. Major life activities include caring for oneself, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working” (56 FR 35741).

Even though the list of major life activities provided by the EEOC is not meant to be exhaustive, many mental health advocates and experts have criticized it, asserting that none of the examples is especially relevant to psychiatric disabilities (19,40). To quote the American Psychological Association’s comment on the regulations:

In the listing of “major life activities,” the only activity listed which is likely to pertain to people with mental disabilities is “working.” “Working” is a very general term and so persons with mental disabilities will be put in the difficult and possibly untenable position of having to prove they are qualified to work at the same time that they have to demonstrate that they are substantially limited in their ability to work in order to be covered by the ADA (3).

It is important to note that neither the EEOC nor all mental health experts concur with this viewpoint (29). As noted by analysts with the EEOC, “In our view, the major life activities of learning, caring for oneself, and performing manual tasks all may be substantially limited by psychiatric disorders or by the side effects of psychotropic medications” (48). Advocates’ concerns reflect, in part, the fact that people do not generally appreciate how mental disorders can impair function.

Various mental health advocates have suggested that the following life functions be added

to EEOC technical assistance materials or guidelines: remembering, concentrating, thinking, information processing, communicating, perceiving, reasoning, and maintaining social relationships (3,40). Although the list of major life activities in the EEOC’s guidelines is not meant to be exhaustive, more explicit guidance in terms of mental disorders and related disabilities would undoubtedly be very useful to employers and employees attempting to implement the ADA. The next section summarizes information on the functions and activities that are limited in psychiatric conditions.

It is also relevant to note how the EEOC defines a substantial limitation in the major life activity of working. First, the EEOC states that this consideration is one of last resort. “If an individual is substantially limited in any other major life activity, no determination should be made as to whether the individual is substantially limited in working” (56 FR 35741). In the absence of a limitation in other major life activities, the EEOC advises an individualized evaluation of work limitation. Consideration should be given, in the view of the EEOC, to the geographic area to which an individual has reasonable access, as well as the number and types of jobs—with similar or distinct qualification demands—affected by the work limitation. The EEOC is careful to note that “an individual does not have to be totally unable to work in order to be considered substantially limited in the major life activity of working.

While the guidelines do not provide a description, they do refer to a case relevant to psychiatric disabilities brought under the Rehabilitation Act—*Forrisi v. Bowen*, 794 F. 2d 931, 934 (4th Cir. 1986). This case shows that while courts have been expansive in defining mental impairment per se, substantially limiting psychiatric impairments have sometimes been defined more restrictively. In this particular case, the court held that acrophobia—fear of heights—did not substantially limit a utility systems repairman from jobs that do not require climbing and exposure to heights; he did not have a disability under the law.

The last two prongs of the ADA's disability definition add a record of past impairment and the perception of such an impairment in the law's definition of disability:

Has a record of such impairment means has a history of, or has been misclassified as having, a mental or physical impairment that substantially limits one or more major life activities.

Is regarded as having such an impairment means .

(1) Has a physical or mental impairment that does not substantially limit major life activities but is treated. . . as constituting such limitation;

(2) Has a physical or mental impairment that substantially limits major life activities only as a result of the attitudes of others toward such impairment; or

(3) Has none of the impairments defined (above). . . but is treated by a covered entity as having a substantially limiting impairment (56 FR 35735).

The law itself, these regulations, and guidelines from the EEOC reflect an attitude of zero-tolerance for employment decisions based on stereotypes or discriminatory beliefs. The often-cited decision of the U.S. Supreme Court in *School Board of Nassau County v. Arline* (1987) underscores the point that the attitudes of others are important contributors to disability:

... [S]ociety's accumulated myths and fears about ability and diseases are as handicapping as are the physical limitations that flow from the actual impairment (480 U.S. 273 (1987)).

As noted in chapter 2, the stigma attached to psychiatric disabilities epitomizes this U.S. Supreme Court finding. Indeed, the negative attitudes surrounding mental disorders are so strong that job application forms commonly asked: "Have you had a nervous breakdown?" "Have you ever been hospitalized in a mental institution?" or "Have you ever received treatment for a nervous or emotional condition?" These questions evince the

firmly entrenched belief in our society that mental illness, present or past, is incompatible with work. Research and experience reflected in the second part of this chapter show that this simplistic belief is false.

The ADA should make such questions a thing of the past.⁵ Title I of the ADA prohibits employers from asking applicants about their disabilities, an important protection for such "invisible" conditions as psychiatric disabilities. Under the ADA, employers are barred from using any source of information about disability status—voluntary medical examinations, educational records, prior employment records, billing information from health insurance, psychological tests, and others. In addition to prohibiting pre-job-offer medical exams and prescribing a specific mechanism for conducting post-offer exams, the burden of proof placed on employers serves to protect applicants and employees with disabilities. While the burden of proving that one is disabled under the ADA's definition lies with the individual alleging discrimination, the EEOC's guidelines indicate that the second prong "of the definition is satisfied if a record relied on by an employer indicates that the individual has or has had a substantially limiting impairment." In terms of the third prong of the ADA's definition of disability, the EEOC guidelines require employers to "articulate a non-discriminatory reason for the employment action. . . (or else) an inference that the employer is acting on the basis of 'myth, fear or stereotype' can be drawn" (56 FR 35743).

RESEARCH CHARACTERIZATIONS OF PSYCHIATRIC DISABILITIES

The above discussion reveals several questions about psychiatric disability that are relevant under the ADA. How do mental disorders affect life activities? Which impairments are most limiting? How long do the symptoms and functional limitations of various mental disorders last, and do they

⁵It is interesting to note that questions on applications for Federal jobs persisted for as long as a decade after becoming illegal under the Rehabilitation Act (45). To the knowledge of OTA, no data address whether this is the case for the ADA.

