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Understanding Workers' Compensation Medical Care in California

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by

Allard E. Dembe, Sc.D.

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About the Foundation

The **California HealthCare Foundation**, based in Oakland, is an independent philanthropy committed to improving California's health-care delivery and financing systems. Formed in 1996, our goal is to ensure that all Californians have access to affordable, quality health care. For more information about CHCF, visit us online at www.chcf.org.

Contents

4	I. Introduction	
6	II. Basic System Characteristics	Obtaining Initial Care for a Work-Related Injury or Illness Comparison with General Health Care for Nonoccupational Conditions
11	III. Regulation of WC Medical Care	
12	IV. WC Medical Care Costs	
17	V. WC Medical Utilization Trends	Providers of WC Care Managed Care in California WC Twenty-Four-Hour Care
27	VI. Outcomes and the Quality of Care	
30	VII. Worker Experiences and Satisfaction with Care	
34	VIII. Prevention and Management of Work Disability	
36	IX. WC Medical Care: Building a System for the 21st Century	
38	Appendices	A. Glossary B. Abbreviations C. Understanding Workers' Compensation Costs
42	Endnotes	

I. Introduction

DRAMATICALLY ESCALATING COSTS IN CALIFORNIA'S workers' compensation (WC) system between 1995 and 2003 prompted the passage of sweeping reform legislation (SB 899) in April 2004. Because much of the inflation in the WC system was driven by rising medical costs and high use of medical services, policymakers adopted measures to restrict some types of services, allow employers to establish new forms of medical provider networks, and ensure that care conforms to a utilization review schedule tied to evidence-based treatment guidelines. The process of considering and enacting these changes sparked a broad reexamination of how the California WC system provides medical treatment to workers suffering workplace injuries and illnesses.

Workers, employers, medical providers, insurers, lawmakers, and others in the state are struggling to understand the system's operation and the ways that medical care for work injuries differs from conventional medical care that patients receive for nonwork-related conditions. They are finding that it is often difficult to locate and interpret reliable information about the function and performance of the system. Few comprehensive sources of information are available to guide individuals through the nuances of workers' compensation medical benefits, medical costs, and delivery of WC medical services.

This publication provides readers with essential information about medical care aspects of California's workers' compensation system, a summary of available research studies, and a guide to understanding recent changes. It is a companion to the four fact sheets on Workers' Compensation published in August 2003 by CHCF and the California Commission on Health and Safety and Workers' Compensation (available at: www.chcf.org). Some of the major recent system reforms affecting WC medical care in California are summarized in Table 1. A glossary of WC medical care terminology and list of abbreviations are available in the Appendices.

Table 1. Major Changes to WC Medical Care from Recent Reform Legislation in California
(See “Appendix B. Abbreviations” for the meaning of acronyms.)

AB 749 amended by AB486 . AB 749 signed into law February 15, 2002 AB 486 signed into law September 25, 2002	AB 227 and SB 228 signed into law September 30, 2003	SB 899 signed into law April 19, 2004
<ul style="list-style-type: none"> • Eliminated the treating physician’s presumption of correctness, except when an employee predesignated a personal physician. • Streamlined requirements for employer use of HCOs. Employers need to offer only one HCO to their employees. Allows for up to 180 days of employer control over choice of treating physician within the HCO, if non-occupational medical coverage is also provided. Exempts HCOs that are licensed as Knox-Keene Health Care Service Plans from the need to apply for certification from the DWC, but they still must file reports with the DWC like other certified HCOs. • Mandated adoption of pharmaceutical fee schedule by the state DWC and required pharmacies to offer generic drug equivalents when available. • Gave DWC authority to adopt an outpatient surgical fee schedule. • Limited disclosure of WC medical information to diagnosis, treatment, and information necessary for job modification. • Provided for electronic medical billing and a standardized billing form. Required conformity with HIPPA confidentiality standards. • Required the DWC to develop educational materials for physicians to help them understand the role of the treating physician, processes for evaluating permanent disability, and the writing of disability reports. 	<ul style="list-style-type: none"> • Required that every employer establish a utilization review plan, based on the ACOEM treatment guidelines (and for services not covered by ACOEM, on other professionally recognized guidelines). Establishes time frames for making and communicating utilization review decisions. • Limited chiropractic and physical therapy to no more than 24 visits for each service over the life of a claim. • Retroactively repealed the treating physician’s presumption of correctness for all dates of injury, unless the physician was pre-designated. • Abolished the Industrial Medical Council (IMC) and transferred its functions to the DWC. • Mandated that the DWC establish a medical treatment utilization schedule that is to be considered presumptively correct for legal purposes regarding the extent and scope of treatment. Adopted the ACOEM guidelines until the DWC develops the final utilization schedule. Repealed the treatment guidelines established previously by the IMC. • Mandated establishment of a new official medical fee schedule (OMFS). Established hospital and pharmaceutical fees based on fees used in the Medicare and Medi-Cal systems. Imposed an immediate reduction of 5% in fee rates for physician services. • Mandated that second opinions be required for spinal surgery. • Prohibited self-referrals by physicians to outpatient surgical centers in which they have a financial interest, unless they disclose that relationship. • Expanded the requirement for generic drug alternatives from pharmacies to all dispensers (e.g., hospitals, clinics, doctors’ offices). • Required payment of medical bills to be made within 45 working days. 	<ul style="list-style-type: none"> • Authorized the formation and use of medical provider networks (MPNs) by WC insurers and self-insured employers, and set standards for MPNs with regard to geographic coverage, availability of specialists, and the mix of occupational and non-occupational physicians in the network. Employees will generally be restricted to receive care from network providers throughout the life of a claim. • Included provisions for employees to obtain second and third medical opinions if they disagree with the treating physician within a MPN, and allows for requesting an Independent Medical Review (IMR) if there is still a disagreement after the third opinion. • Specified that all treatment under WC must be in accordance with the DWC’s utilization schedule or (until the schedule is developed) the ACOEM treatment guidelines. Required that all guidelines adopted by the DWC are to be evidence-based, nationally recognized, and peer-reviewed. Provided that the guidelines can only be rebutted in legal proceedings by scientific medical evidence. • Required employers to authorize payment for initial care prior to formal acceptance of the claim up to \$10,000. • Extended the 24 visit cap to visits for occupational therapy as well as physical therapy and chiropractic services. • Clarified the medical-legal dispute resolution process involving examinations by agreed medical evaluators (AMEs) and qualified medical evaluators (QMEs). • Specified that physicians will determine the level of permanent disability based on the AMA Guidelines. • Specified that the employer’s liability will be based on a medical determination about the proportion of disability that is attributable to a specific work injury. • Allowed for the establishment of 24-hour care plans within construction and other industries.

