



---

Upjohn Institute Press

---

# Over the Hill and Under the Weather: Age v. Health

Monroe Berkowitz  
*Rutgers University*



Chapter 6 (pp. 113-138) in:  
**Current Issues in Workers' Compensation**  
James Chelius, ed.  
Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 1985  
DOI: 10.17848/9780880995498.ch6

Copyright ©1985. W.E. Upjohn Institute for Employment Research. All rights reserved.

# 6

## Over the Hill and Under the Weather Age v. Health

Monroe Berkowitz  
Rutgers University

### *Introduction*

If there is an article of faith among gerontologists, it is that chronological age is irrelevant. Over and over again, we are told that some persons are ready for retirement in their 30s and 40s, while others are responsible for great philosophical or scientific achievements well into their eighth and ninth decade of life.

Examples of age and creativity are cited in the column by Cyril F. Brickfield, executive director of the Association of Retired Persons.<sup>1</sup> Jessica Tandy at age 74 opened triumphantly on Broadway in the demanding role of Amanda Winfield in the revival of Tennessee Williams' "Glass Menagerie." Her performance was widely acclaimed by the drama critics. Just down the street, Rex Harrison, at age 75, opened successfully in the revival of "Heartbreak House" by George Bernard Shaw, who continued to write plays until late in life.

The same evidence is clear from last year's Nobel Prize awards. At age 81 Barbara McClintock won the Nobel for medicine while Subrahmanyan Chandrasekhar, 73, and William Fowler, 72, shared the prize for physics.

Other examples abound. Benjamin Franklin invented bifocals at age 78; Giovanni Colle at age 70 provided the first

definitive description of blood transfusion and Benjamin Duggar discovered a life-saving antibiotic at age 76. Brickfield concludes that creativity can occur at any age, even at advanced ages, and creativity in old age is not found only among the rare individuals who are famous.

The absurdity of the compulsory retirement age is dramatized neatly in a letter from Bernard L. Baer in the *New York Times*, February 19, 1984. At age 73 Baer voluntarily retired and after a year of frustrating idleness began to look for jobs. He maintains he was 100 percent able mentally and physically but was consistently and regretfully turned down because of age. His background was in sales promotion, advertising and management. In desperation, he revised he vita, simply lying by taking 11 years off his age. Within two months he had a job.

Seven years later, even though he claimed he received merit increases and additional responsibilities every year, he was mandatorily retired at age 70. He was actually 81 at the time and as able physically and mentally as when he retired, according to his own version of events. This is one illustration of how ridiculous mandatory retirement can be. He notes, as many others have, “some people become incapable in their 70s, 50s, 40s and 30s; many retain the capability beyond their 70s. They should be appraised accordingly and not automatically dispensed with.”

I do not challenge this precept. Personal observation confirms that some people of rather tender age would be happier retired or at least not working in their current occupations. But I cite one fundamental advantage of chronological age—that is its definitiveness. All one needs to prove age is a birth certificate, but once we discard the criterion of a chronological age, we must seek substitutes. If there are differences among people in terms of ability and performance on the job, how does one begin to think about measuring

them? Once we forget the number of years one has spent in this world, we must move on to less definite criteria to judge ability to do the job at hand.

As it turns out, this is the mirror image of the problem that those of us who have been interested in the economics of disability have been struggling with for years. To distinguish among those persons in the population who should be classified as disabled and those who should not, to determine who is qualified to receive a transfer payment because of a disabling condition and who is not, is a very old problem. In the disability case, the quest is for a measure of physical and mental functional limitations; in the retirement case, it is a search for measures of performance which probably depend on residual functional capacities.

In this paper we examine the disability experience to show how difficult the problem of determining disability status has been. Nothing in the disability experience provides any aid or comfort to those who allege that we should eliminate compulsory retirement and judge persons by their ability to do the job.

We first look briefly at the improvements in longevity which are the reasons for the problem receiving so much recent attention. Scholars disagree as to whether the declines in mortality are associated with improvements or declines in health status. We discuss that controversy and conclude that if our interest is in work ability, then it is something more than health that we must be concerned with. It is not even "active life expectancy," but the decision to participate or not participate in the labor force.

We examine the disability record from ancient days to present to show how difficult disability determination decisions have been. Even where sophisticated models seek to include all relevant variables, it is the health measures which prove to be most elusive. Examination of that experience leads us to

advice caution in eliminating employers' freedom to retire persons after a certain age.

