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Access to Medical Care for Occupational Disorders: Difficulties and Disparities

Allard E. Dembe, ScD

ABSTRACT. Despite state laws guaranteeing full insurance coverage for work-related disorders, many injured workers have difficulty obtaining access to appropriate medical care. Barriers to access arise because: patients are unable to prove that their conditions are caused occupationally; they are discouraged by employers from reporting occupational injuries; workers' compensation insurance carriers aggressively contest claims; and other reasons. Evidence suggests that minority subpopulations of workers are most affected. Overcoming these barriers will require a multifaceted approach involving regulatory oversight, participation of workers in the design of health plans and the selection of providers, and specific measures to detect and prohibit discriminatory care. *[Article copies available for a fee from The Haworth Document Delivery Service: 1-800-342-9678. E-mail address: <getinfo@haworthpressinc.com> Website: <<http://www.HaworthPress.com>>]*

KEYWORDS. Access, equity, workers' compensation, occupational injury, occupational illness

Prompt access to appropriate medical care for patients with workplace injuries and illnesses is guaranteed under state and federal workers' compensation (WC) laws. Employers are generally required to

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carry workers' compensation insurance that pays for all medical services (with no cost-sharing by the patient) and offers wage-replacement benefits to compensate workers with job-induced ailments. This "no-fault" system is designed to provide needed benefits quickly, without regard to questions of negligence or fault on the part of either employers or workers. In theory, workers' compensation is a system featuring compulsory, universal insurance coverage providing unhindered access to needed medical services and income protection for work disability.

In reality, obtaining appropriate medical services for occupational conditions in a timely way is often a complicated matter. It requires the worker, employer, medical provider, and WC insurer to engage in a coordinated set of activities involving numerous medical judgments and administrative actions. For example, the ailment must be recognized and acknowledged to be occupationally-induced to qualify for medical insurance coverage under workers' compensation. Injury and claims reports must be filed in an authorized way. The affected worker has to determine which medical providers can be utilized for providing care. Providers need to know precisely what services will be allowed by the WC insurer. The WC insurer and claims administrators need to conform precisely to applicable WC statutes and regulations.

The process of obtaining WC medical care is further complicated by the close linkage that exists between the provision of medical care for work-related conditions and medical determinations of eligibility for income replacement (so-called "indemnity") benefits available for injured workers under workers' compensation insurance. This often requires medical providers to undertake special diagnostic testing, assessments of impairment and functional limitation, evaluations of job demands, and determinations of fitness to resume work. Because of the intrinsic connection of primary care and recovery of vocational function, treating physicians and insurers frequently must coordinate their efforts closely with physical therapists, occupational therapists, and rehabilitation specialists, as well as addressing the employee's need for retraining and workplace accommodation. The need to associate medical services with eligibility for indemnity payments intensifies the scrutiny and oversight needed in the medical delivery process and may embroil all parties in legal actions, litigation, testimony and other administrative necessities. These factors may serve to further confuse and possibly delay the provision of needed medical care.

Although the workers' compensation system was originally designed around a model of acute traumatic injuries, many WC cases now involve nonspecific back pain, hand/wrist discomfort, musculoskeletal ailments, respiratory illnesses, and other disorders for which there is an indistinct connection with job activities and a range of reasonable medical opinion about the degree of work-relatedness. The inherent uncertainty about the true cause of these disorders further complicates the medical decision-making process for WC cases (Hadler 1999, Miller et al. 1995).