II. Basic System Characteristics

VIRTUALLY ALL EMPLOYED INDIVIDUALS IN CALIFORNIA are covered under workers' compensation, including immigrants, resident aliens, minors, and part-time workers. Only a few types of workers are excluded from coverage: certain domestic workers in private homes, unpaid volunteers in nongovernmental entities, casual laborers, and self-employed people who are not subject to the control and direction of an employer. California's Labor Code requires employers to secure and pay for WC coverage for their employees. Employers can satisfy these requirements by purchasing the insurance from commercial WC insurance companies, or through the State Compensation Insurance Fund (SCIF), a publicly owned nonprofit organization. Some larger employers set up a self-insurance plan to cover their workforce rather than purchasing WC coverage from an insurance company. Regardless of source, the employer is obligated to pay for the entire cost of WC coverage, without cost sharing, deductibles, or copayments by employees.

Under California state law, the employer's WC coverage pays for medical care and provides wage-replacement (called indemnity benefits) for injuries and illnesses that arise "out of and in the course of employment." To be eligible for WC benefits, a worker's ailment must be medically determined to be caused or aggravated by job activities. WC is a no-fault system, which means that benefits are paid without the need for determining whether the employer's or employee's negligence caused the injury. This structure was intended to ensure that workers are able to receive medical attention and income replacement promptly, while shielding employers from potentially costly litigation. The WC insurance pays for medical services that are reasonably required to cure or relieve the effects of a worker's injury or illness, and that conform to professionally recognized standards of care.

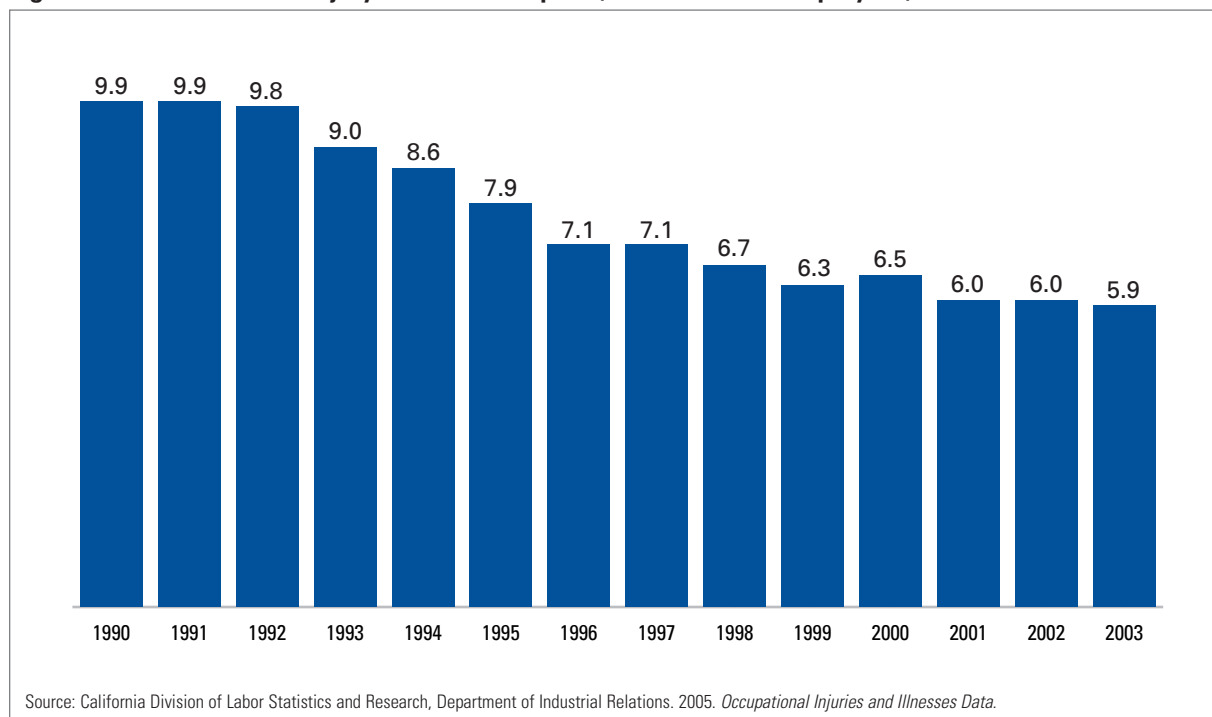
In addition, WC pays for medical equipment, transportation to appointments, prescription medications, and medical care that help restore the injured worker's capability to perform a job (e.g., physical therapy). Furthermore, WC also provides payment for medical providers to evaluate the extent of the injured worker's physical impairments and work restrictions and to assess the worker's readiness for return to work.

