

**Access to Medical Care for Work-Related Injuries and Illnesses:
Why Comprehensive Insurance Coverage is Not Enough to
Assure Timely and Appropriate Care**

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Access to timely and appropriate medical care is widely perceived to be a major problem in the United States. The predominant cause of this problem, according to many authorities, is the lack of health insurance for large segments of the population (Bodenheimer and Grumbach 1998; Millman 1993; Berk et al. 1995). The ranks of the uninsured have continued to swell during the past decade. As of 2001, about 41 million Americans were without basic health insurance (U.S. Census Bureau 2003). In addition, the rising cost of insurance has made it difficult for many low-income families to afford private health insurance and, partly as a result, enrollment in Medicaid and other government assistance programs has soared in recent years (Ellis et al. 2000). Over 40 million people in the United States are covered by Medicaid in 1998 and an additional 4.6 million children by State Children's Health Insurance Programs as of 2001 (Toner 2003; Child Welfare League 2003). Even for those fortunate enough to have health insurance coverage, recent trends towards increasing premiums, co-payments, deductibles, and other forms of cost-sharing, have increased the difficulty many individuals face in securing appropriate medical care for themselves and their families.

By contrast, the medical care benefits available to injured workers under state workers' compensation (WC) insurance systems have generally remained intact during the past thirty years. These benefits include full payment of the insurance premium by the employer, with no copayments or cost-sharing by individual workers. State WC laws typically require employers to maintain coverage for medical care of injured workers, and, as a result, virtually all American workers are covered by WC plans. The most recent estimates are that 98% of employees enjoy this benefit (Thompson et al. 2002). Workers' compensation plans usually provide coverage for all services deemed to be medically necessary for care of work-related conditions, including diagnostic and therapeutic care, as well as corresponding therapy and rehabilitation to facilitate the workers' return to job functions.

Thus, on the surface, it may appear that the nearly universal and comprehensive medical care coverage afforded to injured workers through workers' compensation insurance eliminates most of the financial barriers to accessing general (non-WC) medical care of the type experienced by persons lacking health insurance coverage or having health insurance plans requiring substantial personal cost-sharing. Indeed, experience suggests that, in general, the structural characteristics of the American workers' compensation system have been effective in providing access to needed medical care for most injured workers. But, at the same time, it would be wrong to conclude that significant problems in accessing care do not exist for many workers suffering job-related injuries and illnesses. There is mounting evidence to suggest that many injured workers face substantial barriers in accessing appropriate and timely care despite the basic financial protection afforded under WC insurance (Dembe 2001). For example, a recent study of injured workers in California found that 13.3% of injured workers reported "some or a lot of trouble getting medical care" when they were first injured (Rudolph et al. 2002). In this article, we will describe the kinds of access

problems that commonly arise for injured workers seeking care for occupational injuries and illnesses, and offer recommendations for addressing those problems.

What is "Access to Care"?

Before examining the special access-to-care difficulties in workers' compensation, it will be useful to consider recent health policy perspectives about what constitutes appropriate access to medical care. Substantial progress has been made in clarifying this issue, in collecting empirical evidence about the factors determining successful access to care, and identifying the nature of access problems experienced by the general population.

Several models for understanding "access to care" were developed in the 1970s and 1980s, prompted by growing concerns during those years about the availability of medical services. One classic definition for "access to care" was provided by Ron Anderson in 1983, who described access-to-care as "entry of a given population group to the health care delivery system" (Anderson et al. 1983). He believed that access to care is influenced strongly by the structure of the health care system, especially by provisions for financing, organizing, and staffing the delivery of care. One measure of success in the attempt to access care, according to this view, is the actual utilization of medical services by patients—the delivery of such services indicating that entry to the system has been successfully attained. Anderson also recognized that structural characteristics and service utilization were not the only factors determining whether a patient's access to care is adequate. Together with his colleague, Lu Ann Aday, Anderson developed a conceptual framework for understanding "access-to-care" that reflected the need for a health delivery system to match utilization of services with actual patient needs (Aday and Anderson 1974; Anderson and Aday 1978; Aday and Anderson 1981). According to this model, the key measure of access is not merely the utilization of medical services, but whether the services obtained are medically appropriate and perceived as useful by patients (see Figure 1).

Aday and Anderson's expanded conception of medical care access reflected a growing appreciation by medical authorities of the need to ensure that the medical care afforded to patients was of acceptable quality and produced good medical outcomes. During the 1990s, additional advances were made in specifying standards for defining high-quality care and establishing quality measurement systems (Donaldson 1999; President's Advisory Commission 1998). Conceptions of access-to-care continued to evolve correspondingly. For example, in 1994, Joel Weissman and Arnold Epstein of Harvard University defined access-to-care as: "the attainment of timely, sufficient, and appropriate health care of adequate quality such that health outcomes are maximized" (Weissman and Epstein 1994). In their view, the adequacy of patients' attempts to access care cannot be evaluated without considering whether the care received is appropriate and efficacious, responsive to individual circumstances, perceived to be beneficial, and associated with desirable outcomes (see Figure 2).