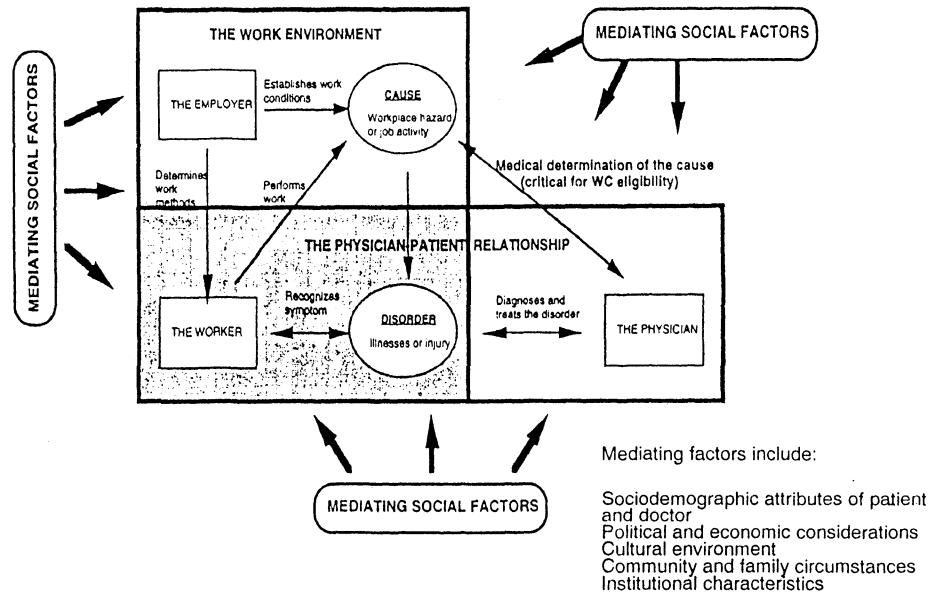
The delivery of WC medical services must be interpreted against the backdrop of the larger social context that pervades labor-management relations in the workplace. Medical care for injured workers is closely linked with determinations of impairment and judgments about causation that qualify workers for a range of cash compensation and other social welfare benefits available through WC insurance. As such, it places clinicians in the role of "gatekeepers" whose pronouncements determine patients' eligibility for medical care payment and government authorized social assistance. Since many low-wage workers do not have separate health insurance, a medical determination that a disorder is not work-related can mean that an injured worker will face significant financial barriers in obtaining appropriate care. The doctor's role as an arbiter for social insurance benefits raises the stakes in the physician-patient encounter and increases the likelihood that nonmedical social determinants will affect its outcome (Dembe 1996).

Though regulated by state government, all direct workers' compensation costs are borne by employers who, consequently, may desire to exert substantial control over how the system operates. Along with the inherent social dynamics and power imbalances that characterize workplace labor-management relations, this creates additional pressure for medical diagnosis and practice to be shaped by nonclinical social factors. Figure 1 illustrates how, in workers' compensation, labor-management issues existing in the employment setting *intersect* with the equally complicated social dynamics of the doctor-patient relationship to help drive social considerations into the medical decision-making process.

BARRIERS TO ACCESSING APPROPRIATE WORKERS' COMPENSATION MEDICAL CARE

As a result of these complications, many injured workers experience significant problems accessing appropriate workers' compensa-

FIGURE 1. The Social Context of Workers' Compensation Medical Care



tion medical care. A recent study in Washington State found that less than 45% of injured workers were satisfied with overall access to medical care for their injuries (Washington Department of Labor and Industries 1997). Difficulties in obtaining medical care can stem from a variety of sources including misdiagnosis of occupational disorders by clinicians; financial incentives in health care plans that promote shifting of cases and costs to the general (nonoccupational) sector or government assistance programs; denials of coverage by insurance carriers; lack of education and awareness about the workers' compensation system among employers, employees and medical professionals; reprisals or other disincentives for injured workers to report their conditions; cultural and language barriers; and utilization review practices.

Here is a brief description of some of the primary ways that barriers to access of appropriate WC medical services arise:

Medical Judgments Regarding Causality. Patients are eligible to receive medical care under WC insurance only if their disorders are medically determined to be caused or aggravated by working conditions. Since many workers do not have employer-provided general health insurance, the failure to recognize an ailment as work-related often means that a patient has no financial coverage to pay for medical services. A medical determination of occupational etiology, however, is often difficult to make and is frequently missed by practitioners. Patients themselves may not perceive their medical problem to be related to their jobs, and thus not provide relevant information to their physicians. Doctors might be unfamiliar with the relationship between work activities and specific ailments or they may fail to fully investigate a patient's occupational history. A recent study by researchers from Harvard University found that physicians at a large HMO failed to properly diagnose and report cases of occupational asthma 21% of the time, in part because they did not obtain detailed work histories (Milton et al. 1998).

