Meanings of Impairment and Disability
The Conflicting Social Objectives Underlying the Confusion

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IMPAIRMENT AND DISABILITY IN MEDICINE

In their seminal work on respiratory impairment, Gaensler and Wright¹ had written: “Because of the increasing use of information on health impairment in ‘disability decisions,’ it is necessary to distinguish between the terms ‘impairment’ and ‘disability’ . . . .” They urged that use of the term impairment be limited to “reduction of body or organ function,” and that the term disability be used "to indicate a lack of ability for a certain level of specific type of performance.”²

As thus defined, a person with disease but without detectable reduction in body or organ function would not have impairment,³ and a person capable of performing his usual occupational functions but lacking the ability to perform customary nonoccupational functions would have disability.⁴

IMPAIRMENT AND DISABILITY IN COMPENSATION LAW

The medical definitions by Gaensler and Wright in general agree with the legal definitions of impairment and of disability. Certain significant differences between the legal and the medical definitions do exist. In the field of compensation law, disability establishing entitlement to compensation usually requires decrement in occupational performance function. However, even in the absence of reduced occupational performance, deficits in nonoccupational performance function may (under certain circumstances) qualify as compensable impairment and also establish entitlement to disability compensation.

The law of compensation recognizes a further distinction between total disability and partial disability. Medicine recognizes different grades or classes of pulmonary impairment.⁵

Within the laws of compensation, depending upon the jurisdiction or upon the type of compensation involved, there are further differences in the definitions of impairment and of disability. A brief survey of some of these differences of definition follows.

State Workmen’s Compensation Laws

Though each state has its own workmen’s compensation statute containing independent definitions, certain common principles are found.

“Compensable disability is inability, as the result of a work connected injury,⁶ to perform or obtain work suitable to the claimant’s qualifications and training.”⁷ The term disability is

²Id
³Disease is legally defined as: “Deviation from the healthy or normal condition of any of the functions or tissues of the body or of some of its organs, interrupting or disturbing the performance of the vital functions, and causing or threatening pain and weakness . . . .” Black’s Law Dictionary, 4th Ed, 1951. Quaere: Is deviation from normal tissue condition, absent deviation from normal body function, a state of disease? See notes 20 and 21, infra.
⁴Quaere: Can one have disability and not have impairment? “Disability” has been defined by one author to mean limitations of performance “resulting from chronic health conditions or impairments.” Haber, Disabling Effects Of Chronic Disease And Impairment—II, J. Chron. Dis. 26:127 (1973) (Emphasis added). By the definitions of Gaensler and Wright, however, it is difficult to conceive of a case in which impairment is present in the absence of an inability to perform at some level some specific type of function; so that, according to Gaensler and Wright, disability should always involve some impairment. Accord: American Medical Association Committee On Rating of Mental and Physical Impairment, Guides To The Evaluation of Permanent Impairment (1971), Preface Definition of Permanent Disability.
⁵Gaensler and Wright, supra note 1, at 172-173; American Medical Association Committee on Rating of Mental and Physical Impairment, supra, 72-76; American College of Chest Physicians Committee on Pulmonary Physiology, Grading of Pulmonary Function Impairment by Means of Pulmonary Function Tests, Diseases of the Chest 1967; 52:370. The gradations and classifications do not appear to have achieved general acceptance; and they are little used by either physicians or attorneys in compensation proceedings.
⁶Injury” is defined to include occupational disease. The Pennsylvania Workmen’s Compensation Act, June 2, 1915, P.L. 736, §301(c) as amended; 77 P.S. §411.
⁷° Larson's Workmen's Compensation (Desk ed, 1978), §57.00 [hereinafter cited as “Larson”].
“synonymous with 'loss of earning power.'" "Total and partial disability are the only forms of compensable disability recognized. . . ." The degree of disability depends on impairment of earning capacity, which in turn is presumptively determined by comparing preinjury earnings with postinjury earning ability. . . ." No matter how impairing the injury, if the injured employee is still able to perform his regular job, or alternatively to perform a different (lighter) job at a level of earnings which equals or exceeds his preinjury earnings, he is not disabled. If impairment prevents the injured employee from performing his former work, but he nevertheless remains medically and vocationally able to perform available alternative work at a lesser rate of earnings, then he is partially disabled. If there exists no available work for which he is medically and vocationally capable, the injured employee is totally disabled.