### *Improvement in Longevity*

What seems to be undisputed is the improvement in mortality rates in this century.<sup>2</sup> The greatest relative improvement has occurred at the young ages, resulting largely from the control of infectious diseases. The probability of death at age 0 decreased 90 percent between 1900 and 1980, but look what has happened to those who survived to age 65. At age 65 the probability of death decreased 30 percent from 1900 to 1980 for males and 61 percent for females, a gap I expect to see narrowed as women become increasingly subject to the same pressures and hazards as men. In the meantime, those males lucky enough to survive can look forward to this unbalanced relationship among the sexes.

We are dealing with a relatively new phenomenon. Life expectancy at age 65 increased very little from 1900 to 1930, but since that time there have been rapid gains in life expectancy at age 65 that have occurred for both males and females, though again the females having the greater gains.

Incidentally, in spite of these improvements in mortality rates, we should expect a decline in the net annual increase in the number of social security beneficiaries at the turn of the century. The low fertility rates during the 1930s will be reflected in a considerable reduction in the rate of increase in the population over 65 during the 1990s in spite of any improvements in the mortality rate. This will come about just at the time when the baby boom generation born after World War II will be swelling the labor force.

After 2015, the growth in the labor force is expected to slow down reflecting the decline of fertility rates which began in the mid 60s. It is then that we expect social security

financing problems, which can be alleviated if workers retire later.

### *Improvements or Declines in Health*

There come now the controversial issues. Alicia Munnell forecasts that tomorrow's elderly will have improved life expectancy, better health, and more education than those retiring today.<sup>3</sup> On two of these accounts, there can be no faulting Ms. Munnell—improved life expectancy and more education. The question of better health is one that is in question.

In sharp contrast to Munnell's position is that taken by James H. Schulz who believes that increased longevity does not necessarily mean more surviving older persons will be able to work. He emphasizes the many health factors that operate to reduce mortality may also reduce the employability of older persons. Examples include: improved survival from myocardial infarctions among the disabled; the persistence of the incidence of arthritis or any of a number other disabling conditions that do not generally cause death; successful treatment of individuals with problems such as diabetes that previously would cause early deaths but that are still disabling, and alcohol or drug abuse.<sup>4</sup>

This discrepancy in the viewpoints of these two eminent scholars has been pointed out by Michael Taussig in his discussion of the two papers and it is Taussig who notes that pension policy decisions depend critically on who is right.

“We expect that continued improvements in medical care and technology will—in the absence of nuclear war or some other catastrophe of comparable magnitude—cause a large increase in the number of persons who survive until, and well past,

the traditional retirement ages in this country. We do not yet know, however, whether the expected increase in longevity will cause a corresponding increase in the number of *dependent* aged persons. If the aged workers of tomorrow is healthier than either his or her counterpart today, and if there are sufficient attractive job opportunities, then increased longevity will not necessarily mean increased dependency.’’<sup>5</sup>

The same controversy runs through the early reports of the National Commission on Social Security, as Jacob J. Feldman has pointed out. In the March 1981 report, the majority position was that increased longevity will be accompanied by a corresponding increase in active life. Also, that periods of diminished vigor associated with aging will decrease so that the chronic disease will occupy a smaller proportion of the typical life span. Yet a minority of the Commission contended that the evidence does not support any claim that longer life is equivalent to longer years of good health. Feldman notes that the current state of knowledge does not permit a definitive resolution of that controversy.<sup>6</sup>

Noting the dramatic decline in death rates, Feldman asks whether that decline among persons 50 to 69 years of age is tantamount to improved health and working capacity. He notes first of all some short term trends. Using data from the National Health Interview Survey, he notes that 21.9 percent of men aged 65 to 69 answered that they had activity limitations that prevented them from working in 1970 a percentage that increased to 24.9 in 1975 and 25.2 in 1980.

Even greater differences are to be found among the other age groups in the 50 to 54, 55 to 58 and 60 to 64 ages. This increase took place during a period of rapid decline in death rates for men in these age groups. Some suggestive data

Feldman cites indicate that if we go back further, the disability or activities limitation rate for men age 55 to 64 was about 10 percent in 1949 and even lower in 1935.

As Feldman notes, morbidity is difficult to quantify as opposed to the relative ease of measuring mortality. Social security actuaries rationalize their ignoring morbidity rates on the grounds that mortality and morbidity are correlated; when mortality improves, morbidity also tends to improve.<sup>7</sup> Feldman disagrees. He believes that a decline in mortality rates can be connected with an increase in morbidity rates. Life-threatening conditions are not the same as disabling conditions. While there is obviously some overlap, a great deal of disability is caused by conditions that are not lethal. Musculoskeletal conditions are the cause of a large proportion of work disability. Arthritis, for instance, does not appear to shorten one's life span to any great extent. In his view, there is no reason why reductions in mortality rates should result in a reduction in the prevalence of arthritis or any of a number of other disabling conditions that are generally not lethal.