TABLE 3-1: Some Serious Mental Disorders

| Disorder | Some common symptoms | Common treatment approaches |
|-------------------------------------|--|---|
| Schizophrenia | Delusions, hallucinations; impaired ability to integrate information, to reason, to concentrate, or to focus attention; usually marked by incoherence, bizarre behavior, suspicion, paranoia (psychotic or "positive" symptoms); dulling of emotions or inappropriateness of emotional response (e.g., a "wooden" personality), apathy, social withdrawal (nonpsychotic or "negative" symptoms). Symptoms vary widely among patients, combine in different ways, and may change over time. | Treatment usually integrates antipsychotic medications to manage psychosis and supportive psychotherapy aimed at helping individuals understand illness, reduce stress, and enhance coping skills; may involve hospitalization. |
| Major depression | Complete loss of interest or pleasure in activities; weight gain or loss; insomnia or hypersomnia; slowed or agitated movement; fatigue; intense feelings of guilt or worthlessness; diminished ability to think or concentrate; recurrent thoughts of death or suicide. | Treatment often consists of antidepressant medications and/or various forms of psychotherapy; short term hospitalization and/or electroconvulsive therapy (ECT) may be required in severe cases. |
| Bipolar disorder (manic-depression) | Symptoms of depression are described above. Mania is characterized by an extremely elevated, expansive, or irritable mood; inflated self-esteem or grandiosity; decreased need for sleep; extremely talkative and distractible; agitated motion; excessive involvement in pleasurable activities (e.g., buying sprees, sexual indiscretions); psychotic symptoms (delusions and hallucinations) may also occur. | Depressive episodes are treated as above. Manic episodes are usually treated with lithium carbonate. Psychosis may be treated with antipsychotic drugs; hospitalization may be required. |
| Obsessive-compulsive disorder | Obsessions are recurrent and persistent ideas, thoughts, impulses, or images (e.g., the feeling of being dirty, the desire for symmetry) that although irrational and unwanted, cannot be resisted. Compulsions are repetitive, purposeful, and intentional behaviors (e.g., hand-washing, checking if stove is on or door is locked). The obsessions or compulsions cause marked distress, are time-consuming, or significantly interfere with the person's normal routine. | Treatment currently consists of medication and/or behavioral therapy. |
| Panic disorder | Hallmark symptom includes sudden, inexplicable attacks of intense fear that is associated with powerful physical symptoms, including shortness of breath, dizziness or faintness, trembling, sweating, choking, nausea, numbness, flushes, chest pain, fear of dying, fear of going crazy, or of doing something uncontrolled. May be associated with agoraphobia—fear of being in public places. | Treatment may include medication (antidepressant or anti-anxiety drugs) or psychotherapy (especially behavioral and cognitive therapies as well as relaxation techniques), or both. |

SOURCE: U.S. Congress, Office of Technology Assessment, *The Biology of Mental Disorders*, OTA-BA-538 (Washington, DC: U.S. Government Printing Office, September 1992).

recur? Many of the legal issues concerned with these questions await further governmental guidance and adjudication. However, knowledge from research on and past experience with mental disorders can assist ADA implementation. This section describes current models of and provides information on psychiatric disabilities.

Mental disorders and their functional sequelae are prevalent and costly to society at large and in the workplace:

- People with mental disorders account for approximately 10 percent of the charges filed by individuals with the EEOC between July 26,

1992 and October 31, 1993; they represent the second largest population of disabilities (48).⁶

- Decreased productivity and lost work days are the largest cost imposed by mental disorders on society. Of the total estimated cost of \$136.1 billion in 1991, \$60.0 billion or nearly 50 percent accrued from lost output, exceeding the cost of hospitalization, care provider consultation, and medication combined (38,43).
- Data from a recent survey of white collar workers confirm the high toll of depression on business: 9 percent of the men and 17 percent of the women surveyed experienced an episode of major depression during the previous year. More than 50 percent of employees with depressive symptoms reported work impairments (14).
- Data from several studies link depression to disability at work (13,22,50): Individuals with depression were shown to experience four times as many disability days when compared to asymptomatic individuals. In fact, depressive symptoms lead to levels of disability comparable to major heart conditions and exceed other major medical disorders such as diabetes. Furthermore, simply the presence of depressive symptoms—far below the threshold for a diagnosis of major depression—significantly impairs functioning.

What are mental disorders? As noted in an earlier OTA report, *The Biology of Mental Disorders* (46), mental disorders encompass a broad range of conditions, classified on the basis of expressed thought processes or emotions, observed behaviors, physical symptoms, and functional impairments. Some of the most common and serious conditions afflicting American adults, their symptoms and common treatments are listed in table 3-1. As in physical conditions, mental disorders can range from temporary, relatively minor condi-

TABLE 3-2: One-Year Prevalence of Some Mental Disorders Among American Adults

| Type of disorder | One year prevalence rate (percent + standard error) | Estimated number of persons |
|-------------------------------------|---|-----------------------------|
| Schizophrenic disorders | 1.1 + 0.1 | 1,749,000 |
| Mood disorders | 9.5 + 0.3 | 15,143,000 |
| • Bipolar disorder | 1.2 + 0.1 | 1,908,000 |
| • Major depression | 5.0 + 0.2 | 7,950,000 |
| • Dysthymia | 5.4 + 0.2 | 8,586,000 |
| Anxiety disorders | 12.6 + 0.3 | 20,034,000 |
| • Phobic disorders | 10.9 + 0.3 | 17,331,000 |
| • Panic disorders | 1.3 + 0.1 | 2,067,000 |
| • Obsessive-compulsive disorder | 2.1 + 0.1 | 3,339,000 |
| Antisocial personality disorder | 1.5 + 0.1 | 2,385,000 |
| Any mental disorder | 22.1 + 0.4 | 35,139,000 |
| Any mental/substance abuse disorder | 28.1 + 0.5 | 44,679,000 |

SOURCE: D.A. Regier, W.E. Narrow, D.S. Rae et al., *The de Facto U.S. Mental and Addictive Disorders Service System: Epidemiologic Catchment Area Prospective 1-Year Prevalence Rates of Disorders and Services*, *Archives of General Psychiatry* 50:85-94, 1993.

tions to chronic and severely incapacitating disorders. The more common and serious conditions listed in table 3-1 typically have a chronic course, with symptoms remitting and relapsing. While the causes of many mental disorders have not been determined, ongoing research is providing more clues about the biological and psychological substrates and contributors. Furthermore, in many cases effective treatment approaches, including medication and psychotherapy, are available (47).

Just how prevalent are mental disorders? The most recently reported findings from the National Institute of Mental Health's (NIMH's) Epidemiologic Catchment Area (ECA) program⁷ show that more than one in five American adults has a diagnosable mental disorder in a given year (42) (table 3-2). Conditions range from the less common dis-

⁶ Chapter 5 provides a complete description of the EEOC's process for handling charges under the ADA.

⁷ The Epidemiologic Catchment Area (ECA) program involved face-to-face interviews of more than 20,000 adults living in communities and institutions. Data on the prevalence of mental and addictive disorders were collected between 1980 and 1985 in five regions of the United States. A complete description of the ECA program is available (44).