Limitations on Referrals to Specialists. Even if primary medical care is available, a patient may not receive appropriate access or referral to providers with adequate training and specialization in particular aspects of occupational medicine. The intensive use of physical therapy, chiropractic, or other modalities may not be authorized under a particular WC medical plan. One recent study from New York found that among 23 patients with work-related low back pain, unnecessary delays in access to specialized medical treatment and physical therapy lengthened the duration of work disability, thereby increasing costs by an average of 25% (Gallagher and Myers 1996).

Utilization Review Practices. Utilization review seeks to constrain health care costs by reducing unnecessary or inappropriate use of medical services. Although national WC utilization review standards have been developed (by the Utilization Review Accreditation Commission) and some states regulate WC utilization review, most states allow private insurers to perform these services at their own discretion using their own staff or through contracting with commercial vendors (Eccleston and Yeager 1998). The resulting variability in approach may increase the likelihood of delays and disputes over care. According to focus groups conducted in Michigan, many workers report significant problems in accessing needed WC medical services be-

cause of delays in insurer approval for treatments, rehabilitation, or equipment (Roberts and Gleason 1994).

Constraints on Hospitalizations or Testing. Utilization review procedures and treatment guidelines may impose restrictions on hospitalizations and specialized testing for WC cases. In some cases, the medical determination of work-relatedness may depend on the performance of a particular specialized diagnostic test. But without a prior decision to accept the workers' claim as occupational, and thus eligible for benefits under workers' compensation insurance, payment to cover such diagnostic testing may not be available. In such cases, the worker can be left without the means to establish occupational etiology and thus obtain needed medical care under workers' compensation.

Disincentives for Claims Reporting. Considerable evidence suggests that injured workers may be reluctant to report work-related ailments for a variety of reasons including fear of reprisal, a belief that pain is an ordinary consequence of work activity or aging, lack of management support after prior reports, and a desire not to lose their usual job (Pransky et al. 1999, Roberts 1997). Data from the Michigan state surveillance system indicate that only 9-45% of workers diagnosed with an occupational disease file for WC benefits (Biddle et al. 1998). A recent Connecticut study estimates that just 10.6% of workers with work-related chronic upper extremity pain file a workers' compensation claim for their condition (Morse et al. 1998). Pransky et al. (1999) found that 10% of surveyed workers do not report work-related injuries because of fear of employer reprisal, and that employer-sponsored safety award programs based on decreasing claims frequency rates create an additional disincentive for appropriate reporting of work injuries.

Employer or Insurance Company Actions. Perhaps the most direct barrier to access to WC medical care occurs when a workers' claim for care is denied or contested by the WC insurer or claims administrator. There can be many reasons for denial, including missing information and breeches in administrative procedure, but the most common sources of dispute involve questions of occupational causality and coverage under state WC compensation criteria. A dramatic example of how insurance denials impede access to appropriate medical care was recently observed among patients receiving care for hand and wrist disorders at an academic health clinic in New York City (Herbert et al. 1999). Seventy-nine percent of 135 workers diagnosed with

occupational carpal tunnel syndrome had their WC claim initially disputed by the employer's insurance carrier. Under New York State law, such disputed cases are adjudicated through the state's WC administrative appeals system. Ultimately, 96% of the disputed claims were decided in favor of the worker, but it took an average of 429 days for the decision to be made. During that period, payment for medical care was unavailable either from the WC insurance carrier or through the workers' general health care plan (which excludes care for work-related cases filed under WC), and, consequently, many workers failed to receive needed medical treatment or diagnostic testing.

Other Barriers. Access to timely and appropriate medical care for occupational disorders can be jeopardized in a variety of other ways. For example, low allowable fee schedules in some states may discourage doctors from accepting work-related cases. The perception that WC medical care involves excessive administrative paperwork, litigation, and/or delays in payment can further discourage physicians from providing care to injured workers. Although workers' compensation medical care supposedly does not require co-payments or cost-sharing by patients, many injured workers report spending significant out-of-pocket expenses on medical treatment for workplace injuries. In a recent study of WC claimants in New Hampshire, 13.6% of workers reported using other types of insurance besides WC to pay treatment costs for their occupational injuries (Pransky et al. 1998). Twenty-one percent of the surveyed workers with occupational back pain and 10% of those suffering upper extremity injuries incurred out-of-pocket expenses related to treatment of their disorder. This finding is consistent with data from Connecticut showing that approximately 11% of persons with work-related musculoskeletal disorders incur out-of-pocket expenses for medical treatment of occupationally-induced conditions (Morse et al. 1998). The need to use personal finances for treatment of workplace disorders may inhibit some workers (especially those with low incomes) from seeking appropriate care.