There are other common types of occupational medical services that are not covered under workers' compensation, including: pre-placement examinations; routine medical surveillance; preventive services (e.g., vaccinations for health care workers); drug testing; and on-site first aid. Typically, employers purchase these services directly from commercial vendors or provide them through the use of in-house medical staff.

Besides medical care benefits, workers' compensation provides four other types of benefits to injured workers: temporary disability benefits, permanent disability benefits, death benefits, and supplemental job displacement benefits in the form of a voucher for education-related retraining and skill enhancement.¹ The amount of these benefits depends on the nature and severity of the worker's condition. The extent of the injured worker's disability is typically determined by a medical provider in accordance with published disability evaluation guidelines.

Currently, about 15 million California workers are covered by WC insurance and more than a half million claims are filed each year. According to the Workers' Compensation Insurance Rating Bureau of California (WCIRB), WC premium costs paid by insured employers have risen from \$5.8 billion in 1995 to more than \$20 billion in 2003.² The WCIRB has projected that total WC system costs for injuries occurring during 2004 (for benefits paid out over the entire expected life of these claims) will exceed \$24 billion.³ The rise in WC costs has occurred despite a significant decline in the incidence of occupational injuries and illnesses during the past decade (see Figure 1).

Figure 1. California OSHA Injury and Illness Reports; Cases Per 100 Employees, 1990–2003



Obtaining Initial Care for a Work-Related Injury or Illness

When a worker suffers a job-related injury or illness, the injured worker is expected to notify the employer promptly and submit a WC claims form. The employer completes the form and files it with its WC claims administrator (either the employer's WC insurer; or in the case of a self-insured employer, with the employer's in-house claims manager or third-party administrator). The claims administrator is required to accept or deny the claim within 90 days after the claim is filed. Under California WC law, if a claim is not denied within that period, it is presumed to be compensable. Workers who have their claim denied are allowed to challenge the decision through an administrative adjudication process. Employers must authorize payment up to a maximum of \$10,000 for initial medical treatment (including emergency care) that the worker receives prior to the claim administrator's official acceptance of the claim, so long as the treatment given accords with the state's utilization schedule and treatment guidelines.

In California, the employer and its insurance administrator generally have the right to determine which medical provider the worker uses during the first 30 days of care. Thereafter, employees are free to select their own primary treating provider. Employers and employees who agree to have care delivered by a licensed health care organization (HCO) are governed by other rules regarding the choice of provider. Generally, under HCO plans, employers have additional time to control the choice of the medical care provider. New rules taking effect in 2005 allow employers to establish medical provider networks (MPNs), which are designated groups of providers approved by the state to offer WC medical services to injured workers. In an MPN, the employer or its insurer may select the worker's initial treating provider. After the first visit, the worker may select a different medical provider, but the provider must be in the network. Additionally, a worker receiving care within an MPN has the right to get a second or

third opinion from another network provider if the worker disagrees with the diagnosis or treatment offered by the primary treating clinician. If the diagnosis or treatment is still in dispute after that, the worker can request an independent medical review. Workers who were already receiving care from specific medical providers prior to the employer's establishment of an MPN can continue to use those providers if surgery is required, or if the worker has a serious, chronic, or terminal condition.

Employees who prefer to be treated by their own personal physician initially can do so if they have notified the employer in writing about their preference prior to being injured (called pre-designation) and if the physician agrees to be pre-designated. Pre-designation is only allowed if the worker's employer provides employees with non-occupational group health coverage through a health maintenance organization (HMO), HCO, or other health care plan as described in the California Labor Code (sec. 4600.5). Workers may still pre-designate a personal physician for initial care even if the employer has established a MPN. Only licensed physicians and surgeons are eligible for pre-designation; other clinicians such as chiropractors and acupuncturists cannot be pre-designated.

California's system for WC medical care presupposes that a designated health care provider will act as the injured worker's primary treating physician. Current WC law allows chiropractors, acupuncturists, psychologists, optometrists, dentists, podiatrists, and osteopaths, as well as traditional medical doctors (M.D.s), to serve as the primary treating physician. In addition, licensed nurse practitioners and physicians' assistants, while not qualifying as "treating physicians," are permitted to perform various care functions, including providing medical treatment of a work-related injury in accordance with their authorized scope of practice, qualifying a worker for up to three days off work, and co-authoring and signing the doctor's reports needed to be submitted to the state WC agency. Other types of health care specialists (e.g., physical therapists, audiologists) are

also permitted to provide care for injured workers, normally through referrals from the primary treating physician.