TABLE 3-3: Use of Mental or Addictive Disorder Services in One Year

| Service setting | Percent of population | Estimated number of persons |
|-----------------------------------|-----------------------|-----------------------------|
| Specialty mental health/addictive | 5.9 | 9,361,000 |
| General medical | 6.4 | 10,043,000 |
| Other human services | 12.5 | 19,734,000 |
| Voluntary supports | 4.1 | 6,535,000 |
| Total* | 14.7 | 23,107,000 |

Total is less than sum of service in each setting since individuals often access more than one type of provider.

SOURCE: D.A. Regier, W.W. Narrow, D.S. Rae et al., "The de Facto U.S. Mental and Addictive Disorders Service System: Epidemiologic Catchment Area Prospective 1-Year Prevalence Rates of Disorders and Services," *Archives of General Psychiatry* 50:35-94, 1993.

orders of schizophrenia and bipolar disorder, with a 1-year prevalence rate of 1.1 ± 0.1 percent and 1.2 ± 0.1 percent, respectively, to the exceedingly prevalent mood disorders of major depression (5.0 ± 0.2 percent), and dysthymia (5.4 ± 0.2 percent). The ECA data also reveal that 14.7 percent of American adults—more than 23 million people—sought treatment for mental or addictive disorders from mental health specialists, primary care providers, other human service personnel (such as pastoral counselors), and/or peers, families, and friends (table 3-3).⁸

The ECA data underline the broad spectrum of diagnoses and service needs that typify mental health problems in the United States. Although it is clear that all of these conditions would not equal disabilities under the ADA, this diversity will un-

doubtedly surface in the workplace, as indicated by requests received by the Job Accommodation Network (JAN),⁹ which is funded by the President's Committee on the Employment of People with Disabilities. While 47 percent of the inquiries received by JAN related to mood disorders, calls sought information on a wide variety of mental disorders (table 3-4). What these data on diagnoses, symptoms, and service use do not reveal is the nature of associated disabilities.

Current models of psychiatric disability began with the need to apportion resources and to deliver useful services. Psychiatric or psychosocial rehabilitation comprises a broad range of services that "assist persons with long-term psychiatric disabilities increase their functioning so that they are successful and satisfied in the environments of their choice with the least amount of ongoing professional intervention" (5,7). The psychosocial reha-

TABLE 3-4: Inquiries Received by the JAN on Specific Mental Disorders

| Specific disorder* | Percent (%) of total inquiries on mental disorders |
|---|--|
| Bipolar disorder (manic depression) | 30 |
| Depression | 17 |
| Schizophrenia | 15 |
| Stress/anxiety | 11 |
| Phobias | 7 |
| Other (personality disorder, post traumatic stress disorder, obsessive-compulsive disorder) | 20 |

● As specified by caller.

SOURCE: Job Accommodation Network, 1993.

⁸ECA data reveal two issues worthy of comment. First, most people with diagnosable mental or addictive disorders—71.5 percent—receive no treatment or service. Even people with the most serious diagnoses—schizophrenia, major depression, obsessive-compulsive disorder, and panic disorder—receive treatment only 45 to 65 percent of the time. The gap between diagnosis and treatment may reflect transient symptoms for which treatment was not sought, inadequate access to mental health care, lack of recognition on the part of a care provider, or other factors.

The second issue concerning service use and prevalence involves the many individuals without a diagnosable disorder who receive treatment: 46 percent of those receiving treatment fall under this category. The ECA data offer some clues about this apparent discrepancy. The vast majority of those receiving care without a current diagnosis have a history of a serious mental disorder (schizophrenia, bipolar disorder, major depression, and panic disorder) or significant, if diagnostically subthreshold, symptoms.

⁹The Job Accommodation Network or JAN is a government-funded technical assistance program aimed at offering employers and employees practical advice on how to accommodate disabilities in the workplace. A complete description of JAN appears in chapter 5.

TABLE 3-5: Psychosocial Rehabilitation Model of Psychiatric Disability

| Stages: | I. Impairment | II. Disability | III. Handicap |
|--------------|---|---|--|
| Definitions: | Any loss or abnormality of psychological, physiological, or anatomical structure or function. | Any restriction or lack of ability, resulting from an impairment, to perform an activity in the manner or within the range considered normal for a human being. | A disadvantage, resulting from an impairment and/or a disability, for a given individual that limits or prevents the fulfillment of a role that is normal (depending on age, sex, social, cultural factors) for that individual. |
| Exam pies: | Hallucinations, delusions, depression. | Lack of work adjustment skills or social skills. | Unemployment. |

SOURCE: W. Anthony, H. Cohen, and M. Farkas, *Psychiatric Rehabilitation*(Boston, MA: Center for Psychiatric Rehabilitation, 1990).

bilitation model, based on the WHO's model for disability (5,21 ,27) (table 3-5), specifies that an impairment, which entails the symptoms of a mental disorder, may restrict certain skills or functions including various social skills. Psychiatric disabilities may impede an individuals' ability to fulfill certain roles, such as holding a job. This model has clear implications for service delivery: While treatment to alleviate a psychiatric impairment remains important, interventions geared toward improving skills, functional performance and environmental supports are also critical.

What data exist concerning the prevalence and nature of psychiatric disabilities (box 3-2)? No data specify how many people with psychiatric disabilities are covered by the ADA. However, recent information from a random survey of adults living in communities detail the prevalence of psychiatric disabilities and associated serious limitations in activity (8). The results of the 1989 supplement to the National Health Interview Survey indicate that approximately 5 million adults with 3.3 million currently in communities—1.8 percent of the total population—have a serious mental illness: a mental disorder during the past year that seriously interfered with daily life. Nearly 80 percent of individuals with a psychiatric impairment were limited in: taking care of personal needs such as eating, dressing, and bathing (activities of daily living); managing money, doing everyday household chores, and getting around outside the home (instrumental activities of daily living); and, cognitive and social functioning. Impaired functioning translated into employment

problems for many: Nearly 50 percent of the people with serious mental illnesses between the ages of 18 and 69 were either completely unable to work (28.9 percent) or limited in work (18.4 percent). Unsurprisingly, a significant fraction of these individual s—23.2 percent—receive disability payments from the government, because of their mental conditions.

This study also defines functional limitations that stem from mental disorders and are especially relevant to employment. More than 90 percent of those restricted in work: 1) experience problems in social functioning; 2) have problems coping with day-to-day stress; and 3) find it difficult to concentrate long enough to complete tasks (table 3-6). These data mirror guidelines for assessing disability (e.g., SSA disability determinations), experience in service delivery, and a large body of research (17). Preliminary data and analysis related to the ADA also echo these findings. Telephone requests handled by JAN since the ADA's implementation identify stress intolerance as an important functional limitation in mental illness (25). Other limitations related by callers include behavior that may contribute to problems in interpersonal relationships, and the reduced ability to concentrate. Similarly, in a report on 12 employed individuals with serious mental disorders, common functional limitations included difficulty concentrating, handling stress, initiating personal contact, and responding to negative feedback (31).