Pervading the entire issue of access to WC medical care is the question of whether the injured employee, rather than the employer or insurer, is allowed to select the physician providing WC care. During the past decade, there has been a gradual erosion in injured workers' ability to choose a particular medical care provider, and currently only 3 states permit an injured worker to exercise complete choice of provider throughout the course of treatment (Eccleston and Yeager 1998).

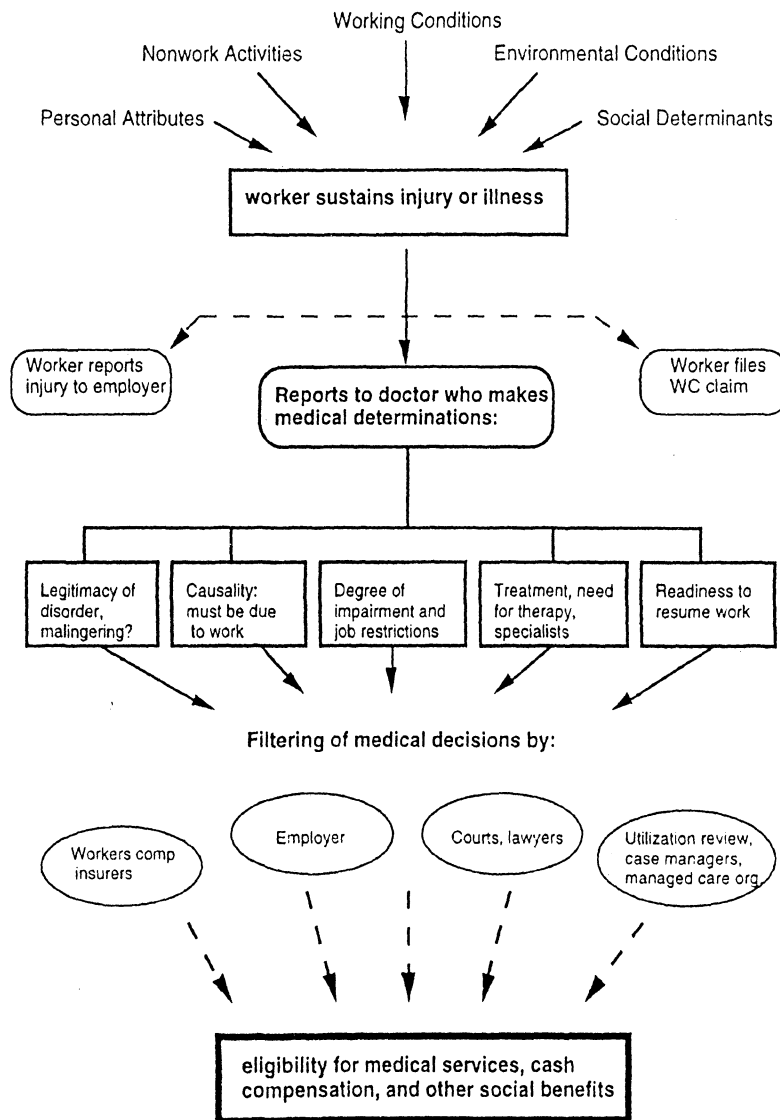
Many workers distrust company doctors or other medical providers perceived to be under the control of employers or insurers (Walsh 1987). Rather than going to a unfamiliar provider, an injured worker may decide to avoid care altogether, or to seek care outside of normal WC channels.

There are other reasons why obtaining appropriate care may be difficult for injured workers. Approved practitioners may not be located conveniently to workers' homes or job sites. This was a major reason for dissatisfaction with access to care according to responses to a survey among Washington workers receiving treatment within a WC managed care organization (Washington Department of Labor and Industries 1998). Additionally, waiting times and the ability to get an appointment quickly can interfere with the delivery of effective care. A survey of injured workers conducted by the Gallup Organization, for instance, found that only 54% of injured workers were able to see a doctor on the first day of their work-related injury or illness, and 13% had to wait more than one week to get an appointment (Intracorp 1995). Problems in identifying an appropriate medical provider can be especially difficult for non-English speaking enrollees and those from diverse cultures, even when a WC insurer or health care system has made provisions for cultural accommodation and interpreter services.