### *Active Life Expectancy*

Since there is sharp disagreement about whether mortality and morbidity are closely correlated, it is necessary to have something other than improvements in mortality rates if we are to have confidence in estimates of the future labor supply of older workers. The problem has been addressed by a Massachusetts research team headed by Dr. Sidney Katz who developed a concept of "active life expectancy." They use life tables techniques to analyze the expected remaining years of functional well-being for their sample of noninstitutionalized elderly people living in Massachusetts in 1974. Waves of these people were interviewed at periodic intervals. They found that the expected years of active life expectancy range from 10 years for those 65 to 70 years to 2.9 years for



those 85 years or older. Active life expectancy is shorter for the poor than others and women had a longer average duration of expected dependency than men.<sup>8</sup>

It is a clever idea to construct life tables, not in terms of expected date of death, but expected date of incapacity; the contrast is between active versus inactive life. But the difficulty is that the contrast is too sharp, the division too abrupt. Scales of activities of daily living measure too much. The scales measure six basic functions; bathing, dressing, going to the bathroom, transfer, continence and eating. These are essential biological functions.

If, however, interest is in whether people are ready to go to work or not go to work, then it is obvious that some persons who may score quite high on these activities of daily living scales are still not necessarily able to jump into the labor market. Measuring limitations of persons based on essential biological functions is to move just one step from the mortality scales themselves.

### *Health, Labor Supply and Survey*

One of the problems noted by Newquist and Robinson<sup>9</sup> is that health data, especially for the older population, has been gathered for purposes other than employment policy analysis. The problem is that the investigators discuss the problem in terms of morbidity factors, or in terms of activities of daily living and these are clearly inappropriate. What is necessary is to get some concept of health which is applicable to the work decision and, at the same time, to recognize that health is only one of the factors that will affect whether older persons are going to be active participants in the job market. In short, what we are dealing with here is a complex labor supply issue, complicated by this notion of what constitutes health and what does not constitute health and how one can measure it.

This is a relatively old problem. It arises in theoretical and empirical models of labor supply as researchers attempt to include a health variable. The problem is present in surveys which attempt to examine the number and characteristics of disabled persons in the population. It has been a leading problem for years in all of the programs designed to compensate persons who have disabling conditions. These include tort cases where juries set indemnity payments according to disability status, workers' compensation programs, and of course, the Social Security Disability Insurance program.

### *The Ancient Origins of the Problem*

The notion of compensation for injuries can be traced back to the code of Hammurabi (1945-1902 B.C.). The essential advance in Hammurabi's code was the partial substitution of "compensation" to replace "retaliation."<sup>10</sup>

One clear illustration of how compensation replaced retaliation is found in Exodus, Chapter 21, verses 18 and 19:

18. And if men contend, and one smite the other with a stone, or with his fists, and he die not, but keep his bed;

19. If he rise again and walk abroad upon his staff, then shall he that smote him be quit; only he shall pay for the loss of his time and shall cause him to be thoroughly healed.

The commentaries explain that compensation is awarded on five grounds for damage, for pain, for healing, for loss of time and for insult. (Insult apparently refers to payments made when the harm was intentionally inflicted.) Liability for healing extended to payment of medical costs. The commentaries are quite specific as to when liability ceases and under what conditions the case may be reopened, to use the modern phrase.

The commentaries speak of payment for damages in what appears to be strikingly modern terms. The idea was to look at the injured person, to appraise his worth before the injury, and to contrast it with what he would be worth with the impairment. In a perfect market, the difference would be the present value of the future net product of the whole person as contrasted with the impaired one. Of course, in those days, there were examples at hand with slave markets, and these capitalized values could be observed. They did not have to be estimated by probabilistic functions dependent on imperfect knowledge of future earnings streams.

The ancient examples permit us to look at several facets of disability. In ancient codes and in modern day workers' compensation, disability is often equated with a loss of limb, loss of an eye, or loss of hearing. Such losses are, of course, permanent. For purposes of both labor market analysis and disability analysis, it is permanent, chronic or long term, not short term, phenomena or acute illness, that is relevant. The permanent aspects are rather gruesomely exemplified by amputation, which is not only long term but quite permanent.