Under certain circumstances (eg, loss of a member) disability benefits are payable for impairment alone. "If an injury has left the claimant with a 'scheduled' permanent bodily impairment, compensation . . . is payable without regard to presence or absence of wage loss. . . ." The test to be applied in order to determine whether an employee is entitled to disability benefits for impairment alone is whether the employee has suffered the permanent loss of the use of the impaired organ "for all practical intents and purposes." Even if the impaired employee can still perform his usual job functions, he nonetheless is entitled to receive disability benefits for his "scheduled" permanent impairment.

Social Security Law

In determining eligibility for benefits based on disability under the Social Security Act, the Social Security Administration defines impairment as follows: "A physical or mental impairment is an impairment that results from anatomical, physiological, or psychological abnormalities which are demonstrable by medically acceptable clinical and laboratory diagnostic techniques." Disability is defined by the Social Security Administration as " . . . [the] inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment or impairments. . . ." To qualify as disabled under this provision, the impairment must be so "severe" that the person " . . . is not only unable to do his previous work or work commensurate with his previous work in amount of earnings and utilization of capacities, but cannot, considering his age, education, and work experience, engage in any other kind of substantial gainful work which exists in the national economy. . . ." Disability under Social Security clearly means total disability.

Federal Black Lung Law

Under the Federal Coal Mine Health and Safety Act of 1969, as amended by the Black Lung Benefits Act of 1972 and by the Black Lung Benefits Reform Act of 1977, additional different definitions of disability and of impairment exist. Under these Acts, it is "total disability due to pneumoconiosis" which is compensable.

Prior to the 1977 Amendments, total disability due to pneumoconiosis has been defined by Statute and Regulations to mean that a miner was prevented because of his pneumoconiosis from " . . . engaging in gainful work in the immediate area of his residence requiring the skills and abilities comparable to those of any work in a mine or mines in which he previously engaged with some regularity and over a substantial period of time." Loss of earning power seemed...
to remain a central requirement.19

Following enactment of the 1977 Amendments, the definition of total disability due to pneumoconiosis, unchanged by the statute, was modified by new regulations. The definition now provides: "In the case of a living miner, if there are changed circumstances of employment indicative of reduced ability to perform the miner's usual coal work, such miner's employment in a mine shall not be used as conclusive evidence that the miner is not totally disabled."20

Thus, Federal Black Lung Benefits, though defined by statute and regulation to be benefits for total disability (due to pneumoconiosis), in reality have become more closely akin to the type of benefits paid for scheduled permanent bodily impairment (more specifically, pulmonary impairment), without any decline of earning capacity.

By regulation, the Department of Labor has added to Federal Black Lung Law the following interesting definition of impairment: "Pulmonary or respiratory impairment' means an inability of the human respiratory apparatus to perform satisfactorily one or more of the three components of respiration, viz., ventilation, perfusion, and diffusion."21

Pragmatic Questions Which Make More Perplexing the Confounding Definitions of Impairment and Disability

The foregoing summary discloses the melange which exists in medicine and law when it comes to defining impairment and disability. Errors and confusions as to proper application of each term confound practitioners of medicine and law within their own profession and, more so, in dialogue between the professions. Is it therefore reasonable to expect laymen to understand that the term disability will not always have the same meaning?

The medical and legal professions should strive to adopt and to apply uniform definitions of impairment and of disability.

For impairment, the definition of Gaensler and Wright cannot be seriously faulted. One would, however, suggest a modification based upon the Code of Federal Regulations in order to have the definition of pulmonary impairment read: "reduction demonstrable by medically acceptable clinical and laboratory diagnostic techniques in one or more of the three components of respiration, viz., ventilation, perfusion and diffusion."22

For disability, the definitions should distinguish between occupational disability (total or partial) which inherently involves a decline in earning power; and nonoccupational disability (that can never be total) which involves impaired performance of usual and customary avocational or recreational activities, but without adverse affect on earning power.

In the event that the professions assign to a medico-legal group the task of arriving at definitions of impairment and of disability which even our legislators will respect, then that group, in carrying out its assignment, should give serious consideration to the rhetorical questions hereinafter posited.