Comparison with General Health Care for Nonoccupational Conditions

In general, workers' compensation medical care differs from nonoccupational medical care in two important ways: (1) WC medical care is financed with exclusive purchasing by employers and requires no patient cost-sharing, and (2) It provides a broader array of treatment services due to the need for clinicians to evaluate the patient's disability and readiness to resume work and to provide medical services for recovery of vocational function. While general health insurance usually covers care only during the time period specified in the health insurance policy, WC insurance covers the costs of medical care for injuries that occur during the policy period, even if the duration of care provided to the patient extends beyond that period. This makes the ultimate cost of WC medical care less predictable and magnifies the importance to health systems and insurers of distinguishing between conditions that are job-related and those that are not.

In addition, the mix of cases seen among WC patients contains a greater proportion of acute injury and musculoskeletal disorders, and relatively fewer infectious or chronic diseases. Common types of occupational disorders include musculoskeletal ailments, sprains and strains, fractures, cuts, contusions, and other traumatic conditions. Back pain is the most frequently treated and costly type of condition covered under WC in California (see Table 2). While WC patients are generally working-aged adults, the system also covers adolescents injured at work, as well as elderly patients whose conditions stem from past workplace exposures. Table 3 compares aspects of WC and general medical care.

Table 2: Distribution of WC Medical Payments Among Top Ten Diagnostic Categories, 1993–2000 Claims

DIAGNOSTIC CATEGORY	SHARE OF MEDICAL PAYMENTS
Back pain, without spinal cord involvement	21.6%
Other injuries, poisonings and toxic effects	19.3%
Sprain of shoulder, arm, knee, or leg	6.9%
Wound or fracture of shoulder, arm, knee, or leg	6.3%
Back pain, with spinal cord involvement	5.5%
Tendonitis, myositis, and bursitis	5.0%
Joint disorders	4.8%
Minor wounds	4.6%
Cranial and peripheral nerve disorders	2.8%
Carpal tunnel syndrome	2.6%
Other categories (<2.6% each)	20.6%

Source: Swedlow A, Gardner, L. 2003. *Provider Experience and Volume-Based Outcomes in California Workers' Compensation*. Oakland, California. Workers' Compensation Institute (CWCI). February 2003.

Table 3. Comparison of General Medical Care and California WC Medical Care

	General Medical Care	California WC Medical Care
Care Financing	<ul style="list-style-type: none"> • Insurance can be purchased by employers, individuals and other entities, or funding for care can be provided by public funding sources. Many workers do not have health insurance. • Cost sharing by patients is common. Most employers that offer coverage require workers to pay a portion of the premium. • Payment to providers can be on a fee-for-service, capitated, or prospective payment basis. Fees are typically negotiated or established by government payers like Medicare or Medicaid. • Health insurance policies are typically written on an annual contract basis. 	<ul style="list-style-type: none"> • Virtually all employers are required to provide WC coverage for their workers through commercial WC insurance, self-insurance, or the State Compensation Insurance Fund. • There is no cost sharing, deductibles, or copayments required by patients. WC provides first dollar, 100% payment for care. • Almost all payment is on a fee-for-service basis. The use of capitated payment plans is uncommon in California's WC system. Many fees are regulated by the state. • WC policies are generally for one year, but medical care payment for injuries occurring during that period can extend far into the future.
Access to Care	<ul style="list-style-type: none"> • Care is normally provided for a variety of conditions. Routine and preventive care is commonly included. • Patients can typically select a primary care provider. In some plans, the provider must be chosen from a designated list or from members of a provider network. 	<ul style="list-style-type: none"> • Care is provided only for injuries and illnesses that are determined to be work-related. Care often includes evaluation of disability, work capabilities, restoration of vocational function, and assessment of readiness to resume work. • In California, the employer has control over choice of the primary treating provider for the first 30 days after an injury (unless the worker pre-designates a personal provider). Thereafter the employee can choose. Beginning in 2005, employers can restrict all WC care to a designated medical provider network.
Quality of Care	<ul style="list-style-type: none"> • Quality measurement standards exist (e.g., HEDIS) and quality measurement and reporting is performed by many provider organizations. • Providers focus on providing appropriate care, achieving desired health improvement, alleviating symptoms, and addressing patient needs. Many providers have limited knowledge of workplace demands, occupational health principles, and workers' compensation. • Treatment guidelines are becoming more common, as increasing emphasis is placed on evidence-based practice, but their use is rarely legally mandated. 	<ul style="list-style-type: none"> • Although a few quality standards have been proposed (e.g., URAC), systematic quality measurement and reporting is uncommon. • Along with conventional diagnostic and therapeutic care, providers also focus on vocational function, minimizing work disability, and addressing employer as well as patient needs. Providers are commonly familiar with job demands, occupational hazards, workers' compensation, and return-to-work strategies. • California WC regulations require adherence to treatment guidelines that are specific to the care of particular work-related conditions.