Another dimension that has to be focused on is the concept of partial versus total disability and it is obvious, even in ancient days, that a man could sustain rather extensive physical damage and still participate to some extent in work. Thus a persons is not either disabled or not disabled, but there are various degrees of disability. The extent of disability becomes particularly important when trying to assess the labor force chances of older persons.

### *Workers' Compensation Experience*

Soon after workers' compensation was introduced in this country, beginning in 1911, the state laws provided for schedules derived from experience with private insurance carriers and from some of the European laws. Schedules

soon became hallmarks of compensation statutes. Essentially, these provided for a price, possibly the number of weeks of compensation that was to be paid, for specified losses. They detailed the prices of parts of the body. If a person lost a finger, toe, or wrist and arm, the amounts of compensation due him would be listed in the schedule, thereby minimizing administrative discretion.

Eminent legal scholars argue about the nature of the system. Larson believes it was a matter of operationalizing a wage-loss system appropriate to large scale mass social insurance programs.<sup>11</sup> In effect, the schedules provided a way to proxy the wage loss suffered by some average person with these particular losses. Whatever the intellectual and theoretical justification, the schedules never lived up to their promise. The trouble was that persons simply did not always lose limbs at the particular joints specified in the schedule. More important, if the law that is going to compensate a person for loss of an arm triggers a particular amount of compensation, why not pay an equal amount for the *loss of use* of that arm? But once you consider loss of use and injuries to parts of the body not specified on the schedule, such as the back or head, you are into an area where discretion has to be used, thus defeating the purpose of the schedules.

The point to be made is that there are difficulties involved in assessing the amount of disability payments due a person with a particular type of work injury. The problem has been recognized for years and years under our workers' compensation statutes.

In workers' compensation, the worker alleges either that he cannot now work at all, or that he cannot now work at the level of energy or capacity that he could prior to his injury, or that his injury has left him in a condition that will interfere with his future ability to perform tasks in the same manner and method as he could have, had he not incurred

that injury. The workers' compensation commissions therefore have the task of deciding whether there has been any such interference with the work potentiality of the individual and if so, how that deficiency can be measured. As noted above this is the mirror image of the problem faced by the aged. In the retirement case, it is the worker who alleges that his ability to work at his task, in the same degree of efficiency and manner as before, has not been impaired. The employer who advocates retirement of the worker, alleges otherwise. Consequently, the question arises as to the appropriate tests of limitation or residual capacity.

In workers' compensation where the schedules are not appropriate (the vast majority of cases in most states), the commissions have developed several different theories to determine payment.

In some jurisdictions, payments will be made if the worker can demonstrate specific physical or mental impairment. Other states will not pay unless the worker can demonstrate actual wage loss. Jurisdictions in between, as it were, attempt to evaluate a worker's loss of wage-earning capacity.

In any event, each of these methods has its distinct limitations. Physical impairment is difficult to measure and more difficult to translate into compensation payments. It is one thing to be able to evaluate physical losses and another to be able to price these losses in some way that is meaningful in the labor market.

When it comes to wage loss, a method that is now being widely touted because of its recent adoption in the State of Florida, there are obvious difficulties. Michigan, for many years, had a wage-loss system in workers' compensation, but unfortunately, the complexities of the system, the institutional arrangements, or other factors resulted in most cases ending up in compromise and release settlements.<sup>12</sup> So, although Michigan technically had a wage-loss system, it was

to all intents and purposes really a bargaining system based on a workers' physical condition.

Michigan also had a problem which was unique among the states. Many workers who retired from automobile plants simultaneously filed workers' compensation claims. The so-called retirement problem exposed, in raw relief, the essential issue with which we are concerned. To what extent are workers who formally retired realistically in the labor market? Interestingly enough, in the Michigan cases, the claim was that the retirement status did not bar access to the labor market, rather it was alleged that some physical condition incurred during working life prevented working at the wages that otherwise would have been earned. The terrible complexities of that situation again argue for a certain arbitrariness in defining an age of retirement, no matter how inequitable this may be to particular individuals.

It seems to be quite clear that no workers' compensation program had the lock on a perfect solution to its problems. All that can be said is that some states that actively intervened in the administration process and combined rehabilitation techniques with its administration of benefits were more successful than others who depended on purely legal administrative methods.

### *Social Security Disability Insurance*

The problems of workers' compensation were well known to the framers of our national Society Security Disability Insurance Act.<sup>13</sup> Although it was thought that disability insurance would come on stream early in the history of social security, as a matter of fact the federal government entered the field with the disability freeze in the 1950s and it was not until 1960 that we began a full-fledged disability insurance program.