Diagnosis and treatment of workplace injuries and illnesses is only one component of obtaining full access to appropriate medical care under workers' compensation. Because workers need medical determinations to qualify for WC indemnity benefits, available services must also include the capability to perform assessments of functional impairment and work disability, readiness to return to work, and specialized tests needed for establishing occupational etiology. In addition, some important types of medical services are not covered by WC insurance, particularly prevention-oriented medical services including medical surveillance and pre-placement examinations. Barriers to complete medical care can arise if only the minimal care as prescribed under state law is offered, without provisions made for obtaining these important types of expanded services.

The aforementioned examples illustrate that there are diverse circumstances creating barriers to accessing timely and appropriate occupational medical care. Figure 2 depicts some of the factors that can potentially affect workers' ability to obtain needed medical services.

FIGURE 2. Factors That Can Affect Patient Access to Medical Care for Work-Related Disorders



*INEQUITIES IN ACCESS TO WC MEDICAL CARE
AMONG VULNERABLE POPULATIONS*

Disparities in general health status and health care among various social groups in the United States are well documented (Aday 1993). Many existing inequalities in access to health services have been traced to the inability of disadvantaged groups to obtain adequate health insurance. In workers' compensation, however, all employees are entitled to comprehensive medical insurance covering work-related injuries and illnesses. Possibly for that reason, little investigation has been previously conducted into possible inequities in WC health care.

Nevertheless there is reason to believe that WC medical care access problems can affect social subgroups of workers differentially. Dembe (1996) has provided historical examples in which physicians failed to regard injuries as work-related because of the patient's gender, ethnicity, religion, or nationality. For thirty years after World War II, for example, carpal tunnel syndrome (CTS) was viewed by the medical community as a non-occupational condition related to female hormones because one prominent medical authority observed that most CTS patients were women and he insisted that "women's work" inherently requires little manual exertion. Similarly, during the early twentieth century, hand and wrist disorders among Jews, women, and Eastern European immigrants were routinely dismissed as manifestations of "nervous tendencies" that were supposedly characteristic of those groups.

More recently, additional evidence has been accumulating suggesting that there are significant differences among social subgroups with respect to occupational health status, workplace exposures, experience in the workers' compensation system, and medical care for workplace injuries (Beach et al. 1994, Frumkin and Walker 1998, Roberts and Gleason 1994). Some disparities arise because minority groups are concentrated in jobs with more hazardous work activities. For example, the average occupational injury rate for occupations in which more than 25% of the workers are black is three times higher than job categories having a low (< 1%) proportion of black workers (Frumkin and Walker 1998).

At present, there is only circumstantial evidence that disparities in access to WC medical care contribute to the lower occupational health

status of minority groups. In one recent study among a population of low-wage, predominantly female garment workers in New York City, nonwhites (Black, Hispanic and Asian) were more likely than whites to have their claims for occupational carpal tunnel syndrome disputed by workers' compensation insurers (on the grounds that there was insufficient evidence for workplace causation), resulting in lengthy delays in accessing medical treatment (Herbert et al. 1999). In another study, blacks were found to be twice as likely as whites to have WC claims rejected for treatment of occupational asbestos-related lung disease, even after adjusting for disease severity, job classification, smoking status, and other potential confounding factors (Nevitt et al. 1994).

Immigrant and migrant workers face especially significant barriers to accessing WC medical care. A recent study among a population of Central American immigrant workers in the Washington, DC area revealed that only 40% of the immigrant workers suffering occupational injuries or illnesses filed claims for medical treatment under workers' compensation (Pransky and Thackrey 1998). Preliminary data from a study being conducted in Worcester, Massachusetts, suggest that about 5-10% of low-income and immigrant patients treated at free clinics are receiving care for work-related disorders (Dembe et al. 1999).