While the conceptual model of psychiatric disabilities embrace the notion of impairment and

BOX 3-2: Federal Measures of Disabilities

Measures of disability can be quite useful to policymakers. Information on prevalence, longitudinal course, and associated socioeconomic status can aid in service planning, resource distribution, and the assessment of enacted policies. The Federal Government collects some relevant information on disability in general, and psychiatric disabilities specifically. Several analyses have concluded, however, that these efforts contribute to a shallow and irregularly updated database.

The National Health Interview Survey (NHIS) is the Federal Government's most regular collection of information on disabilities. Conducted by the National Center for Health Statistics every 2 years, the NHIS collects data concerning existing impairments and activity limitations in noninstitutionalized individuals. Another source of information on disabilities is the Survey of Income and Program Participation (SIPP), conducted by the U.S. Census Bureau since 1983. SIPP is an ongoing study of the economic well-being of U.S. households. As part of the third round of interviews, data were collected on functional limitations, work limitations, and the receipt of Social Security or Veterans disability benefits. Finally, the Current Population Survey (CPS), in which the U. S. Department of Labor collects data on the work status of the population each month, solicits information on disability status in each March supplement.

NHIS, SIPP, and CPS provide limited information on disabilities in general; The data they provide on psychiatric disabilities are even more scant. To augment the Nation's database on disabilities in general and psychiatric disabilities specifically, a special survey to supplement the NHIS is underway. The survey was planned to provide a depth of data heretofore unknown in the field of disability statistics. In addition to information on health status, health care utilization, and activity limitation, the survey includes a variety of questions on impairments (e.g., severity, nature, onset, and duration), receipt of benefits, employment status, work accommodations, earnings, use of vocational rehabilitation services, social interactions, and self-perceptions of disability. The survey also provides an opportunity for longitudinal study. Furthermore, a group of experts developed a new section on psychiatric and cognitive impairments.

To improve the Nation's database on psychiatric disabilities, the Center for Mental Health Services (CMHS) has developed the Uniform Client Data Instrument (UCDI) to assess psychiatric disability. The UCDI incorporates questions on psychiatric symptomatology, daily activities, social functioning, behavioral

functional limitation, the relative role of each factor in work is unclear and controversial. On the one hand, many people in the psychosocial rehabilitation community disavow a high correlation between symptoms or diagnosis and employment outcome (4,5,35).

A number of studies illustrate the lack of relationship between a variety of assessments of psychiatric symptomatology and future ability to live and work independently. . . . Although occasional studies do report a relationship between a type of symptom and rehabilitative outcome . . . the evidence is overwhelming that little or no relationship exists (5).

On the other hand, some researchers offer evidence of significant correlation between psycho-

pathology and work performance. For example, data from a recently completed study of nearly 500 individuals with various mental and addictive disorders implicate a close correlation between the type and severity of symptoms and work performance and employment (28,30,32).

[A]ssessments of psychiatric symptoms and vocational performance . . . documented that severity of psychiatric symptoms was significantly related to the functional capacity for work in a wide variety of mental disorders. Persons with psychotic disorders performed much more poorly on work performance than those with non-psychotic disorders (30).

These seemingly antithetical results reflect differing measures of psychiatric symptomatology,

BOX 3-2: Federal Measures of Disabilities (cont'd.)

problems at home and/or work, and substance abuse, The UCDI was incorporated into the National Medical Expenditures Survey (conducted in 1986, data not yet available). More recently, the UCDI was incorporated into a supplement to the NH IS; the data are described in table 3-6. While much of the regular CMHS' data collection focuses on service providers and use, a current project—the Longitudinal Client Sample Survey of Outpatient Mental Health Programs—will include information on client functioning. But, Federal support for the collection, analyses, and reporting of national statistics on mental health services and client characteristics has been precarious over the last several years, in that it has not had an official budget of its own. Prior to fiscal year 1989, the program received funds from program management and support accounts at NIMH. Since that time, \$5.1 million in fiscal year 1992 and \$8.8 million in fiscal year 1993 came from a mental health block grant set-aside.

Information relating to the impact of the ADA on employment is not addressed by any of the ongoing or planned Federal surveys. Data are lacking on the hiring of people with psychiatric disabilities, discrimination and other problems in the workplace, or the attitudes of employers and employees about the ADA and psychiatric disabilities. Indeed, which people with mental disorders are covered by the ADA is not clear. Some analysts have suggested that the EEOC, which now collects information from large employers on the hiring of women and minorities, could monitor such trends among people with disabilities as well, to establish a statistical basis for discrimination. Also, surveys by Federal granting agencies, including the CMHS, NIMH, or the National Institute on Disability and Rehabilitation Research, could incorporate the ADA's definition of disability and ask questions about employment experiences.

SOURCES Institute of Medicine, *Disability in America: Toward a National Agenda for Prevention* (Washington, DC: National Academy of Sciences, 1991), E. H. Yelin "The Recent History and Immediate Future of Employment Among Persons With Disabilities," *The Americans With Disabilities Act: From Policy to Practice*, J. West (ed.) (New York, NY: Milbank Memorial Fund, 1991), R. Manderscheid, Director, Division of State and Community Systems Development, Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, Rockville, MD, personal communication, February 1993, M. Adler, Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services, Washington, DC, personal communication, January 1993.

measures of work performance, and vocational outcomes. Furthermore, treatment status and individual ability are almost always ignored in these studies as are traditional labor force predictors (e.g., age, gender, ethnicity, and social class), the type or amount of any vocational services that the individual may have received, and prior job history (15).¹⁰ Complete resolution of how impairment, functional limitation, and work disability relate to one another awaits further research (box 3-3). That is not to say that some conclusions can-

not be drawn. Data and experience permit the following assertions.

Psychiatric symptomatology has practical relevance for employment. Some research data suggest an important link between certain psychiatric impairments and ability to work. Indeed, several scholars, upon review of the research literature, acknowledge data supporting the link between symptoms and functioning, and point out the association between severe and chronic conditions, psychotic features, and subsets of symp-

¹⁰ Other factors to be considered are changes in the demand for labor, the changing roles of men and women in work, and changing industrial structure. Preliminary data suggest that people with psychiatric disabilities fared more poorly than people with other types of disabilities during the 1980s, with a general increase in the unemployment rate (52).