More recently, health policy experts have begun to conceptualize access-to-care as a multistage process in which patients potentially face a sequence of increasingly complex interactions with the delivery system in their attempts to secure effective and appropriate care. Arlene Bierman et al., in 1998, developed a model of access-to-care which categorizes this process into three components termed "primary," "secondary," and "tertiary" access (Bierman et al. 1998). In this model, primary access issues are those that involve patients' efforts to secure initial entry into the system, which is a primarily a function of insurance, financing, availability of primary care

providers, and other basic requirements. Secondary access involves barriers to care that arise once basic entry to the system has been achieved. Typical secondary access concerns include difficulties in getting appointments, referral to specialists, delays in obtaining authorization for care, obtaining after-hours care, and similar structural obstacles existing within a particular care system. Tertiary access pertains to issues related to securing appropriate and efficacious care once the secondary access issues have been resolved. Examples of tertiary access problems include: lack of appropriate skills among treating providers, inadequate communications between patient and provider, inability of providers to assess patient needs properly, and receiving care that is not evidence-based or appropriate for the patient's condition. Bierman's access model highlights the non-financial barriers to accessing high-quality care and the sequencing of obstacles in accessing care that are faced by many patients.

Access Issues in General Medical Care

Numerous recent studies of the general population seeking care for nonwork-related conditions have documented the scope and extent of the access problems portrayed in these conceptual models (Berk et al. 1995; Committee on the Consequences of Uninsurance 1998, 2001, 2002; Haley and Zuckerman 2000; Bodenheimer and Grumbach 1998; Henry J. Kaiser Family Foundation 2000; Millman 1993). Most authorities still believe that lack of insurance and under-insurance constitute the major barriers to accessing appropriate medical care for Americans. For example, in establishing "improving access to quality health services" as a key national goal in *Healthy People 2010*, The U.S. Department of Health and Human Services indicated that "increasing the proportion of persons with health insurance" is a critical strategy for achieving better access to care, noting: "Access to health services—including preventive care, primary care, and tertiary care—often depends on whether a person has health insurance" (U.S. Department of Health and Human Services 2002). There is extensive evidence documenting that individuals without basic health insurance experience inferior access to basic health services, have worse health status, and suffer unfavorable health outcomes. As summarized in *Healthy People 2010*:

Uninsured people are less than half as likely as people with health insurance to have a primary care provider; to have received appropriate preventive care, such as recent mammograms or Pap tests; or to have had any recent medical visits. Lack of insurance also affects access to care for relatively serious medical conditions. Evidence suggests that lack of insurance over an extended period significantly increases the risk of premature death and that death rates among hospitalized patients without health insurance are significantly higher than among patients with insurance (U.S. Department of Health and Human Services 2002).

Similar findings were contained in a 2002 report by the Institute of Medicine (IOM), which examined more than 130 research studies investigating whether health insurance status affects health outcomes (Committee on the Consequences of Uninsurance 2002). The IOM report concluded that "Americans who do not have health insurance are at risk for poorer health because of their lack of insurance coverage." Specific findings in the IOM report included: 1) uninsured adults who lose insurance temporarily (for one to four years) are more likely to have diminished health status than those who remain continuously insured; 2) those without health insurance face about a 25 percent higher risk of premature death than those with insurance, resulting in an estimated 18,000 premature deaths annually; and 3) uninsured adults are much less likely than

adults with any kind of health insurance to receive recommended screening and preventive services.

While the absence of sufficient health insurance is recognized to be a key barrier to accessing high-quality medical care, there is also a growing awareness among health researchers and policy makers that obtaining insurance coverage is not by itself sufficient to guarantee access to appropriate care (Ayanian et al. 2000; Zuvekas and Weinrek 1999). Several recent studies have documented other serious barriers to accessing care that frequently arise even for those who have been able to secure basic coverage. According to a report from the Center for Studying Health System Change, these barriers include: getting timely physician and clinic appointments; having medical providers accept their health insurance; and getting their health insurer to pay for services (Strunk and Cunningham 2002). In another study, fewer than half of all patients reported receiving an appointment at a clinic or doctor's office as soon as they wanted (AHRQ 2001). Additional cost barriers for insured patients, including out-of-pocket expenditures and copayments, also have been frequently cited as a significant impediment to accessing needed medical services (Halfon et al. 1995; Weinick et al. 1996). Several studies have documented that access problems affect ethnic and racial minorities and low-income individuals more acutely, even after accounting for differences in insurance coverage among these groups (Hargraves et al 2001; Committee on the Consequences of Uninsurance 1998). Non-insurance considerations that have been shown to create inferior access to care for minority groups include language and cultural accommodation deficiencies within care systems, problems in obtaining transportation to care sites, not having a usual source of care, and disparities in physician practices for providing care to these patients.

Accessing Medical Care for Work Injuries under Workers' Compensation

Workers' compensation insurance is generally paid for entirely by employers, and covers most of the direct medical care costs for injured workers. This form of insurance helps to minimize many of the financial barriers to primary access discussed above. However, other features of state workers' compensation systems create special access-to-care problems that do not normally exist in the general health care setting. Table 1 summarizes some of the potential barriers to primary, secondary, and tertiary access in workers' compensation and general health care, highlighting the barriers that are especially characteristic in each system. Here is a summary of some of the chief barriers to access experienced by injured workers:

Primary Access

With regard to primary access (initial entry into the system), injured workers do not normally have to worry about securing insurance coverage, since they will generally be covered by an employer's workers' compensation policy. However, some employers, especially smaller businesses, may fail to comply with state laws requiring them to secure workers' compensation coverage. A recent report by the California Department of Industrial Relations and the Employment Development Department, for instance, estimated that 19% of California employers either underreport payroll to the state or have no workers' compensation insurance (LRA 1998). Numerous other barriers to initial reporting of WC claims have been identified in research studies including fear of employer reprisals and employer safety incentive systems which discourage the initial reporting of work-related injuries and the filing of WC claims (Azaroff 2002; Pransky et al 1999; Morse et al. 2000). Recent surveys of injured workers have revealed that many workers, especially low-wage and contingent employees, are threatened by possible job loss if they report

occupational health problems (Azaroff 2002; ILO 1998). In Florida, for instance, 33.4% of injured workers surveyed in 1999 expressed concerns about being laid off or fired as the result of suffering a work-related injury. (FDLES 1999). A similar survey of injured workers in Minnesota found that 21.3% of respondents were worried that they would be fired or laid off as a result of filing a WC claim (MacDonald 2000).

Primary access to WC medical care is also impeded by a lack of knowledge among workers, employers, and physicians about how the WC system works. Studies have shown that many employers and workers lack basic knowledge about the workers' compensation system including eligibility for medical care benefits and the procedures necessary to obtain care. Most of the participants in a focus group study in California reported receiving inadequate information from their employer about how to obtain medical care for a work injury (Sum 1996). Respondents to a survey of more than 8,500 injured workers in 10 states in 1997 indicated that only 61% of workers felt that they had received sufficient information about accessing workers' compensation care following their injury (Intracorp 1997). Over 21% of injured workers in Florida reported that they did not receive information from their employer after the injury about what workers' compensation benefits and services were available (FDLES 1999).

Eligibility for medical care under workers' compensation is also dependent on establishing that the patient's medical condition is caused by occupational factors. Work-related etiology must be established before workers can receive workers' compensation payments for medical care. For many conditions, such as a lacerated finger, determining whether work activities caused the injury is generally a straightforward matter. But there are other common conditions, such as nonspecific back pain and tendonitis of the hands, for which establishing the extent of occupational causation may be complicated and medically ambiguous. This inherent medical uncertainty can delay and potentially jeopardize access to care for affected workers (Dembe 1996). In addition, medical providers might be unfamiliar with the relationship between work activities and specific ailments or might not fully investigate a patient's occupational history. For example, 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). Workers suffering from unusual or emerging occupationally-induced diseases—such as acquired HIV infection among health care workers—face special problems (Tereskerz and Jagger 1997, Dembe 1992, Boden 1987).

A direct and potentially serious impediment to entering the WC medical care system is created when insurers deny coverage for a work-related injury. One recent study from Hawaii found that 12.8% of WC claims for medical treatment are denied at some point during the history of the case (Kelley and Amparo 2000). 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 observed among patients receiving care for hand and wrist disorders at an academic health clinic in New York City (Herbert et al. 1999). At that clinic, seventy-nine percent of 135 workers diagnosed with occupational carpal tunnel syndrome by clinic physicians 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 board. 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.

Secondary Access

Even if an injured worker is able to report a workplace injury, file a WC claim for benefits, prove that the condition is work-related, get the claim accepted by the employer's insurance carrier, and identify clinicians from which to seek care, there may still be significant barriers impeding the worker's ability to obtain needed medical services. For example, physicians may refuse to provide the care when approached, possibly because the available WC reimbursement fees are too low or perhaps because they feel that the administrative complexities and medical-legal exigencies of providing WC medical care are burdensome. In this regard, a recent study in upstate New York found that approximately 42% of physician practices refuse to accept WC cases (Lax and Manetti 2001). Frequently cited reasons for refusing to accept WC cases included: delays in payment for services as well as nonpayment; the time-consuming nature of WC cases, excessive paperwork, and distrust of the WC legal system.

Approximately 42 states currently regulate the medical provider fees available for care of work-related injuries and illnesses under workers' compensation. In some cases, the enactment of extremely low fee schedules—which might be politically attractive as a way of reducing system costs—can discourage and deter providers from accepting WC cases, thus creating another type of secondary access barrier for injured workers. Massachusetts, for instance, has among the lowest permissible WC medical care fees rates in the nation. In Massachusetts, allowable Medicare reimbursement rates for general medical care are 15 percent higher than the Medicare median rate for all states, indicating that health care costs in Massachusetts are generally higher than elsewhere in the country. However, at the same time, the Massachusetts workers' compensation fee schedule has been set at a level 26 percent lower than the median Medicare rate (Tanabe and Murray 2001). This striking imbalance apparently creates a powerful financial disincentive for medical professionals to accept WC cases. According to one physician who testified before a state panel exploring this issue; "I won't treat workers' compensation patients. I might as well see them for free. The fees are too low" (Kulich et al. 2001). A study sponsored by the California Society of Industrial Medicine and Surgery recently examined this issue comparing California's fee schedule, and its affect on access to medical services, to those existing in Massachusetts and Florida (another low-fee state) (Johnson et al. 2002). A physician survey conducted as part of this study found that only about 47-53% of neurologists and 79-88% of orthopedists in the low-fee states accepted WC cases and that the low reimbursement rates were indicated as a major reason why providers chose not to participate in the WC system. A similar conclusion was recently reached in Hawaii, where the Hawaii Legislative Bureau examined the problem and found that "the [low] medical fee schedule definitely appears to have had a negative impact on an injured employee's access to specialty care and diminished access to more experienced health care providers" (Martin 1998).