Two of the pitfalls were neatly eliminated in the disability insurance program of social security. One was the decision not to pay any permanent partial benefits. Either a worker was to be considered disabled or not disabled. This decision created a host of problems even as it solved others. There was no easy way to dispose of doubtful cases. The other problem eliminated was the confusion over retirement and disability. Workers could collect disability insurance only up to the age of 64. At age 65 they would receive social security retirement benefits. No one over the age of 65 was eligible to receive disability insurance benefits on their own account.

The definition of disability under the Act was the inability to engage in substantial gainful activity that is due to a physical or mental impairment that is expected to last at least 12 months. To be considered disabled under this rather stringent definition, a person has to be unable to perform any work which he is reasonably qualified to perform, anywhere in the economy. It was not a test that depended on the ability to perform the duties of one's job, or even one's occupation.

Although all workers age 50 and over were entitled to collect disability insurance payments as early as 1956, it was not until 1960 that the program became a general one for all covered workers below age 65. Thus we have not yet seen a full generation of workers who are covered by the Social Security Act disability provisions pass through their working lives.

By 1970 we were paying out about \$2.7 billion a year in disability insurance benefits, an amount that increased to \$7.6 billion by 1975, a 175 percent increase. The increases in the program continued between 1975 and 1976, reaching \$11.1 billion in 1977. Although payments have not peaked, the number of beneficiaries did at about that year, and since then, the increases in payments have been modest, ranging about 9 to 10 percent each year in payments as wage levels

have escalated. All told, from 1970 to 1980, there has been a 436 percent increase in disability insurance payments.

Although the decline in the numbers of beneficiaries began to come as early as 1977, the public consciousness of this decline did not surface until a good bit later. It was the 1980 amendments to the Act which tightened the administrative regulations as to who should or who should not receive benefits. More important, they provided for a review of these benefits and it is the administration of this review which has created a great deal of public concern over the last several years, especially for those persons with mental illnesses.

The problem is a familiar one and it is exactly the same problem that we have had in workers' compensation and in every disability program. How does one tell whether one is disabled; under what conditions does one buy this ticket out of the labor force? Bear in mind that the pressure to increase retirement ages and to stay in the labor force has been matched by this pressure for certain people to get out via the disability benefits.

The problem has been that the criteria actually used depend a great deal on the showing of some severe medical impairment. Probably 80 percent of the awards are made to applicants who have one or more impairments equivalent to those listed in the federal regulations. It is only for people who do not meet these so-called "medical listings" that consideration is given other factors such as the person's training, education and experience.

This possibility excessive reliance on medical conditions ignores the fact that there is a large gap between medical condition, on the one hand, and the withdrawal from the labor force which is the prerequisite for disability benefits, on the other.



### *Not Medical Condition Alone*

My reasons for emphasizing this difference comes from two sources, one sociological and one economic. The sociologists, largely influenced by Saad Nagi and others,<sup>14</sup> have emphasized the differences between medical condition, impairment, functional limitation, and the resulting disability. They recognize that a medical diagnosis based upon symptoms and signs and classified largely according to body systems, is useful to the physician interested in cure, but possibly irrelevant to the problem of work, in part because of the large differences in the extent of severity of any condition.

The issue is whether or not that medical condition leads to an impairment, the enervation of a nerve or the loss of a limb to take an extreme case. From there, we need to know whether or not that impairment results in any functional limitation. We are thinking of such things as ability to lift, to carry, to stoop, to bend, to walk, or in the case of mental impairments, the equivalent of functional limitations which may be the ability to relate to others or to tolerate the stresses of a normal job. I will return to that problem of getting the equivalent of functional limitations in mental illnesses in a moment.

From an economic point of view, it is essential that we have some measure of functional limitations as a health variable in an attempt to explain whether or not people with disabilities choose or do not choose to participate in the labor force. What the framers of the disability insurance law and, for that matter, workers' compensation laws never recognized explicitly, but always recognized implicitly, is that there are disincentive effects to these benefits. These disincentive effects are related to the generosity and the leniency of the disability transfers generally. The matter is well put by Barbara L. Wolfe:

The older disabled person's work/retirement choice depends on potential earnings in the labor market, the availability and generosity of disability-related transfers and other income support programs and the disability status of the individual. Disability status reflects limitations of physical, mental or emotional sort which reduce the worker's ability to perform the required functions of jobs which he is on other grounds qualified to hold. It is a concept that links impairment with the requirements of specific jobs.<sup>15</sup>

The work that has been done thus far attempts to measure the income and substitution elasticities associated with changes in net wage rates on unearned income generated by income transfers. Several studies have attempted to look at this problem.<sup>16</sup> Wolfe points out the problem with these studies, including their choice of the variable to represent health is that some of them do not capture severity, duration or the relation of functional limitations to past or available occupations. There are other problems relating to the measurement of availability of disability-related transfers and the fact that some of these leave out labor demand variables and include only a few labor supply variables.