TABLE 3-6: Serious Mental Illness, Functional Limitation

| Work limitation status among people 18-69 years of age | Total with serious mental illness (in 1,000's) | Limited in personal care activities such as eating, dressing, and bathing (% of total) | Limited in instrumental activities of daily living such as managing money, household chores (% of total) | Limited In social functioning (% of total) | Limited in coping with day-to-day stress (% of total) | Limited in concentrating long enough to complete tasks (% of total) |
|---|--|--|--|--|---|---|
| Unable to work | 829 | 7.7 | 48.8 | 70.4 | 86.5 | 72.9 |
| Limited in work | 529 | 2.6 | 30.2 | 61.2 | 80.1 | 67.2 |
| No current work limitation | 1,032 | | 4.6 | 26.8 | 52.6 | 21.4 |
| Does not work for other reasons or work limitation status unknown | 485 | | 9.8 | 30.7 | 54.3 | 32.0 |
| Total | 2,874 | 2.7 | 22.9 | 46.3 | 67.7 | 46.5 |

SOURCE: P.R. Barker, R.W. Manderscheid, G.E. Hendershot et al., "Serious Mental Illness and Disability in the Adult Household Population: United States, 1989," *Advance Data From VV/and Health Statistics of the Center for Disease Control/National Center for Health Statistics*, Sept. 16, 1992.

BOX 3-3: Assessing Psychiatric Disability

Models of disability and data from research show that identifying a particular diagnosis or symptom is insufficient to determine the severity of disability, required services, or work limitations. In order to qualify for the ADA's protections a person must be an individual with an impairment that "substantially limit(s) one or more of the major life activities." EEOC investigators, employers, people with mental disorders, and mental health care providers face the challenge of determining who with a mental disorder has a psychiatric disability under the law.

The Status of Functional Assessment

Questionnaires, interviewing techniques, and observational approaches have been developed to assess disability, and disability assessment has become a standard part of vocational and psychosocial rehabilitation services. The goals of assessment may be very general, aimed at measuring social skills, the ability to maneuver every-day requirements, and work performance; or very specific, aimed at specific disorders and functions. Recent analyses have documented shortcomings of these disability assessment methods. Following a comprehensive review, one researcher concluded that no one instrument was wholly adequate for assessing functional impairments. Recently this same scholar noted that:

[B]etter methods of assessment would improve both the interpretation of future evaluations and current clinical practice. Most evaluations use relatively idiosyncratic methods of measuring role functioning. What is needed is an easily administered, low-cost assessment tool that not only measures individuals' impairments and role functioning, but provides information that is directly relevant to treatment decisions.

Similarly, expert reviewers of social functioning measures concluded that modest reliability and the lack of evaluation limit the usefulness of available assessment tools. Furthermore, they concluded, none is simple enough for routine clinical use. These conclusions are in the National Institute of Mental Health's plan for services research, which states that

[a]lthough [disability] assessment seems logical and straightforward enough, the truth is that the mental health field is still without an adequate arsenal of instruments and techniques to fully accomplish the task. No aspect of clinical services or of research designed to improve such services can prosper without the availability of meaningful and valid techniques for assessing the status of mentally ill patients, not only in purely clinical terms but also in terms of their everyday functioning in the real world and their strength on which rehabilitation can build. Needed are ways to assess general health status and physical functioning, the quality of the patient's life, the nature of the family's burden, and the patient's rehabilitation potential and progress.

Disability Assessment at the Social Security Administration

The experience of the Social Security Administration (SSA) illuminates the pitfalls of implementing disability assessment. SSA administers two disability income maintenance programs: the Social Security Disability Insurance (SSDI) program and Supplemental Security Income (SSI) program. Eligibility for these programs hinges on the inability to work. The methods used by SSA to assess severe psychiatric disability in the 1980s was said to be difficult to use, too subjective, out of date, and discriminatory. "The essential problem is that it is not possible to construct a set of medical and vocational standards that will distinguish perfectly between those who are able to work and those who are not able to work." The public outcry that resulted from a disproportionate number of people with severe mental disorders being terminated from the programs led Congress to order a revision of SSA's psychiatric disability assessment methods. The new method includes the consideration of diagnosis as well as limitations in four areas of functioning: activities of daily living, social relations; cognitive functioning such as concentration, persistence, and pace; and decompensation or deterioration in work. Consideration of environmental interventions was also provided as an option in the assessment.

(continued)

BOX 3-3: Assessing Psychiatric Disability (cont'd.)

SSA's current disability determination is not without its critics: An American Psychiatric Association study of the new guidelines indicates that additional changes may improve the disability determination; the use of this assessment method by psychiatrists and other care providers also warrants improvement; some have criticized the increasing number of people with psychiatric disabilities who now receive SSI or SSDI.

It should be noted that the SSA's disability determination procedure is not appropriate for the ADA. The elaborate hurdle that people with disabilities must vault to receive SSA program benefits would limit unduly the ADA-guaranteed protections against discrimination. In addition, the definition of disability under the ADA obviously is not limited to individuals who cannot work at all.

Functional Assessment and the ADA

The ADA defines disability in terms of impairment and functional limitations. In general, an applicant or employee discloses the presence of a disability to an employer or covered entity, often providing very limited information. The employer may require confirmation of a disability that is not readily apparent, such as a psychiatric disability. Also, the EEOC must make a determination as to whether an individual is considered disabled under the ADA in the event that a charge of discrimination is filed. To date, in its computerized charge data system, the EEOC simply lists the marginally informative term "mental illness" as the impairment relevant to psychiatric disability.¹ The EEOC will be implementing anew coding system for disabilities in fiscal year 1994 and it will include a category for "emotional/psychiatric impairment," under which there will be separate entries for anxiety disorder, depression, manic-depressive disorder, schizophrenia, and other emotional/psychiatric condition where none of the above clearly apply. What doesn't exist are guidelines for determining who with a mental disorder has an impairment that substantially limits a major life activity—is disabled under the ADA's definition. Convening a group of experts and interested parties to help fashion guidance for EEOC investigators and others, concerning diagnoses and other assessment criteria relevant to the ADA and employment would be useful. Continued research and the development of functional assessment tools also represent critical needs.