As in general medical care, authorization for care requirements and utilization review procedures are used for controlling over-utilization of services and containing system costs. But there is some evidence suggesting that utilization review processes are applied particularly aggressively in the workers' compensation setting, possibly owing to employer control over the purchasing of WC insurance and selection of the WC medical care plan. A recent national study of ambulatory medical care visits found that authorization for care was required approximately four times more often for WC cases compared to cases paid for by general (non-WC) health

insurance, after controlling for diagnosis, age, gender, region, location of care, and other factors (Dembe et al. 2002). Other studies have shown that the need for insurer authorization can delay and degrade the care provided to patients. Among a sample of WC claimants with low-back pain in Long Island, New York, the need to obtain insurer authorization was found to impede access to specialists and physical therapists, thereby delaying recovery and increasing net WC costs by 25% (Gallagher and Myers 1996).

Despite the comprehensive financial coverage afforded by workers' compensation insurance, it is not uncommon for medical care for work-related conditions to require outlays by injured workers, thus creating another potential barrier to obtaining medical care. For example, although WC ostensibly covers the cost of needed prescription medications, many WC plans require the injured worker to purchase the drugs out-of-pocket and then seek reimbursement for those payments through the filing of appropriate claims forms with the WC insurer. With the increasing cost of prescription drugs, which can easily top \$100 per pharmaceutical purchased, the need to make such an expenditure can deter some injured workers from obtaining the needed medication. It can also create an incentive for cost-shifting to other insurance systems. A recent study of prescription drug use among New York state civil servants revealed that 69% of injured workers eligible for WC medical care instead used their regular health insurance plan (with co-payments) for obtaining medications for their work-related injuries (Stapleton 2003). Other studies have also documented that some injured workers face a possible financial burden related to the need to make out-of-pocket expenditures for the care of work-related conditions. In a survey of New Hampshire workers with work-related back injury cases that had been accepted for coverage under workers' compensation, 21% of respondents reported making out-of-pocket payments for medical treatment of their injury (Pransky et al. 2000). Nearly a quarter (23.1%) of patients being treated for occupational injuries under workers' compensation insurance in California reported incurring nonreimbursed expenses for medical treatment of their injuries, with 2% making out-of-pocket payments exceeding \$500 (Rudolph et al. 2002).

Injured workers frequently experience substantial delays in obtaining WC medical care for a variety of reasons. A survey of 514 workers in ten states found that only 54% of injured workers were able to see a doctor on the first day of their work-related injury or illness (Intracorp 1997). Inadequate means of transportation to the care facility is one factor which commonly causes delays in care. The Intracorp survey found that even though 36% of all injuries were reported as emergencies, injured workers frequently had to arrange their own transportation or drive themselves to the doctor or hospital. The employer helped get the injured worker get to a clinician's location in only 20% of cases (Intracorp 1997). Many injured workers report substantial obstacles and delays in obtaining care from specialists and therapists, and from doctors providing "independent medical examinations" that may be required in the adjudication of disputed WC cases (Lax and Manetti 2001, NYCOSH 2003). Injured workers surveyed in Michigan reported extreme frustration and delays of several months before being able to see a particular medical specialist (Roberts and Gleason 1994). Similarly, surveyed workers cited inadequate access to specialists as a source of dissatisfaction with care provided in the Washington state managed care pilot program (Kyes et al. 1999).

Tertiary Access

Tertiary access problems involve difficulties in obtaining care that is directed appropriately at patients' needs and is effective in achieving desired outcomes. Care for injured workers under

workers' compensation has distinctive medical and rehabilitative needs that go beyond the conventional medical services typically delivered in the primary care setting. Because of the focus on restoration of vocational function and return-to-work, medical care for patients with work-related injuries and illnesses traditionally has been characterized by the intensive use of specialists, including physical and occupational therapists, to achieve functional rehabilitation and a rapid return to job activities. Special diagnostic tests and procedures, such as functional capacity evaluation and nerve conduction velocity measurement, are often applied in workers' compensation cases, not necessarily as medical imperatives, but rather to fulfill administrative and legalistic needs in the workers' compensation system. The patient's level of functional impairment frequently has to be ascertained by a doctor for the patient to qualify for disability payments. Special medical testing may also be necessary to substantiate occupational causation and eligibility for WC coverage.

These special aspects of WC medical care impose requirements that may not be adequately addressed by clinicians without special training in occupational medicine and workers' compensation. Studies have indicated that there are not a sufficient number of clinicians in the United States with special training in occupational medicine to meet these kind of patient needs (Baker and Landrigan 1990). An Institute of Medicine report concluded that primary care physicians are poorly trained to deliver the targeted diagnostic, therapeutic, and rehabilitative services required for appropriate care of patients with work-related injuries and illnesses (IOM 1988). Specific problems identified by the IOM included: the limited number of occupational medicine specialists; inadequate medical school training for primary care physicians in the principles of occupational medicine; insufficient funding for occupational medicine faculty in medical schools, lack of payment and reimbursement systems to compensate physicians for worksite assessment and prevention activities, fragmentation and poor coordination of medical services for injured workers; lack of technical support services for primary care physicians providing occupational care; and lack of knowledge about techniques for facilitating successful return to work.