Some of the problems with the so-called first generation studies have been remedied in the second generations of these studies.<sup>17</sup> Each of the later studies is a fairly sophisticated work-choice model, and each of them has difficulties in dealing with so-called true health status of the employee.

Parsons, as Wolfe points out, uses subsequent mortality as his health status measure. But as we have discussed above, there is a great deal of controversy about the relationship between mortality and morbidity. Wolfe also points out that Leonard's disability status indicator consists of 27 specific

health problems, diseases, conditions and infirmities. It poses a number of difficulties. It gives no indication of severity, it gives no indication of degree of functional limitations and it is not linked to job requirements.

Slade's disability measure indicates whether or not the individual reports that he or she is limited in getting around. This simple self-reported status has a number of problems. Wolfe notes that since it is measured contemporaneously with labor force participation, it may reflect the individual's taste for work and, hence, it may be endogenous to the model.

The Haveman and Wolfe disability measures are self-reported measures and while they convey duration and intensity, they are very general and may be subject to the charge that they allow the legitimization of failure. Persons who are unsuccessful at work may be motivated to define themselves as permanently sick in order to legitimize their self-defined failure. All of these measures capture only some limited dimensions of the relevant concept of disability.

### *Functional Limitations Again*

What is needed for purposes of econometric surveys, for the various transfer payment programs, and I believe for the retirement decisions for aged persons, is a better measure of functional limitations.

The search for these measures has been going on for some time. The American Medical Association, as far back as 1971, under the guidance of a committee chaired by Dr. Henry Kessler, issued the *Guides to the Evaluation of Permanent Impairment*.<sup>18</sup> Here we have a detailed look at essentially physical impairment or functional limitation measures. Such measures required a physical examination to determine, for example, the extent of flexion of the extremities. The *Guides* specify the exact percentage of disability that

ought to be assigned for particular conditions. This is a heroic attempt to deal not only with the extremities but to deal with the evaluation of permanent impairment of backs, heart disease and a number of other types of condition which would not ordinarily be thought of as being scheduled.

We also have to note the attempt by the Social Security Administration in its survey to deal with measures of functional limitations by self-reported responses. These obviously do not go far enough. It should be possible to develop these scales so as to give us some clue as to whether or not a person is capable of working, insofar as his health is concerned.

We think a promising beginning is made in the so-called functional assessment inventories developed by the University of Minnesota. We are currently engaged in a research project where we are trying to test these as measures of functional limitation in a vocational rehabilitation program.<sup>19</sup>

What all this boils down to is that the same issues that arise as we deal with disability can crop up as we seek to measure ability. If one wishes to eliminate compulsory retirement age, residual functional capacity measures become important. We have to get down to looking not at a medical condition classification or even impairments, but rather whether or not a person is able to carry out the physical and mental functions required by the job or by any job. In this regard, there is no doubt that the area we know least about has to do with mental impairments. That evaluating mental impairments and the residual functioning capacity is a troublesome problem is nowhere more apparent than in the Disability Insurance program. Most of the controversy has arisen in this area as more and more persons have been denied benefits in this review process which began in 1981.

Over 900,000 beneficiaries were evaluated as to their eligibility status and almost 400,000 of these lost benefits as a

result of these investigations. A disproportionate amount of those who lost benefits were persons with mental impairments of one sort or another. Conceptually, we are just beginning to understand what the equivalent of physical limitation or functional capacity for mental impairment is. It is obviously necessary that we consider such things as carrying out and remembering instructions, responding appropriately to supervision and coworkers and reacting to customary work pressures in a routine work setting.

### *Measuring Ability of Older Workers and Retirement Issues*

Ability or inability to work because of a mental or physical impairment is difficult to determine, but however the issue is decided, we know that examination of that person's medical condition is not enough. It is not the medical condition, but the consequences of that condition—how that condition affects an individual human being's mental and physical functioning that counts, and even that is not enough. We must look at how the limitations or residual functioning capacity interacts with a host of other factors to determine that person's labor market chances.

These complex considerations are the same whether we are considering the injured worker fighting to retain his job, another worker doing his best to maximize his disabling conditions so as to leave the labor force, the older worker who is seeking to retain his position or the employer seeking to retire him at age 65.