III. Regulation of WC Medical Care

VARIOUS ASPECTS OF WORKERS' COMPENSATION MEDICAL care in California are regulated by the Division of Workers' Compensation (DWC) of the California Department of Industrial Relations (DIR). The administrative director of the DWC is ultimately responsible for developing and promulgating regulations governing the official medical fee schedule (OMFS); medical provider networks, and workers' compensation HCOs; the state's WC utilization schedule and treatment guidelines; and specific reporting requirements for medical providers delivering WC services. In 2004, the DWC also assumed responsibilities that were previously fulfilled by the Industrial Medical Council (which was abolished in 2003 by the passage of SB 228). Those functions include examining and appointing physicians to be qualified medical evaluators (QMEs) and overseeing the state's medical-legal evaluation process.

The Workers' Compensation Appeals Board (WCAB), a unit of the DIR, has jurisdiction over the WC dispute resolution process. When a dispute cannot be settled, the case may be heard by a DWC administrative law judge. The WCAB is responsible for regulating the adjudication process and hearing appeals for reconsideration of decisions made by the administrative judges.

The California Department of Insurance (CDI) has authority for regulating, investigating, and auditing insurance business practices to ensure that companies remain solvent and meet their obligations to insurance policyholders. With respect to workers' compensation, the CDI primarily deals with rating and underwriting issues. The CDI reviews and approves WC rate filings, investigates potential WC insurance fraud, audits premium filings, and monitors WC insurer solvency.

The Workers' Compensation Insurance Rating Bureau (WCIRB) is not a state regulatory agency, but rather a nonprofit association comprised of all companies licensed to transact WC insurance in California. The WCIRB is a licensed rating organization and the designated statistical agent of the California Insurance Commissioner; it collects and analyzes WC statistical information regarding premiums, benefit payments, and administrative costs to help establish advisory premium rates for various business types.

IV. WC Medical Care Costs

HISTORICALLY, PAYMENTS FOR MEDICAL CARE HAVE comprised a smaller proportion (about 40 percent) of total workers' compensation costs than have payments for indemnity benefits. Beginning in the early 1990s, WC payments for medical care of work injuries began to escalate sharply, exceeding the rate of growth in general (nonoccupational) medical care costs. California's WC system, like those of most other states, adopted managed care and cost-control measures in the early 1990s in an attempt to stem this trend. But by the late 1990s and into the 2000s, the surge in WC medical care costs remained unchecked. Several factors contributed to the rise in medical costs, including: high utilization levels for physical therapy and chiropractic care; a relatively low use of managed care plans in California's WC system, the absence of effective mechanisms to ensure that service use conforms with recognized treatment standards, increased use of outpatient surgical facilities that were not governed by WC fee regulations, and growth in pharmaceutical use and prices. Recent reform legislation passed between 2002 and 2004 aimed at curbing many of these cost drivers.

Interpreting workers' compensation cost estimates often can be confusing because of subtle distinctions involving the type of benefits provided (e.g., medical and indemnity), the timing of benefit payments (e.g., those already paid and those reserved for the future), the consideration of non-benefit expenses (e.g., legal, administrative, and cost containment), the inclusion of costs from self-insured as well as insured employers, and the date at which the cost estimates are made. An example to help clarify these distinctions is provided in Appendix C.

WC System Cost Estimates

Total California WC system costs—including medical payments and payments for indemnity benefits to injured workers, reserves for future payments, and administrative expenses—were estimated to be about \$25.1 billion in 2003, representing an increase of 264 percent since 1995.⁴ The cost for employers to purchase WC insurance in 2003 (i.e., premiums) was about \$21.4 billion, not including self-insured employer costs (see Figure 2 on the following page).⁵ As a percentage of payroll, employers spent

about \$5.55 per \$100 of payroll for WC insurance premiums in 2004, up from \$2.30 in 1999 (see Figure 3).⁶

System-wide, approximately \$11.9 billion in WC benefits were paid out in California in calendar year 2003, \$6.09 billion for medical care and \$5.79 billion for indemnity benefits (this estimate does not include reserves for future payments). The average total incurred cost for a California WC indemnity claim for accident year 2003 was estimated (as of September 30, 2004) to be \$50,441 (this estimate includes payments already made plus reserves for future payments).⁷

The incurred cost of a WC claim is the estimated total indemnity and medical benefits payments made over the entire life of a claim. For example, a claim for a serious accident occurring in 2003 might incur payments for many years afterwards. Therefore, paid costs (costs paid for claims in a particular year) will always be less than the incurred

Figure 2. Growth in Written WC Insurance Premiums (excluding self-insured), 1996–2004