APPROACHES TO IMPROVING ACCESS TO MEDICAL CARE FOR OCCUPATIONAL CONDITIONS

Ensuring appropriate and timely access to occupational medical services will require a multifaceted approach involving employers, insurers, providers and health care systems, workers and workers' representatives, and government regulators. Only a coordinated approach involving all affected stakeholders will be able to resolve the communications and administrative barriers that are at the root of many access problems. Government oversight and formal accountability measures are particularly needed to protect the interests of minorities and marginalized workers who may not otherwise have the resources or support to affect needed system changes.

Specific measures to guarantee access to appropriate medical care are especially important in the workers' compensation context because of the increasingly restricted opportunity for workers to "vote with their feet" when confronted with what they perceive as inade-

quate care. Because employers, rather than workers, select and purchase the WC insurance coverage (and, thus, the associated WC health care plan), many of the market-driven consumer-protection mechanisms used in the general health care field may not be applicable to the occupational health care setting. Report cards concerning the performance of various health care systems, for instance, may not be useful to workers trying to find the best and most convenient care if the selection of providers is out of their control. In general, one of the most effective ways to ensure ease of access to appropriate WC medical services may be to preserve injured workers' ability to actively participate in the selection of providers.

These needs will become increasingly important as occupational medical care continues to migrate from the traditional fee-for-service environment to one dominated by large managed care organizations and for-profit health delivery systems, a trend that has expanded greatly during the 1990s (Dembe et al. 1997). Many workers and public health advocates fear that the incursion of managed health care into workers' compensation may reflect a broader employer-driven campaign to erode benefits, tighten eligibility requirements, and further restrict employees' control over health care for occupational conditions (Dembe 1998).

General measures that can be taken to protect workers' interests and ensure adequate access to WC medical care services include: worker involvement in the design and selection of the health care plan, guarantees on choice of primary care and specialist providers, contract provisions to ensure adequate access, government oversight and regulations specifying access requirements, WC health care plan certification and accreditation standards regarding access to care, internal and external audit processes for identifying and resolving access problems, financing and delivery methods for maintaining access to care during claims adjudication and disputes, and appeals and complaint procedures for injured workers.

Specific access requirements that can be incorporated into WC contracts, government regulations, certification criteria, and accreditation standards include precise time requirements for responding to requests for medical care, distance requirements for geographical location of plan providers, minimal staffing levels to ensure availability of specialists and ancillary services, and patient surveys to monitor satisfaction with access to care. Educational programs and materials

for both workers and providers are essential to inform each about how to access and deliver medical care for work injuries. Employers, insurers and their affiliated health plans should provide workers with essential information on how to locate and utilize available medical services including names, addresses, and telephone numbers of participating providers, enrollment and reporting forms, and (when applicable) identification cards.

Special measures may be needed to ensure that minority and disadvantaged workers are able to access appropriate care. These measures might include: (a) having multi-lingual and culturally diverse providers and staff available for applicable enrollees, or (b) having trained interpreters available for applicable enrollees, and (c) providing applicable enrollees with translated versions of literature, forms and facility notices (Dembe and Himmelstein 1999). In addition, the MCO should ensure that in the provision of health care or administration of benefit claims neither the MCO nor its affiliated providers discriminates against enrollees on the basis of race, color, sex, sexual orientation, age, marital status, national origin, religion, place of residence, or HIV status. Older and younger workers and those with particular impairments may need to be provided with transportation to and from medical providers. Provisions for providing the transportation ought to be made part of the formal WC plan developed by employer and insurers.

Ultimately, the access problems that currently plague injured workers may never be completely resolved until there is a system of universal, comprehensive health care. Many of the current access problems arise because of the need to differentiate work-related from non-work related disorders and administer each under different rules and financing arrangements. A universal, combined system, in theory, might cut through some of those complications allowing medical practitioners to concentrate on improving a patient's overall health rather than attending to the artificial barriers and administrative complexities engendered by the current system.