Presence of Disease without Functional Deficit

Question: Does a coal miner with category 1 CWP have impairment?

It is reported in the literature that only in categories 2 and 3 simple coal worker's pneumoconiosis (CWP) can detectable impairment be found.23 The reports plainly imply that functional impairment is not detectable in category 1 CWP.24 Yet it is the certain experience of compensation attorneys handling cases of coal worker's pneumoconiosis that the great preponderance of them, and of total disability

19"A miner disabled under §402(f) Standards has suffered in at least two ways: his health is impaired, and he has been rendered unable to perform the kind of work to which he has adapted himself." Usery v. Turner Elkhorn Mining Co., 98 S. Ct. 2862, 2865, 426 U.S. 1, 21 (1976). However, proof of complicated pneumoconiosis or progressive massive fibrosis, which creates "an irrebuttable presumption that a miner is disabled due to pneumoconiosis" (§411 (c)(3), 30 U.S.C. §921 (c)(3)); 20 C.F.R. §410.418), by implication qualified even a working miner as "totally disabled" even before the 1977 Amendments. "...[D]estruction of earning capacity is not the sole legitimate basis for compulsory compensation of employe...", We cannot say that it would be irrational for Congress to conclude that impairment of health alone warrants compensation." Usery v. Turner Elkhorn Mining Co., supra, at 23 (U.S.).

20 20 C.F.R. §410.702 (f)(1); 43 Fed. Reg. 34782 (Aug. 7, 1978). New regulations, effective as to claims filed on or after March 31, 1980, provide that coal mine employment shall not be conclusive evidence that the miner is not totally disabled unless it can be shown that he does not have reduced ability to perform his or her usual coal mine work. 45 Fed Reg. 13088 (Feb. 29, 1980).

21 See notes 2, 13 and 21, supra.


awards based upon them, involve category 1 CWP.25

Presence of Detectable Impairment without Decline in Earning Power

Question: Does a 72-inch tall, 65-year-old clerk employed at a desk job in an underground coal mine, whose FEV₁ equals 2.45 liters and whose chest x-ray film is normal, but whose hobby is distance running, have disability?

Because the FEV₁ is only 79 percent of predicted normal, and because a performance which is less than 80 percent of predicted normal demonstrates abnormality of pulmonary function, our hypothetical desk clerk-runner has measurable pulmonary impairment of a slight degree.26 By Gaensler's definition, since the impairment would probably affect adversely his ability to compete in marathons, there is disability. Under Workmen's Compensation Law there does not exist disability because the slight functional decrement would not affect performance of his clerical work, and no decline in earning power has occurred. Under Federal Black Lung Law there is sufficient impairment for "total disability due to pneumoconiosis" notwithstanding the normal chest x-ray findings because the desk clerk performed below the "normal" prescribed by Federal regulation, which is 2.6 liters on the FEV₁ test.27

Presence of Simple CWP without Detectable Impairment in a Still-Working American Miner

Question: Does an American miner, who has simple CWP without decrements of pulmonary function which are demonstrable by medically acceptable clinical and laboratory diagnostic techniques, have disability because, by continuing to work as a coal miner, he risks progression of his pneumoconiosis and contracting disabling impairment?

Simple coal worker's pneumoconiosis tends to progress so long as the individual is exposed to excessive amounts of dust, but it becomes non-progressive after dust exposure has ceased.28 "Every effort must be made to protect a man with pneumoconiosis from being exposed to concentrations of dust which are likely to cause further deterioration in his condition."29 Consequently, a miner with pneumoconiosis is given by law the option of transferring to another job in the mine "where the concentration of respirable dust in the mine atmosphere is not more than 1.0 milligrams of dust per cubic meter of air..."30 Even when this right of transfer is ignored, the American miner's maximum respirable dust exposure at any job or work location may not by law exceed 2.0 mg/m³.31 An epidemiologic study of British miners reports that the risk of developing complicated pneumoconiosis (PMF) as a result of continued work where the concentration of respirable dust averages 4.3 mg/m³ is small as to miners having category 1 CWP, but is "increased substantially" in miners having category 2 CWP.32 In reference to American coal mines, where by law the maximum average respirable dust exposure may not exceed 2.0 mg/m³ (less than half the British standard of 4.3 mg/m³), Morgan has written that progression from Category 1 is highly improbable.33