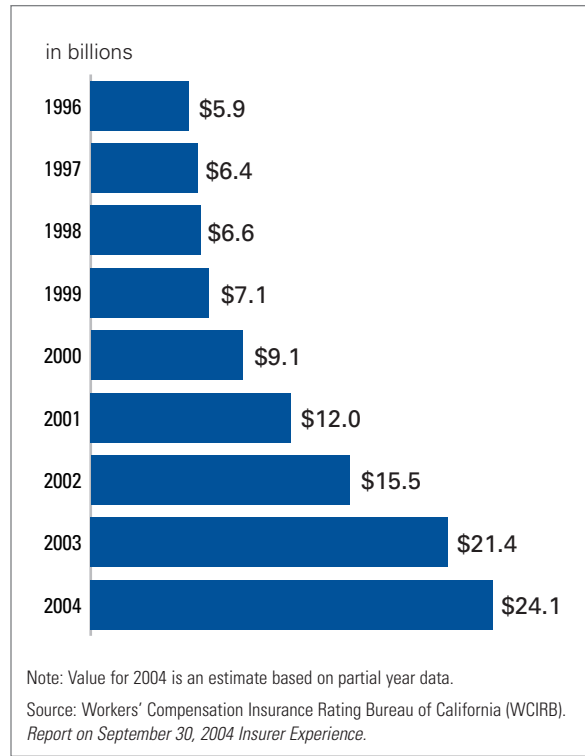
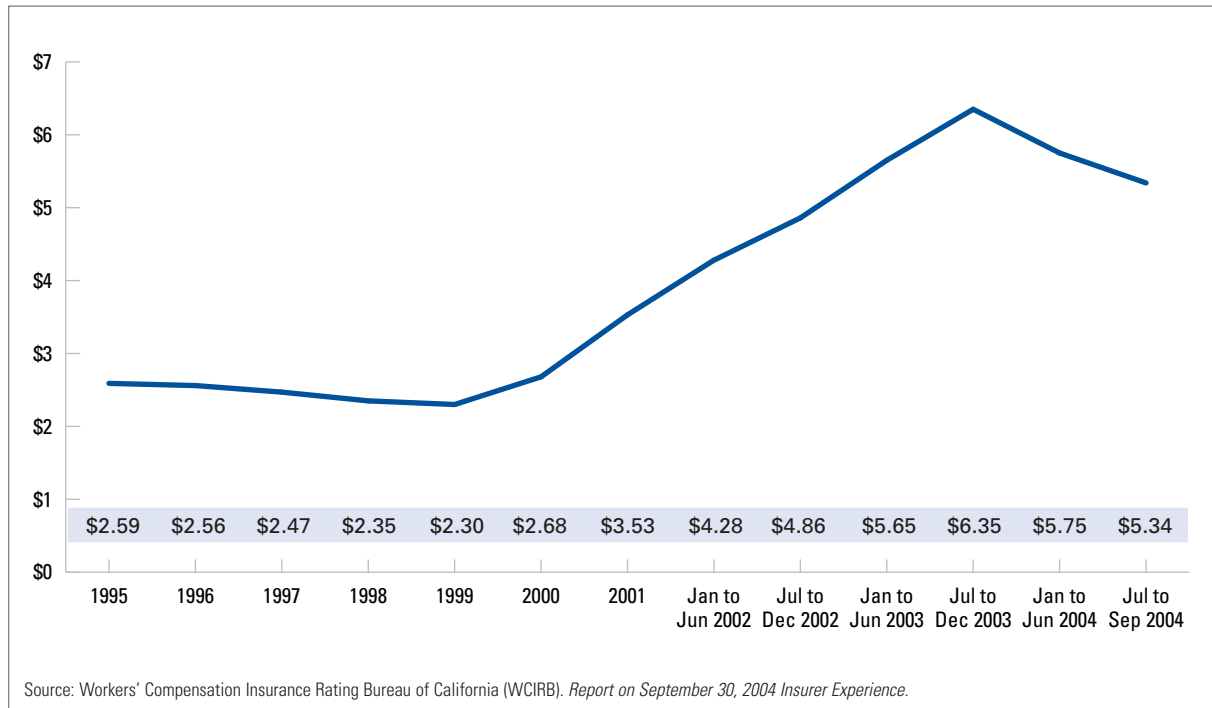


Figure 3. Average WC Insurance Premiums Per \$100 of Payroll, 1995–2004, valued as of 9/30/04



costs for claims originating in a particular year. An accident year refers to claims covering accidents occurring in a particular year. An illustration of these concepts is available in Appendix C.

WC Medical Cost Estimates

In 2003, medical payments by insured employers (excluding self-insured) totaled about \$4.87 billion, up 42 percent from 2001 and 147 percent from 1996 (see Figure 4). By comparison, during the same period (1996 to 2003), total national medical care costs rose by 62 percent (\$1.68 trillion versus \$1.04 trillion).⁸ Medical care expenses, in 2003, accounted for about 51.3 percent of all WC benefit payments (the remaining 48.7 percent were indemnity payments), up from 42.3 percent in 1996 (see Figure 5).⁹

The average incurred medical costs of WC indemnity claims for accident year 2003 were estimated (as of June 30, 2004) to be \$28,532, which is 222 percent higher than the estimated incurred medical cost of \$8,856 for accident year 1993 claims.¹⁰ In

Figure 4. Total WC Paid Costs per Calendar Year, 1995–2003, valued as of June 2004