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REFERENCES

- Aday, L. A. (1993). *At Risk in America: The Health and Health Care Needs of Vulnerable Populations in the United States*. San Francisco: Jossey-Bass.
- Beach, J. R., Baranski, B., & Harrington, J. M. (1994). Equity or inequity in occupational health. *International Journal of Occupational and Environmental Health* 14: 247-252.
- Biddle, J., Roberts, K., Rosenman, K. D., & Welch, E. M. (1998). What percentage of workers with work-related illnesses receive workers' compensation benefits? *Journal of Occupational and Environmental Medicine* 40 (4): 325-331.
- Dembe, A. E. (1996). *Occupation and Disease: How Social Factors Affect the Conception of Work-Related Disorders*. New Haven: Yale University Press.
- Dembe, A. E. (1998). Preserving workers' compensation benefits in a managed health care environment. *Journal of Public Health Policy* 19(2): 200-218.
- Dembe, A. E., Johnstone, J., & Ramler, A. J. (1999). Improving access to workers' compensation health care for underserved populations in Worcester, Massachusetts. Worcester, MA: UMass Center for Health Policy, Working Paper.
- Dembe, A. E., Himmelstein, J.S., Stevens, B.A., & Beachler, M. P. (1997). Improving workers' compensation health care. *Health Affairs* 16 (4): 253-257.
- Dembe, A. E., & Himmelstein, J. S. (1999). Contract Provisions to Ensure Quality in Workers' Compensation Managed Care Arrangements. *Journal of Insurance Regulation* 18(3):289-326.
- Eccleston, S. M., & Yeager, C. (1998). *Managed Care and Medical Cost Containment in Workers' Compensation: A National Inventory, 1997-1998*. Cambridge, MA: Workers' Compensation Research Institute.
- Frumkin, H., & Walker, E. D. (1998). Minority workers and communities. In *Public Health and Preventive Medicine* (14th Edition), R. B. Wallace, ed., Stamford: Appleton & Lange, pp. 684-690.
- Gallagher, R. M., & Myers, P. (1996). Referral Delay in Back Pain Patients on Workers' Compensation: Costs and Policy Implications. *Psychosomatics* 37(3): 270-284.
- Hadler, N. (1999). *Occupational Musculoskeletal Disorders (2nd. Edition)*. Philadelphia: Lippincott Williams & Wilkins.
- Herbert, R., Janeway, K., & Schechter, C. (1999). Carpal tunnel syndrome and workers' compensation among an occupational clinic population in New York State. *American Journal of Industrial Medicine* 35: 335-342.
- Intracorp. (1995). *Intracorp Impairment Rating Review Project*. Dallas, Texas: Intracorp, Inc.
- Miller, T. R., Pindus, N. M., Rossman, S. B., & Douglass, J. B. (1995). *Databook on Nonfatal Injury: Incidence, Costs and Consequences*. Washington, DC: The Urban Institute Press.
- Milton, D. K., Solomon, G. M., Rosiello, R. A., & Herrick, R. F. (1998). Risk and incidence of asthma attributable to occupational exposure among HMO members. *American Journal of Industrial Medicine* 33: 1-10.
- Morse, T., Dillon, C. Warren, N., Levenstein, C., & Warren, A. (1998). The economic and social consequences of work-related musculoskeletal disorders: The Connect-

- icut Upper-Extremity Surveillance Project (CUSP). *International Journal of Occupational and Environmental Health* 4: 209-216.
- Nevitt, C., Daniell, W., & Rosenstock, L. (1994). Workers' compensation for nonmalignant asbestos-related lung disease. *American Journal of Industrial Medicine* 26: 821-830.
- Pransky, G., Snyder, T., Dembe, A., & Himmelstein, J. (1999). Under-reporting of work-related disorders in the workplace: A case study and review of the literature. *Ergonomics*. 42(1): 171-182.
- Pransky, G., Benjamin, K., Hill-Fatouhi, C., Himmelstein, J., Fletcher, K., & Katz, J. (1998). Outcomes on work-related upper extremity and low back injuries: Results of a retrospective study. Working Paper.
- Roberts, K., & Gleason, S. (1994). Procedural justice in the workers' compensation claims process. In *Employee Rights and Industrial Justice*, J. Rojot, ed. Boston: Kluwer, pp. 77-88.
- Roberts, K. (1997). Why don't people with work-related injuries file for workers' compensation benefits? Presentation at the National Symposium on Workers' Compensation, New Brunswick, NJ, July, 1997.
- Walsh, D. C. (1987). *Corporate Physicians: Between Medicine and Management*. New Haven: Yale University Press.
- Washington Department of Labor and Industries and the University of Washington Department of Health Services (1997). *Workers' Compensation Managed Care Pilot Project: Final Report to the Legislature*. Olympia, Washington, April 1997.