¹ Mental retardation is appropriately listed separately from mental illness

SOURCES: C Koyanagi and H. Goldman, *Inching Forward: A Report on Progress Made in Federal Mental Health Policy in the 1980s* (National Mental Health Association, 1991), U.S. Department of Health and Human Services, *Toward a National Plan for the Chronically Mentally Ill* (Public Health Service, Washington, DC, 1980); H.A.Pincus, C. Kennedy, and S.J. Simmens, American Psychiatric Association, Washington, DC, "Study of SSA Methods and Standards for Evaluating Disability Based on Mental Impairment," final report to Social Security Administration (SSA-600-84-0174), November 1987; H.A.Pincus, C. Kennedy, S.J. Simmens, et al., "Determining Disability Due to Mental Impairment: APA's Evaluation of Social Security Administration Guidelines," *American Journal of Psychiatry* 148:1037-1043, 1991; H.H. Goldman, A.E. Skodol, and T.R. Lave, "Revising Axis V for DSM-IV: A Review of Measures of Social Functioning," *American Journal of Psychiatry* 149:1148-1156, 1992; C.J. Wallace, "Functional Assessment in Rehabilitation," *Schizophrenia Bulletin* 12:604-630, 1987

toms and work (5,16,49). What does this mean now, in practical terms? People with psychiatric disabilities as well as care providers, advocates, and other experts note that exacerbation of symptoms may require brief time away from work for treatment (see discussion of reasonable accommodations in ch. 4). In fact, access to treatment may become paramount.

Many people with psychiatric disabilities will find access to appropriate treatment necessary for maintaining employment. Even experts who highlight the importance of functional and environmental interventions admit that medication, psychotherapy and/or other clinical interventions are a necessary component of care. "Psychiatric treatment and psychiatric rehabilitation

procedures ideally occur in close sequence or simultaneously” (5). Results from a recent study of depression reinforce this point. Data from 10 major studies of depression treatment revealed that symptom relief significantly improved work function and outcome (33). The authors of the study concluded that “behavioral impairments, including missed time, decreased performance, and significant interpersonal problems are common features of depression that appear to be highly responsive to symptomatically effective treatment given adequate time” (33).

Although many effective medications, psychotherapeutic interventions, and other approaches are available (1,47), access to effective treatment is far from universal. Research and policy analyses point to several barriers to treatment, including: Limitations on insurance coverage, under-recognition of symptoms by care providers, and inadequate or inappropriate treatment offered by some care providers (46). Without access to treatment, the protections and requirements of the ADA become a moot point for many people with psychiatric disabilities.

While important, the relevance of psychiatric symptoms and treatment to employment remains limited and not clearly understood. The precise relationship among impairments, functional limitations, and work is obscure and complex. For example, the course of symptoms over time does not parallel that of functional limitations. An author of one recent review of the data concluded that “diagnoses do not predict rehabilitation outcomes except in the broadest terms, and there are wide variations in outcomes within diagnostic groups” (49). Also, while research data increasingly characterize the nature of cognitive impairments in schizophrenia—including problems with attention, memory, information processing, and other aspects of learning—very little is known about how these specific deficits relate to job performance (18,20,34,39,41,49). Certainly the presence of even unusual symptoms does not necessarily hamper work performance. An example, shared by a rehabilitation specialist, conveys this last point: A computer programmer, who suffered hallucinations that could be distracting, found that

audibly responding to the voices allowed him to continue successfully with his work (9). No doubt, the young man’s talking to himself appeared unusual to his coworkers, but his work did not suffer.

Clinical treatment can have a paradoxical impact on disability and employment. While, as noted above, effective treatments are available for many mental disorders, they are not a panacea. Medications are not effective for everyone, and some of the most disabling symptoms of mental disorders may resist their effects. In fact, medication has little direct impact that has been measured on such functional issues as interpersonal relationships (6,49). Furthermore, the side effects of psychotropic medications can prove quite annoying if not outright disabling. Some common side effects of psychoactive medications include: Dry mouth, constipation, blurred vision, memory difficulties, restlessness, tremor, and sedation. Data from a recent survey of employed individuals with psychiatric disabilities confirm this observation: Medication side effects commonly led to functional difficulties on the job (31). Similarly, a reviewer of the research literature concluded that while standard or minimal medication dose in schizophrenia was associated with positive work outcomes, a “surprising number of studies [suggested] that higher dose or more consistent neuroleptic treatment might be associated with poorer work outcomes” (32).

This research on impairments and their treatments notwithstanding, one of the most reliable indicator of future work performance is prior work (1,16):

Notably, every study that investigated the link between prior work history and future vocational performance has found a significant, positive relationship between these two variables (16).

Some of the most severe mental disorders interrupt key aspects of developing a work history, however. For most people, late adolescence and early adulthood are critical times for building vocational skills and gaining knowledge, through education or early work experience. This is just

the time that symptoms of disorders such as schizophrenia first erupt. ECA data reveals resulting disruption of educational achievement. While the educational achievement of people with schizophrenia is comparable to others at the beginning of college, achievement diverges by the end of college: Only 4.8 percent of individuals with schizophrenia obtain a degree compared to 17 percent in the total population (26).

What do these data imply for the ADA? Quite bluntly, people with the most severe mental disorders, and often with less education and a checkered work history, are unlikely to achieve competitive employment by virtue of the ADA's passage alone. Individuals with severe psychiatric disabilities will require a broad range of educational, psychosocial, and vocational services to prepare them to find and keep a job. While the ADA is an important tool for fighting the discrimination commonly attached to psychiatric disabilities, it is only one piece of the puzzle for people with the most severe conditions.

Several experts have commented that the ADA's impact will be most strongly felt by people with less severe mental disorders (12, 45):

There are many people, probably a much larger number, in the workforce with less severe conditions or less pronounced functional limitations, who have much to gain from the ADA. It is particularly for their vocational needs that the provisions of the ADA provide a good fit (12).

Indeed, data described throughout this section demonstrate the prevalence of diagnosable mental disorders and symptoms among working-age adults. However, much less is known about this population's functional limitations, their employment characteristics, accommodation needs, or even who among this group would be covered under the first prong of the ADA's definition of disability. As noted above, the first prong of the ADA's definition refers to individuals with serious or nontrivial disabilities. While courts have been expansive in defining mental impairment *per se* under the Rehabilitation Act, substantially limiting psychiatric impairments have sometimes been defined more restrictively. Unless questions

are answered concerning these less severe conditions—Which ones are covered? How can such determinations be made?—the ADA is open to excessive subjectivity in claims of psychiatric disability.