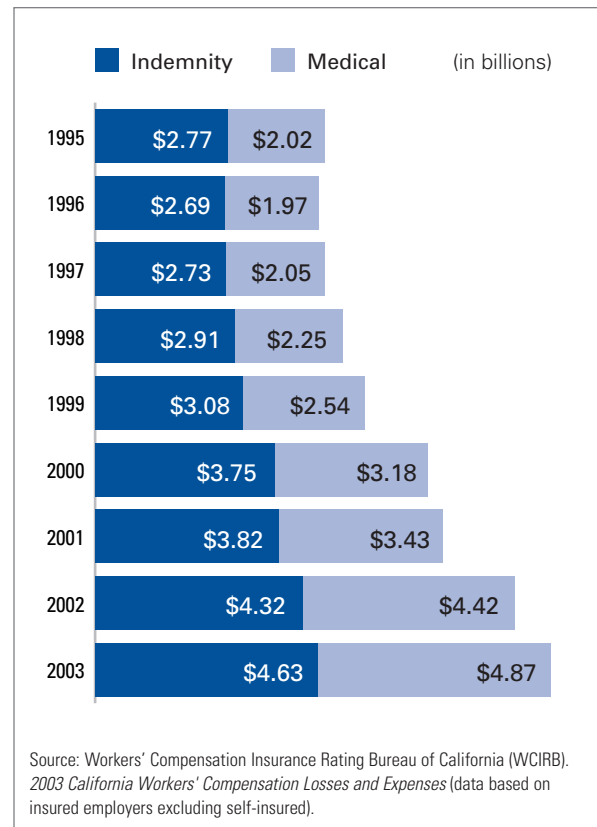
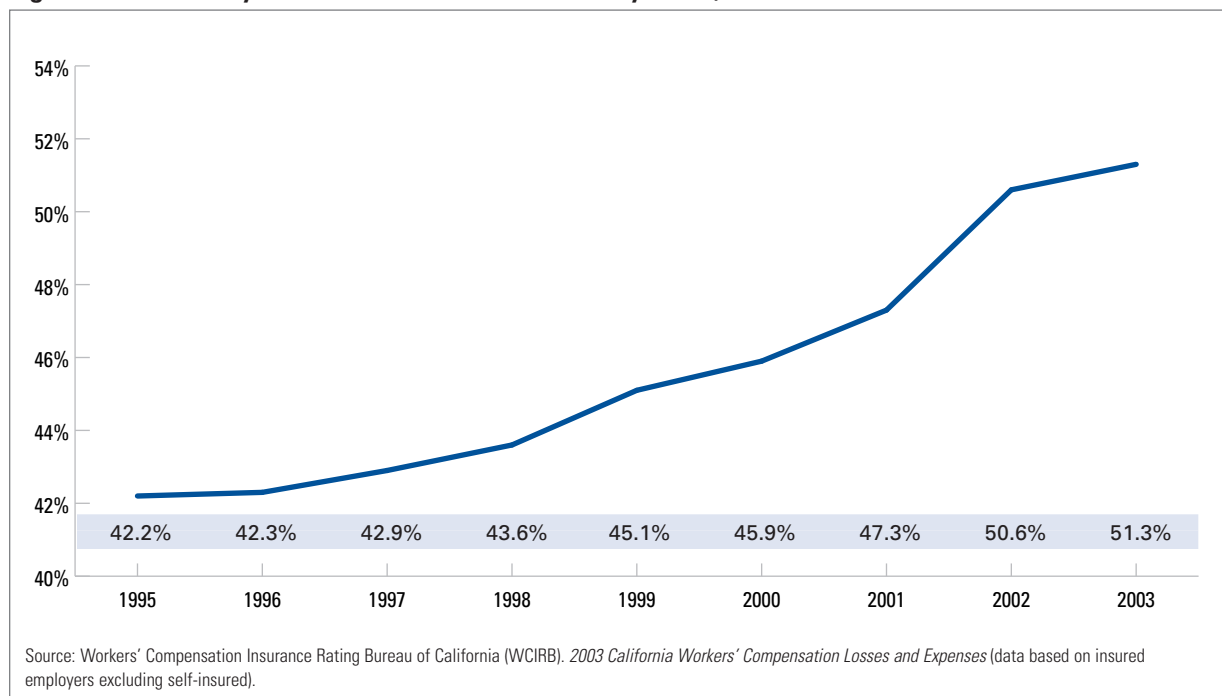