The dispute that rages over whether improvements in longevity will mean an increase in healthier workers fighting to stay in the labor force or an increase in impaired older persons who will become dependent on the working population probably centers around the wrong issues. Here again, it is not simply a question of possible changes in morbidity levels

of older workers. Their health must be considered together with such factors as their education, their training, the condition of the labor market and the levels of social insurance benefits. Does that mean that health is not important? No, but it is their physical and mental functioning, not their medical condition, that is going to be the important health variable to be considered.

Are we serious about wanting to encourage the participation of older workers in the labor force? Are we serious about eliminating compulsory retirement age? If we are, it calls for action on all fronts, not merely passing legislation which imposes costs without assurances of corresponding benefits. We will have to think not only about education and training programs but retraining programs as workers progress through their life cycles. If we are going to live in a rapidly changing high technology economy, and if we want to have workers equipped to deal with its problems, it is obvious that one injection of education which concludes at age 22 or 23 is not sufficient to carry workers over the next four, let alone five or six decades of life.

It is just as obvious that our retirement policy is affected by levels of social insurance benefits and particularly by how we penalize workers who retire early or reward them for staying past the normal retirement age. The 1983 amendments to the Social Security Act will increase normal retirement age to 67 by 1990 and increase the benefits for workers staying past their normal retirement age.

Bear in mind that the argument for abolition of compulsory retirement centers around the notion that chronological age is irrelevant. That sword cuts both ways. Some older people are competent past the age of retirement and some younger people are incompetent prior to the age of retirement. Eliminating the compulsory retirement age means that we have to get serious about tests of performance

for younger workers, and to the extent that health is important, as I think it is, we have to get serious about devising measures of physical and mental limitations which can be applied in sufficiently standardized fashion so as to move the discussion away from medical diagnosis to tests of function.

Our experience with disability programs should give us pause, but at least the right questions can be asked. If we have no compulsory ending point to the work experience and we substitute tests of performance, these may well be applied to workers long before they reach what used to be the arbitrary age of retirement.

It has always been an eligible defense against a charge of poor performance for a worker to note that, whatever his level of performance, it has not changed. If it has been condoned for years by the employer, arbitrators have been unwilling to view low levels of performance as a cause for termination. That kind of argument is spreading as dismissal cases move into law courts in nonunion situations as the doctrine of "employment at will" seems to be deteriorating. In short, if one seeks to terminate an employee, it is necessary to show that something has changed. For this and other reasons, we need particularly sensitive measures of physical and mental functioning, if not general performance appraisals.

Possibly this may be placing too great a burden on arbitrary tests and on our systems of dispute settlement, be they arbitration or the courts. It might be that we could make use of the doctrine of presumptions. We could set an age of retirement, be it 65, 67 or 68, and if an employer seeks to retire someone prior to that age, we could require him to show that the worker is no longer able to meet the legitimate requirements of the job. Or that his physical or mental functioning, if we deal with it at that level, has deteriorated to the point where he is not able to carry on. The presumption

would be used in the opposite way for situations past that age where the employee would have to carry the burden of proof. In short, if the employer sought to retire a person past that age, the presumption would be that that would be O.K. but that the employee would now have the burden of showing that he or she was competent to perform the requirements of the job and that he or she has the requisite physical and mental capacities to perform the necessary tasks.

The use of presumptions might minimize litigation but one cannot be too sanguine about its possibilities. It is sad but true that, since the ancient days of Babylonia, we have found no satisfactory way to determine the disability status of an individual. There simply is no reason to believe that we could do much better if we seek to determine, in some legal sense, the "ability" status of an older person who the employer seeks to retire.

We should recognize that there are limits on what governments can accomplish in this field. It is one thing to say that compulsory retirement at a predetermined age is a bad policy; it is another to say that governments should attempt to forbid an employer from retiring a person at that age.

The arguments against governmental interference in this area go beyond the usual ones which relate the advantages of private decisionmaking. We simply lack the technical knowledge to derive administered tests of ability applicable to the wide range of occupations and industries in the U.S. Without such substitute tests, eliminating the chronological age test promises to usher in extensive litigation and to impose other costs on private employers to the detriment of our competitive situations. If this is too extreme a position and if notions of discrimination on the basis of age, any age, are firmly entrenched, then laws prohibiting compulsory retire-



ment are not enough. An integrated national policy requires us to move on several fronts: to reexamine our programs of education and training and our prevailing pay practices, to recognize the incentives and disincentives posed by the social insurance programs, and possibly simply to brace ourselves for yet another wave of litigation as arbitrators and courts consider essentially the same kinds of issues they have been struggling with in the disability area.