SUMMARY AND CONCLUSIONS

The ADA's definition of disability explicitly includes people with psychiatric disabilities, as does Title V of the Rehabilitation Act. Furthermore, the law addresses some specific concerns of this population, such as discrimination on the basis of past impairment. More recently, the EEOC has been developing guidelines especially relevant to psychiatric disabilities, including a discussion of issues surrounding episodic disorders and the potentially impairing effects of treatment. The charge coding system used by the EEOC is also being updated to reflect more specific diagnostic terminology. Further guidance from the EEOC concerning psychiatric disabilities would still be useful. Specifically, questions remain on whether any mental disorders are, by definition, "substantially limiting impairments" and how to determine the functional implications of psychiatric impairments. A useful first step on these questions would be to convene groups of experts to help fashion guidance.

OTA's review of the literature reveals some general characteristics of psychiatric disabilities:

- Mental disorders range from relatively short-lived, minor conditions to extremely debilitating, chronic ones with remitting and relapsing symptoms.
- Data do not divulge the number of people with psychiatric disabilities covered by the ADA. We know that mental disorders are common, with more than one in five American adults having a diagnosable mental disorder in a given year. Five million adults in the U.S. have a serious mental illness: A mental disorder during the past year that seriously interfered with daily life.
- Studies document a few, specific functional limitations associated with mental disorders

and relevant to employment: Problems in social functioning; difficulty in concentrating; and problems coping with stress.

- The relative role of symptoms and functional limitations in employment for people with psychiatric disabilities has been a contentious topic. Data do permit some conclusions, however. Psychiatric symptoms have been linked to work performance and employment outcome. Thus, access to effective treatment and time off during symptom exacerbation, or other accommodation of symptoms, will be important for many people with psychiatric disabilities. Symptomatology is not the whole picture, however. Functional limitations and environmental supports (or lack thereof) are critical issues for people with psychiatric disabilities.
- It is unlikely that people with the most severe psychiatric disabilities will gain competitive employment—the underlying value of the ADA—in the absence of treatment, access, and vocational and other psychosocial supports.
- Many more people with less severe conditions may be covered by the ADA. However, much less is known about this population's functional limitations, their employment characteristics, accommodation needs, or even who among this group would be covered under the first prong of the ADA's definition of disability. Unless questions are answered concerning these less severe conditions—Which ones are covered? How can such determinations be made?—the ADA is open to excessive subjectivity in claims of psychiatric disability.

OTA recommends research into the following issues to close the psychiatric disability data gap:

- The relationship between mental disorder symptom and treatment to work disability.
- The number of people with mental disorders covered by the ADA.
- The development of functional assessment measures of psychiatric disabilities for clinical and public policy arenas.
- The impact of the ADA on the relationship between mental disorders and employment status.

CHAPTER 3 REFERENCES

1. Agency for Health Care Policy Research, U.S. Department of Health and Human Services, Public Health Service, *Depression in Primary Care: Vol. 2: Treatment of Major Depression, Clinical Practice Guideline No. 5*, AHCPR Publication No. 93-0551 (Rockville, MD, April 1993).
2. American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders (Third Edition-Revised)*, *DSM-III-R* (Washington, DC: 1987).
3. American Psychological Association, letter to Equal Employment Opportunity Commission, Apr. 29, 1991.
4. Anthony, W. A., and Jansen, M. A., "Predicting the Vocational Capacity of the Chronically Mentally Ill: Research and Policy Implications," *American Psychologist* 39:537-44, 1984.
5. Anthony, W., Cohen, M., and Farkas, M., *Psychiatric Rehabilitation* (Boston, MA: Center for Psychiatric Rehabilitation, 1990).
6. Armstrong, H.E., "Review of Psychosocial Treatment for Schizophrenia," *Current Psychiatric Therapy*, D.L. Dunner (ed.) (Philadelphia, PA: W.B. Saunders Co., 1993).
7. Bachrach, L. L., "Psychosocial Rehabilitation and Psychiatry in the Care of Long-Term Patients," *American Journal of Psychiatry* 149:1455-1463, 1992.
8. Barker, P. R., Manderscheid, R. W., Hendershot, G.E. et al., "Serious Mental Illness and Disability in the Adult Household Population: United States, 1989," *Advance Data from Vital and Health Statistics of the Centers for Disease Control/National Center for Health Statistics*, No. 218, Sept. 16, 1992.
9. Bell, C. G., Attorney, Jackson, Lewis, Schnitzler and Krupman, Washington, DC, personal communication, Jan. 13, 1993.
10. Billings, P.R., Kohn, M. A., de Cuevas, M. et al., "Discrimination as a Consequence of Genetic Testing," *American Journal of Human Genetics* 50:476-482, 1992.

11. Bond, G. R., and Friedmeyer, M. K., "Predictive Validity of Situational Assessment at a Psychiatric Rehabilitation Center," *Rehabilitation Psychology* 32:99-111, 1987.
12. Bonnie, R.J., Visiting Professor of Law, Cornell Law School, Ithaca, NY, personal communication, Oct. 1, 1993.
13. Broadhead, W.E., Blazer, D.G., George, L.K. et al., "Depression, Disability Days, and Days Lost From Work in a Prospective Epidemiologic Survey," *Journal of the American Medical Association* 264:2524-2528, 1990.
14. Bromet, E. J., Parkinson, D. K., Curtis, E.C. et al., "Epidemiology of Depression and Alcohol Abuse/Dependence in a Managerial and Professional Work Force," *Journal of Occupational Medicine* 32:989-995, 1990.
15. Cook, J. A., Director, Thresholds National Research and Training Center on Rehabilitation and Mental Illness, Chicago, IL, personal communication, Sept. 15, 1993.
16. Cook, J. A., and Rosenberg, H., "Predicting Community Employment Among Persons With Psychiatric Disability: A Logistic Regression Analysis," *Journal of Rehabilitation Administration*, in press.
17. Goldman, H. H., Gattozzi, A. A., and Taube, C. A., "Defining and Counting the Chronically Mentally Ill," *Hospital and Community Psychiatry* 32:21-27, 1981.
18. Green, M. F., "Cognitive Remediation in Schizophrenia: Is It Time Yet?" *American Journal of Psychiatry* 150: 178-187, 1993.
19. Haggard, L. K., "Reasonable Accommodation of Individuals With Mental Disabilities and Psychoactive Substance Use Disorders Under Title I of the Americans With Disabilities Act," *Journal of Urban and Contemporary Law* 43:343-390, 1993.
20. Hogarty, G.E., and Flesher, S., "Cognitive Remediation in Schizophrenia: Proceed. . . With Caution!" *Schizophrenia Bulletin* 18:51-57, 1992.
21. Institute of Medicine, *Disability in America: Toward a National Agenda for Prevention*, A.M. Pope and A.R. Tarlov (eds.) (Washington, DC: National Academy Press, 1991).
22. Johnson, J., Weissman, M. M., and Klerman, G.L., "Service Utilization and Social Morbidity Associated With Depressive Symptoms in the Community," *Journal of the American Medical Association* 267: 1478-1483, 1992.
23. Jones, N. L., "The Alcohol and Drug Provisions of the ADA: Implications for Employers and Employees," *Consulting Psychology Journal: Practice and Research* 45:3-9, 1993.
24. Jones, N. L., Legislative Attorney, American Law Division, Congressional Research Service, Library of Congress, Washington, DC, personal communication, September 1993.
25. Judy, B., Executive Director, Job Accommodation Network, remarks at "Americans With Disabilities Act, Mental Illness, and Employ merit," a workshop sponsored by the Office of Technology Assessment, U.S. Congress, Apr. 21, 1993.
26. Keith, S. J., Regier, D. A., and Rae, D. S., "Schizophrenic Disorders," *Psychiatric Disorders in America: The Epidemiologic Catchment Area Study*, L.N. Robins, and D.A. Regier (eds.) (New York, NY: The Free Press, 1991).
27. Liberman, R. P., *Psychiatric Rehabilitation of Chronic Mental Patients* (Washington, DC: American Psychiatric Press, 1988).
28. Liberman, R. P., "Psychiatric Symptoms and the Functional Capacity for Work: Provisional Final Report, Research Grant," No. 10-p-98193-9004 from the Social Security Administration, Mar. 23, 1989.
29. Liberman, R. P., Professor of Psychiatry, UCLA School of Medicine and Director, Clinical Research Center for Schizophrenia and Psychiatric Rehabilitation, Camarillo, CA, personal communication, Aug. 30, 1993.
30. Liberman, R. P., Mintz, J., Massel, H.K. et al., "Psychopathology and the Functional Capacity for Work," abstract provided to OTA, 1993.