Clinicians treating work-related injuries and illnesses should be familiar with the patient's place of employment and specific job requirements to assess work restrictions and readiness to resume work. Increasingly, however, doctors have little time and financial incentive to visit work sites or engage in prevention-oriented programs. In theory, medical providers can play an important role in facilitating accident prevention at the workplace by recognizing sentinel health events, making on-site assessments to help advise safety specialists about potential hazards and medical management of exposed workers, and by keeping records of diagnostic trends to be used in occupational health surveillance (Deitchman 2000). However, in practice, primary prevention is rarely effectively integrated or coordinated with medical services delivery for work-related injuries and illnesses (Dembe et al. 1998).

Primary care physicians' failure to fully investigate the potential occupational origin of patients' maladies have been well documented (Milton et al. 1998, McCurdy et al. 1998). Doctors often neglect to take a basic occupational history from their patients, thus making it more difficult to identify potential work-related conditions (Deitchman and Sokas 2001, Lax et al. 1998, Newman 1995, IOM 1988). In a study of medical examinations performed by third-year residents, patients under 40 years of age and adult women were found to be significantly less likely than older patients and adult men to have been asked about work experiences and job activities (McCurdy et al. 1998). Most physicians have not been trained in principles of functional capacity

assessment, disability prevention, and readiness for return-to work (McGrail et al. 2001, Wyman 1999, Dembe 1999).

Many workers report pervasive feelings of mistrust and suspicion surrounding workers' compensation medical care that can jeopardize the provider-patient trust that is essential for attaining optimal care and outcomes (Sum 1996, Rudolph 2002). More than a dozen workers interviewed in 2000 for a *Consumer Report* story on workers' compensation uniformly complained of doctors who hadn't read their medical records and of superficial examinations lasting less than 15 minutes (Consumer Reports 2000). A substantial proportion of focus group participants in a California study felt that doctors were "against the injured worker" and several commented that the treating physician caused further injury to the worker, that the physician did not understand the particular injury, or that the physician did not understand the nature of the worker's job (Sum 1996). Several participants in that study perceived that evaluating physicians operated "mills," were "unprofessional," and were "pro-insurance." The air of suspicion surrounding the medical evaluation of workers' compensation cases and clinicians' skepticism about the legitimacy of patients' disorders leads some workers to experience their interaction with medical practitioners as adversarial and humiliating (Reid et al. 1991, Imershein et al. 1994).

Surveys of injured workers have consistently shown a substantial level of dissatisfaction with workers' compensation medical care. A recent survey of injured workers in California found that 23.5% of respondents were "somewhat" or "very" dissatisfied with the medical care provided for their work injuries (Rudolph 2002). Many of the California injured workers reported shortcomings in the providers' communications and clinical behaviors including not listening well to the patient (reported by 22% of respondents), not showing courtesy or respect (27%), not explaining things understandably (30%), and not examining the patient thoroughly and carefully (36%). In a similar survey in Minnesota, 16% of respondents reported being somewhat or very dissatisfied with the care provided (MacDonald 2000). Eleven percent of the Minnesota respondents thought that the treating physician did not take their condition seriously, and 10% indicated that the doctor did not explain their condition in an understandable manner. Comparable results were obtained in a survey of injured workers in Florida in which 29% of respondents indicated that they were somewhat or very dissatisfied with the medical care received for work-related conditions and 17% reporting that their physicians could not answer questions about how their injuries or illnesses would affect their job functioning (Intracorp 1997).

Evidence suggests that tertiary access problems with the appropriateness and adequacy of WC medical care may disproportionately affect minority populations. A recent survey in California found that injured workers who were younger, Spanish-speaking, non-white, lower income, less educated, or laborers reported significantly lower satisfaction with the doctor-patient interaction (Rudolph et al 2002). Moreover, Spanish-speaking patients were less likely to be treated by physicians familiar with principles of occupational medicine. Studies of ambulatory care for work-related conditions have found that Hispanic patients were more likely to receive X-rays and need insurer authorization for care, and less likely to receive a prescription drug or to see a physician, compared to non-Hispanics (Dembe 2003). Compared to white patients, black patients with work-related conditions were found to be more likely to receive mental health counseling and physical therapy, and less likely to see a nurse, after controlling for diagnosis, age, gender, geographical region, and other factors.

Special WC Access-to-Care Problems Among Low Wage Workers

The problems in obtaining access to workers' compensation services are particularly acute for low wage workers. In California, over 5 million workers are employed in occupations with a median wage less than \$10 per hour (EDD 2000). Of these, nearly two-thirds are in occupations in which the annual income is less than \$20,000 per year. The largest occupations in this group are waiters and waitresses, cashiers, janitors and cleaners, food service workers, clerks, farm workers, cooks, hotel and garment workers. Five occupations are expected to post the largest growth in employment through 2008 (cashiers, waiters and waitresses, janitors, food preparation workers, and guards). Latinos, Asians, and African Americans are disproportionately represented among low wage workers. For example, nonwhite employment is greatest among garment workers (88%), farm workers (86%), and housekeepers and room cleaners (76%). More than 26% of California workers are immigrants, three times higher than in the rest of the United States (Schoeni 1996). A recent Los Angeles-based study found that 46% of the working poor in California were foreign-born citizens (More 2000). Over half of California's working poor are Latino, with large numbers of Asian immigrants from China, Korea, Vietnam, Thailand, and the Phillipines (Ross 2000). According to 1996 estimates, approximately one-third of foreign born residents of California are undocumented (US INS 1996).