## NOTES

1. Cyril F. Brickfield, executive director of the Association of Retired Persons. "Creativity and Age: Times are Changing." *Modern Maturity* (February/March, 1984):19.
2. Information about mortality rates is from the *Life Tables for the United States 1900-2050*, Actuarial Study No. 87, U.S. Department of Health and Human Services, Social Security Administration, Office of the Actuary, September 1982, SSA Publication No. 11-11534.
3. Alicia H. Munnell, "Financing Options for Social Security," in Herbert S. Parnes, ed., *Policy Issues in Work and Retirement* (Kalamazoo: W. E. Upjohn Institute for Employment Research, 1983), chapter 8.
4. James H. Schulz, "Private Pensions, Inflation and Employment," in Herbert S. Parnes, *Work and Retirement*, chapter 9.
5. Michael K. Taussig, discussion of chapters 8 and 9, in Herbert S. Parnes, *Work and Retirement*, p. 281.
6. Jacob J. Feldman, "Work Ability of the Aged Under Conditions of Improving Mortality." Statement before the National Commission on Social Security Reform, June 21, 1982.
7. F. R. Bayo and N. J. Faber, "Equivalent Retirement Ages, 1940-2050." *Social Security Administration Actuarial Note*, No. 105 (June 1981):5-6.
8. Sidney Katz, Laurence G. Branch, Michael H. Branch, Joseph A. Papsidero, John C. Beck, and David S. Greer, "Active Life Expectancy." *The New England Journal of Medicine* 20 (November 17, 1983):1213-1223.

9. Deborah Newquist and Pauline K. Robinson, "Health and Extended Work Life." Unpublished paper, National Center on Employment and Retirement, Andrus Gerontology Center, University of Southern California, p. 11.
10. The history and background of disability benefits is from Monroe Berkowitz, John Burton and Wayne Vroman. "Permanent Disability Bought in the Workers' Compensation Program." Final report to the National Science Foundation (No. APR75-01067), 1979.
11. Arthur Larson, *Workmens' Compensation* (New York: Matthew Bender, 1982), Vol. 1, Sec. 57.14.
12. H. Allan Hunt, *Workers' Compensation System in Michigan* (Kalamazoo, MI: W. E. Upjohn Institute for Employment Research, 1982).
13. Edward Berkowitz and Kim McQuaid, *Creating the Welfare State* (New York: Praeger, 1980), chapter 8.
14. Saad Nagi, "The Concept and Measurement of Disability" in Edward Berkowitz, ed., *Disability Policies and Government Programs* (New York: Praeger, 1979), chapter 1.
15. Barbara L. Wolfe, "Economics of Disability Transfer Policies." Paper prepared for the session on Multidisciplinary Perspective on Cost Issues and Disability and Rehabilitation, APHA meetings, November 14, 1983.
16. Monroe Berkowitz, Edward H. Murphy and William G. Johnson, *Public Policy toward Disability* (New York: Praeger, 1976); Harold Lift, "The Impact of Poor Health on Earnings." *Review of Economics and Statistics* 57 (1975):43-57; and "Job Requirements: Effects on Labor Force Choices," in *Policy Analysis with Social Security Research Files*, U.S. Department of Health, Education and Welfare, Social Security Administration (Washington, DC: U.S. Government Printing Office, 1978), pp. 447-460; Thomas Chirikos and Gilbert Nestel, "Impairment and Labor Market Outcomes: A Cross-Sectional and Longitudinal Analysis," in Herbert S. Parnes, *Work and Retirement* (Cambridge, MA: MIT Press, 1981).
17. Donald Parsons, "The Decline in Male Labor Force Participation." *Journal of Political Economy* 88 (1980:117-134; Frederic P. Slade, "Labor Supply Under Disability Insurance," National Bureau of Economic Research, Cambridge, MA, Working Paper No. 800, 1982;

Robert Haveman and Barbara Wolfe, "Disability Transfers and Early Retirement: A Causal Relationship." *Journal of Public Economics*, forthcoming; and Jonathan Leonard, "The Social Security Disability Program and Labor Force Participation," National Bureau of Economic Research, Cambridge, MA, Working Paper No. 392, 1979.

18. American Medical Association, *Guides to the Evaluation of Permanent Impairment*, 1971.

19. Enhanced Understanding of the Economics of Disability research project #133AH30005.