Not all compensation authorities would agree with this statement of Rogan: "Since simple pneumoconiosis generally causes no symptoms, no

25The appellate courts of Pennsylvania, holding that it is not proven "... as a universally accepted scientific fact that Category 1 CWP cannot cause disabling impairment," recently affirmed an award of total disability compensation benefits in a case in which the claimant had normal breath sounds, normal pulmonary function, and radiographic evidence of Category 1 CWP. Bethlehem Mines Corporation v. Commonwealth of Pennsylvania. Workmen's Compensation Appeal Board and Michael Vinansky, Pa. Cmwlth. Ct. 398 A.2d 725 (1979). In another recent case, a physician, Board certified in internal medicine, testified that a coal miner, whose chest x-ray was read "UIIC 0/0" and as "demonstrating no radiological evidence of pneumoconiosis," was totally and permanently disabled because of CWP. George Sowalla vs. Bethlehem Mines Corporation, Pa. Dept. of Labor and Industry, No. 175-18-8541.


27C.F.R. §727.203(a)(2). An FEV₁ performance of 2.6 liters equals 83% of predicted normal (3.11 liters). Federal Black Lung Law has therefore revised the lower parameter of normal pulmonary function in the FEV₁, test from 80% to 83%.


29Muir, Clinical Aspects Of Inhaled Particles, 153 (1972).


31Id., §202(b)(2); 30 U.S.C. §842(b)(2). 30 C.F.R. §70.100(b).


33"A miner who has Category 1, if he worked in an environment where the level was 2 mg/m³, would show very little likelihood of progressing unless he was one of those susceptible individuals who develop CWP in a relatively short time." Letter dated March 13, 1978 from W. Keith C. Morgan, M.D. to Stephen I. Richman. See: Jacobson, Progression of Coal Workers' Pneumoconiosis In Britain In Relation To Environmental Conditions Underground [Graphs at pp. 88, 89], Proceedings of Conference on Technical Measures of Dust Prevention and Suppression in Mines, Luxembourg, October, 1972.
treatment is needed, and if the miner has no symptoms from other respiratory disease he may continue to work in the same job." It has been held that compensable disability can be based upon simple pneumoconiosis alone, in the absence of detectable impairment, because of an assumption that continued dust exposure of the working environment carries the unreasonably high risk of pneumoconiosis progression and resultant future impairment. There is no report of a challenge to the factual basis of this assumption by proof which quantifies the extent to which such risk does or does not exist, particularly under maximum respirable dust standards of Federal law. However, even absent a factual challenge of the assumption, it has to the contrary also been held that disability benefits are payable only to those who have presently provable disabling impairment; and are not payable to those who may at some future date (or may never) contract disabling impairment.

In defining disability within the context of risk and consequences of disease progression by continuation of work, the proposed medicolegal group should convert from speculation to measurable certainty medical opinion as to what conditions of continued occupational exposure do and do not subject a worker to real risk of disease progression and of disabling impairment.

CONCLUSION

Confusion in the definitions of impairment and of disability reflect uncertainty about the economic and social purpose of disability compensation. Are disability compensation benefits to be paid only to a worker whose "injury" has cost him a loss of earning power? Should disability compensation benefits be paid to a worker whose "injury" has resulted in detectable reduction in body or organ function but no decline in earning power? Or should disability compensation benefits be paid to a worker whose "injury" has caused neither impairment nor decline in earning power but who runs some risk of both by staying at his job? The answers to these (and other) questions involve the social policy determination of whether disability compensation benefits are intended to function as income maintenance or as health insurance or as retirement pension for the American worker.

8Rogan, Medicine in The Mining Industries, 85 (1972).
10See the discussion of the preceding paragraph and Notes (30)-(33), supra.
11La Coste v. J. McDermott & Co., 193 So.2d 779 (La., 1976); Chiquitito v. Johns-Manville Products Corporation, 330 So.2d 295 (La., 1976). In each of these cases, a physician had advised the worker to leave his work environment.