31. Mancuso, L.L., *Case Studies on Reasonable Accommodations for Workers With Psychiatric Disabilities* (Sacramento, CA: California Department of Mental Health, 1993).
32. Mintz, J., Mintz, L. I., and Phipps, C. C., "Treatments of Mental Disorders and the Functional Capacity to Work," R.P. Liberman (ed.) *Handbook of Psychiatric Rehabilitation* (New York, NY: Macmillan Publishing Co., Inc., 1992).
33. Mintz, J., Mintz, L. I., Arruda, M. J., et al., "Treatments of Depression and the Functional Capacity to Work," *Archives of General Psychiatry* 49:761-768, 1992.
34. Mueser, K.T., Bellack, A. S., Douglas, M.S. et al., "Prediction of Social Skill Acquisition in Schizophrenia and Major Affective Disorder Patients From Memory and Symptomatology," *Psychiatry Research* 37:281-296, 1991.
35. National Institute on Disability and Rehabilitation Research, "Strategies to Secure and Maintain Employment for Persons With Long-Term Mental Illness," Consensus Validation Conference, Washington, DC, September 1992.
36. Natowicz, M. R., Alper, J. K., and Alper, J. S., "Genetic Discrimination and the Law," *American Journal of Human Genetics* 50:465-475, 1992.
37. Nelkin, D., and Tancredi, L., *Dangerous Diagnostics: The Social Power of Biological Information* (New York, NY: Basic, 1989).
38. National Foundation for Brain Research, *The Costs of Disorders of the Brain* (Washington, DC: 1992).
39. Nuechterlein, K. H., and Dawson, M. E., "Information Processing and Attentional Functioning in the Developmental Course of Schizophrenic Disorders," *Schizophrenia Bulletin* 10: 160-203, 1984.
40. Parry, J.W., "Mental Disabilities Under the ADA: A Difficult Path to Follow," *Mental and Physical Disability Law Reporter* 17: 100-112, 1993.
41. Penn, D. L., Willem Van Der Does, A.J., Spaulding, W.D. et al., "Information Processing and Social Cognitive Problem Solving in Schizophrenia: Assessment of Interrelationships and Changes Over Time," *The Journal of Nervous and Mental Disease* 181: 13-20, 1993.
42. Regier, D. A., Narrow, W. E., Rae, D.S. et al., "The de Facto U.S. Mental and Addictive Disorders Service System: Epidemiologic Catchment Area Prospective 1-Year Prevalence Rates of Disorders and Services," *Archives of General Psychiatry* 5:85-94, 1993.
43. Rice, D. P., Kelman, S., Miller, L.S. et al., *The Economic Costs of Alcohol and Drug Abuse and Mental Illness: 1985*, report submitted to the Office of Financing and Coverage Policy, Alcohol, Drug Abuse, and Mental Health Administration, U.S. Department of Health and Human Services (San Francisco, CA: Institute for Health and Aging, University of California, 1990).
44. Robins, L. N., and Regier, D. A., *Psychiatric Disorders in America: The Epidemiologic Catchment Area Study* (New York, NY: The Free Press, 1991).
45. Rubenstein, L. S., "Mental Disorder and the ADA," *Implementing the Americans With Disabilities Act: Rights and Responsibilities of All Americans*, L.O. Gustin and H.A. Beyer (eds.) (Baltimore, MD: Paul H. Brookes Publishing Co., 1993).
46. U.S. Congress, Office of Technology Assessment, *The Biology of Mental Disorders*, OTA-BA-538 (Washington, DC: Government Printing Office, September 1992).
47. U.S. Congress, Office of Technology Assessment, *Benefit Design: Mental Health Services and Substance Abuse Treatment*, in press.
48. U.S. Equal Employment Opportunity Commission, Washington, DC, staff communication, Oct. 14, 1993.
49. Wallace, C. J., "Psychiatric Rehabilitation: Summary for NIMH," draft report, 1993.
50. Wells, K. B., Stewart, A., and Hays, R. D., "The Functioning and Well-Being of Depressed Patients: Results of the Medical Outcomes Study," *Journal of the American Medical Association* 262:914-919, 1989.

4 | Psychiatric Disabilities, Employment and the Americans With Disabilities Act

51. Wexler, N. S., Beckwith, J., Cook-Deegan, R.M. et al., "Statement of Recommendations by the Joint Working Group on Ethical, Legal, and Social Issues (ELSI) Concerning Genetic Discrimination and ADA Implementation, Apr. 29, 1991," *Human Genome News*, September 1991.
52. Yelin, E. H., Professor of Medicine and Health Policy, University of California, San Francisco, personal communication, Aug. 25, 1993.