Low wage workers face additional problems in securing access to health care coverage in general and to workers' compensation care in particular. Almost half of the working poor lack a high school diploma or GED, a potential problem in understanding employer training on how to file a workers' compensation claim. Nearly 48% of foreign-born non-citizen workers are uninsured, more than 2 1/2 times the rate for native-born workers. Sick leave benefits are usually not provided for many low wage workers, such as cooks and food servers (20%) and sewing machine operators (22%). These workers are not typically covered by a collective bargaining agreement—for example, a study in Los Angeles of the working poor found that only 4% were represented by a union (More 2000).

Many studies have documented difficulty in obtaining access to occupational health services among organized workers. For example, a recent Michigan survey of mostly unionized workers with work-related musculoskeletal conditions of the neck, back and upper extremities found that only 25% filed for workers' compensation. Severity of the illness and treatment by specialists were the most significant predictors of filing a claim (Rosenman 2000). There has been little data collected on the barriers to obtaining workers' compensation services among low wage workers. One recent study has documented the difficulty that these workers experience in obtaining access to care (Brown 2002). In this ethnographic study of low wage, low skill workers in Los Angeles County employed in day labor, restaurants, homes, garment factories and hotels, 37% indicated that they had not reported their work-related injuries to their employers. Most felt that they might suffer retaliation if they reported their injuries. In one typical interview, a garment worker reported about his experience with his work-related injury: "They don't have insurance...so you need to look out for yourself. They don't pay attention to you. Because they don't have insurance to cover us. Because really, if you don't claim it, you won't get paid anything. You always run into problems, always, always." Another study has documented that only one-third of California agricultural workers knew they were eligible for compensation (Villarejo 2000).

Low wage workers, particularly those who do not have health insurance, are most likely to lack a regular medical provider or to use public clinics or emergency rooms for their care. Other

workers, particularly from less populous immigrant groups, may seek care from private providers of the same ethnic background or who may speak their language or understand their culture. These clinic staff or other primary care providers often have little or no training in occupational health and may fail to recognize work-related problems. In one survey of garment workers seen at a community clinic in California, nearly one-third of those with work-related musculoskeletal injuries had never been seen by a health care provider, and only 3% had filed a workers' compensation claim (Lashuay 2002). Although only 22% had employer-paid health insurance, almost all workers were unaware of the option to file a workers' compensation claim to receive care for their injuries. The most frequently cited barrier to accessing care was language (46%), followed closely by the cost of care (40%). Fear of job loss or reprisals was reported by about 10% of these workers.

Strategies for Improving Access to Workers' Compensation Medical Care

The preceding examples illustrate that the relatively comprehensive insurance coverage provided under workers' compensation is not necessarily sufficient to assure the delivery of timely and appropriate medical care for injured workers. Employers, insurers, providers and health care systems, workers and workers' representatives, and government regulators will need to work together to ensure that WC medical care delivery is organized and financed in a way that minimizes obstacles to accessing care. While much can be accomplished voluntarily, government regulation and formal accountability measures may also be necessary, in part to protect the interests of minorities and marginalized workers who might not otherwise have the resources or support to affect needed system changes.

Provisions for assuring good access to WC medical care potentially can be included in the WC insurance policy or in the contractual agreements established between the WC insurer and its participating medical providers and health systems. Involving workers in the initial design and development of a WC medical care plan could help to identify potential access problems and devise appropriate responses. Specific access requirements that might be incorporated into WC insurance agreements and medical care plans include: precise time limits 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 periodic 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 the names, addresses, and telephone numbers of participating providers, enrollment and reporting forms, and (when applicable) medical identification cards. Provisions for providing transportation to the clinical site ought to be included in the WC medical care delivery plan. Special measures to help ensure that minority and disadvantaged workers are able to access appropriate care include: a) having multi-lingual and culturally diverse providers and staff available for WC patients, b) having trained interpreters available, and c) providing applicable patients with translated versions of literature, forms and facility notices.

State WC policymakers have a potential role in monitoring these efforts and making sure that insurers, doctors, hospitals, and participating health care systems deliver appropriate and timely care to injured workers. States can enact specific access-to-care requirements through WC agency regulations, state criteria for certification of WC health plans, and compulsory or voluntary

accreditation standards for providers and health systems. Examples of regulatory options available to state agencies include: structural requirements to ensure appropriately trained providers for WC care, internal and external audit processes for identifying and resolving access problems, measures for maintaining access to care during claims adjudication and disputes, and appeals and complaint procedures for injured workers who having trouble obtaining the care they want. Expanded state efforts may be needed to identify employers that fail to provide WC coverage, that improperly discourage the reporting of work-related injuries, or that attempt to suppress the filing of WC claims. State sanctions might also needed to curb unjustified insurer denials of coverage or insurer failure to authorize needed care in a timely way. Billing and reimbursement procedures and administrative processes required by treating physicians must be simplified and streamlined as much as possible to minimize clinicians' resistance to providing WC care.

Further research is needed to understand the consequences of delayed or obstructed access to care on WC system costs, employer productivity, and worker outcomes. Financial barriers (such as out-of-pocket payments), problems in obtaining referrals for specialist care, and problems in patient-provider communication need to be studied more extensively. Additional investigation is needed to determine the impact of reimbursement levels on physicians' willingness to treat WC cases, and on other determinants of the adequacy of care. We are optimistic that continued research will demonstrate that improved access to care is in everyone's interest, ultimately reducing WC costs for employers and insurers, boosting workplace productivity, achieving better health outcomes and reduced disability for injured workers, and enhancing providers' ability to deliver high-quality care efficiently.

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Figure 1: Aday and Anderson (1981) Model of Health Care Access

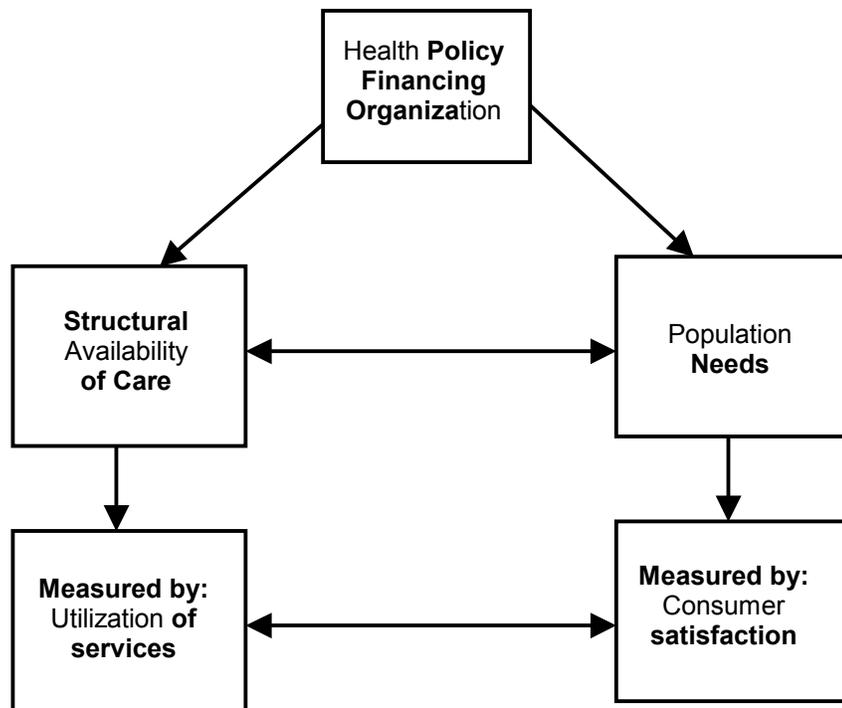


Figure 2: Weissman and Epstein (1994) Model of Health Care Access

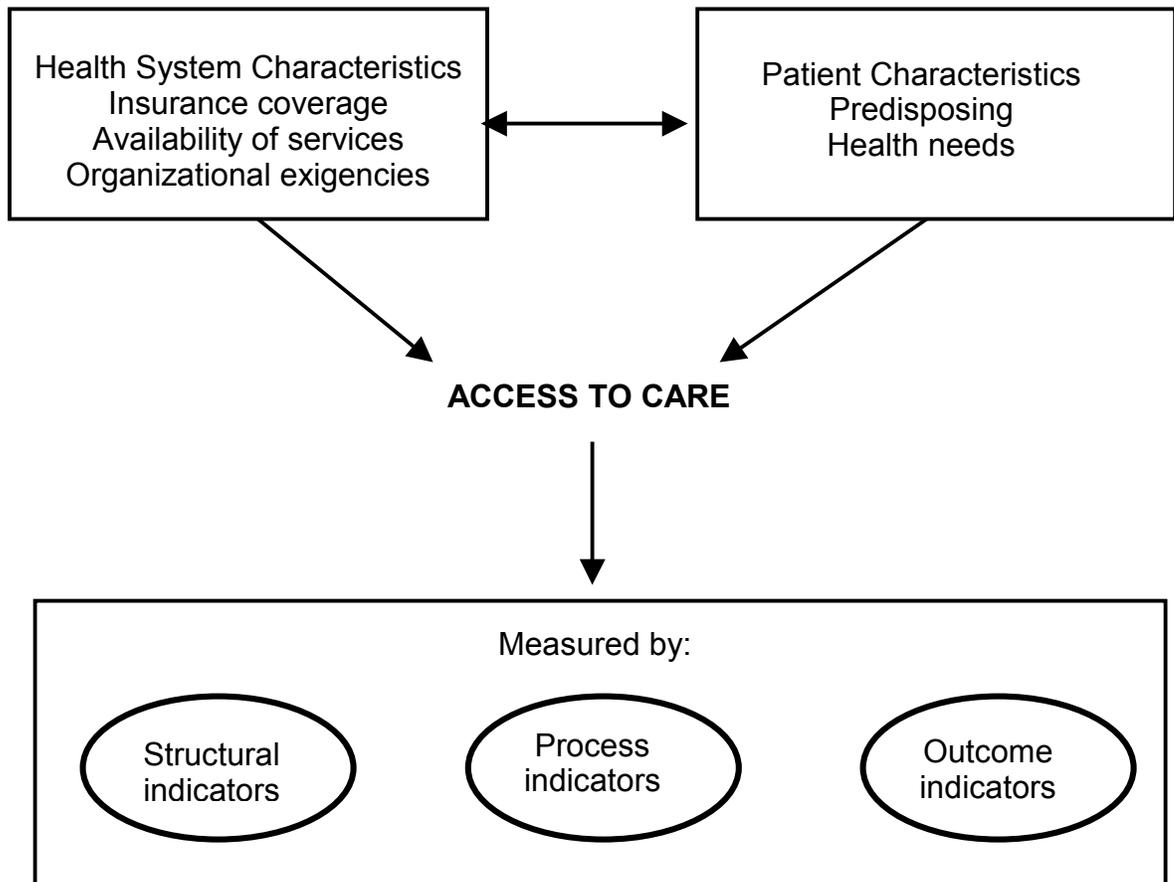


Figure 3: Bierman et al. (1998) Model of Health Care Access

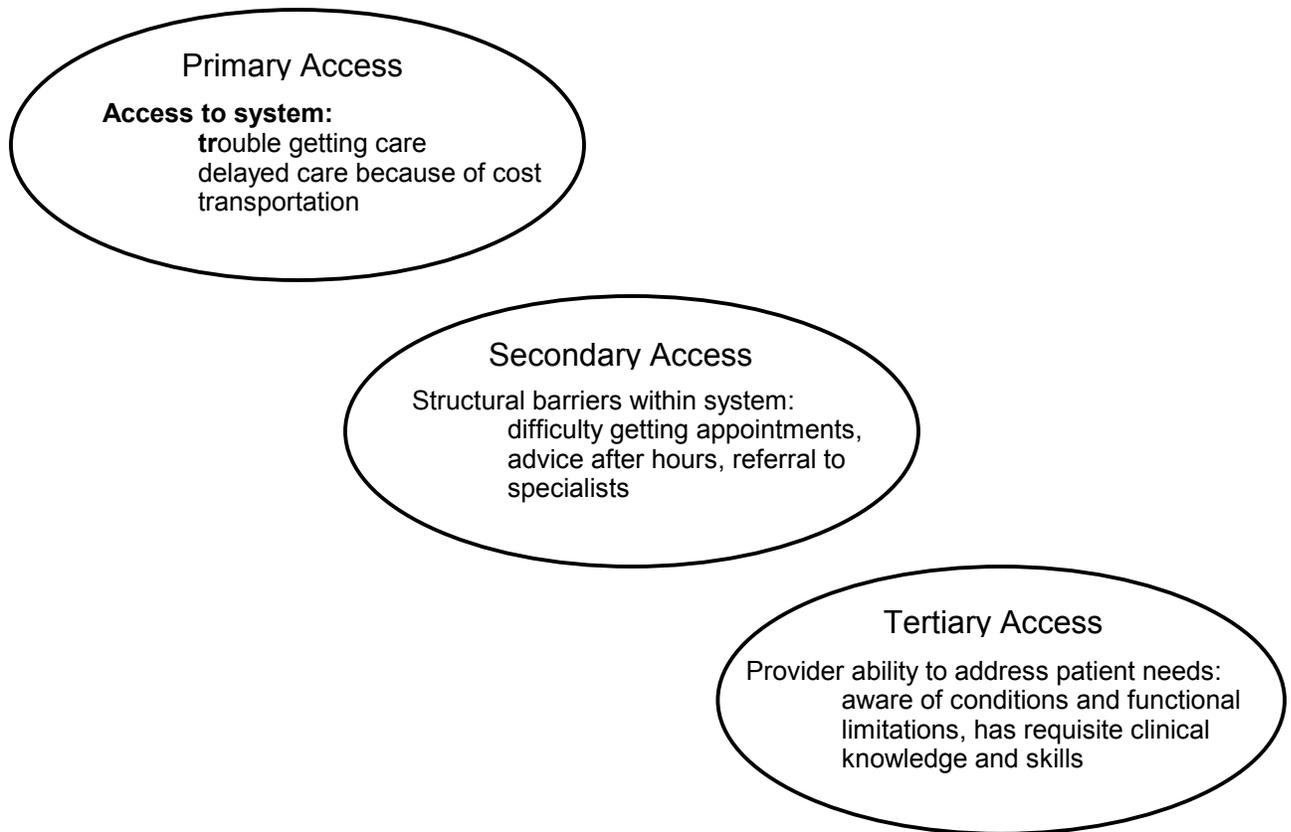


Table 1: Potential Barriers to Accessing Medical Care

	General Medical Care	Workers' Compensation Medical Care
Primary Access (blocked entry to the system)	Lack of insurance, under-insurance* Coverage and eligibility restrictions Insufficient number, type of providers Inadequate location of providers	Employer doesn't carry WC insurance** Coverage and eligibility restrictions Insufficient number, type of providers Inadequate location of providers Need to prove occupational causation** Insurer denials & group health exclusions** Employer suppression of reporting** Inadequate knowledge about WC filing**
Secondary Access (structural barriers within the system)	Limitations on services covered* Excessive premiums, co-pays, cost-sharing* Limitations on choice of provider Aggressive utilization review Inability to see specialists Delays in getting appointments	Limitations on choice of provider Low WC fee schedules in some states** Aggressive utilization review Inability to see specialists Out-of-pocket expenses (prescription drugs) Delays in getting appointments Lack of rehabilitation and therapy services** Medical-legal exigencies (e.g., IMEs)**
Tertiary Access (failure to address patient needs)	Inadequate knowledge and skills Poor provider-patient communication Cultural/language barriers Poor care continuity	Inadequate knowledge of occupational care** Poor provider-patient communication Cultural/language barriers Lack of coordination with general health care** Inability to assess job demands/function** Pressure to return to work prematurely** Few preventive services** Mistrust in WC impairs doc-patient relationship

* problems particularly distinctive to general medical care

** problems particularly distinctive to workers' compensation medical care