Figure 5. Medical Payments as Percent of Total WC Payments, 1995–2003

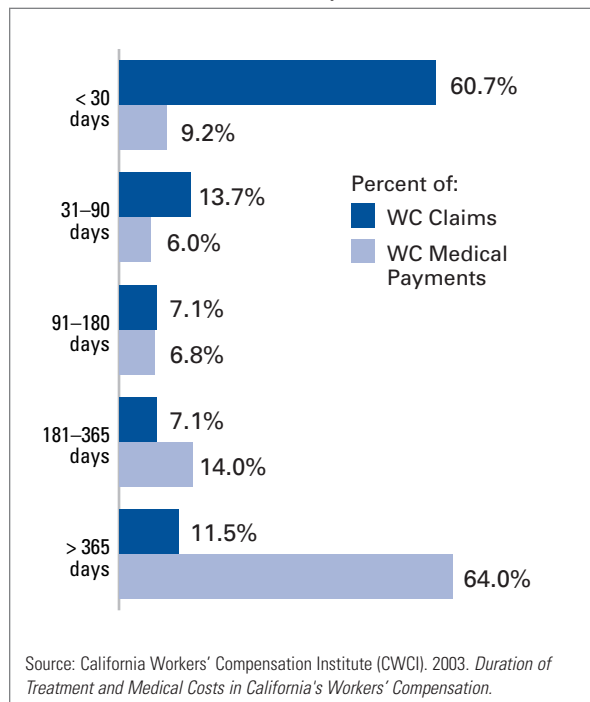


workers' compensation, a small proportion of serious claims typically accounts for a large proportion of the total costs. For example, as indicated in Figure 6, less serious claims involving less than 30 days of medical treatment represent 60.7 percent of all claims but only 9.2 percent of the cost, whereas serious claims involving more than a year of care account for just 11.5 percent of claims but nearly two-thirds (64.0 percent) of total WC costs.¹¹ The average (mean) costs of WC claims will thus usually be significantly larger than the median cost of a claim (i.e., the mid point, with half the claims costing more than the median and half less). For example, a nationwide study of WC claims in the construction industry found that in 2000, the mean paid cost of a WC claim was \$7,542 while the median paid cost was \$3,360, less than half as much.¹²

Declining Frequency of WC Claims

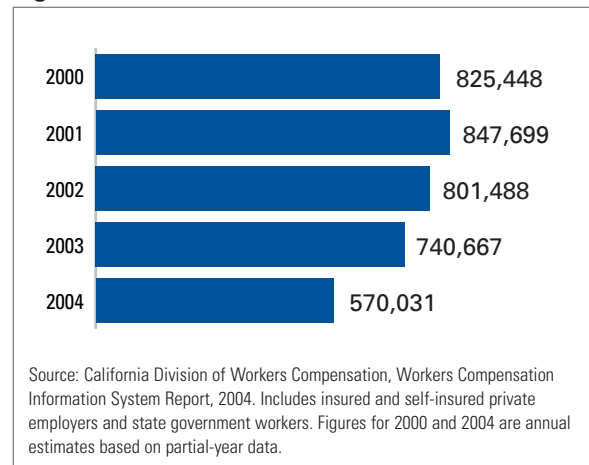
At the same time that WC costs have been increasing, the frequency of reported work-related injuries and illnesses in California and WC claims filings have been steadily declining. Cal-OSHA-reportable

Figure 6. Percentage of WC Claims by Duration of Medical Treatment, 1993–1999 Claims



injuries and illnesses have fallen from an annual rate of 9.9 per 100 employees in 1991 to 5.9 per 100 employees in 2003, a decrease of more than 40 percent (see Figure 1).¹³ The annual number of WC claims filings declined by more than 30 percent between 2001 and 2004 (see Figure 7).¹⁴ Thus, the growth of WC medical costs apparently is not a result of rising injury rates, but rather is primarily the result of increasing use of medical services and growing medical costs for some services (e.g., pharmaceuticals) in the WC system.

Figure 7. Estimated Annual WC Claims, 2000–2004



Duration of Claims

The Work Loss Data Institute (WLDI), a private medical database development company, reports that, on average, California WC claims have longer duration per claim than elsewhere in the United States.¹⁵ A WLDI study found that, in 2000, the median number of days missed from work per WC indemnity claim in California was eight, compared with a national median of six days per claim for the United States as a whole (ranging from a low of four days in Georgia, Indiana, and Virginia to a high of 17 days in Puerto Rico). Another study of insurance claims data found that, in 2000, a California WC claim averaged 21.8 weeks of medical care, a duration considerably longer than in eight other states studied (in which the median average duration of medical care was 14.5 weeks).¹⁶ These studies suggest that California's relatively high

medical costs per claim may be driven, in part, by the relatively long duration of WC claims in this state.

Costs of Medical-Legal Evaluations

Medical-legal examinations are conducted by physicians for the purpose of gathering evidence in disputes between insurers and injured workers about whether the injury happened on the job, the extent of impairment, readiness to resume work, and other matters. Medical-legal examinations are performed in approximately 22 percent of California WC indemnity claims (with more than seven days of lost time), about twice as often as in other states.¹⁷ Payments for WC medical-legal evaluations cost an estimated \$160.4 million in 2003, representing about 2.6 percent of all medical care payments.¹⁸ Orthopedists provided most of the medical-legal evaluations (73 percent); psychiatrists conducted roughly 9 percent.¹⁹

Comparing WC and Non-WC Medical Costs

Payment for medical care under workers' compensation is generally costlier than similar treatment under other forms of health insurance (e.g., group health insurance, Medicaid, and Medicare). For example, WC hospital stays cost 30 percent more on average than inpatient stays for the same diagnostic conditions covered under employer-based health insurance.²⁰ Similarly, the prices paid for prescription drugs under WC are about 40 to 45 percent greater than what large employers in general health plans pay.²¹ Studies indicate that in general, WC medical treatment costs in California are 50 to 100 percent higher than treatments paid for similar disorders by group health insurance.²²

A 1996 study comparing costs of care for WC patients to care provided through general health insurance found that WC medical care costs in California for specific kinds of work-related ailments (e.g., low-back pain; sprains, strains and lacerations; inflammation, laceration, and contusions; and fractures) were on average 2 to 5 times

higher. The authors of that study concluded that most of the differences in cost between the WC and non-WC cases could be attributed to use of services and mix of providers, rather than to higher average prices per service.²³

A study of California WC inpatient cases from 1998 and 1999, found the average payment for a WC hospitalization was \$9,637, compared with \$7,428 per inpatient stay for similar diagnostic conditions under group health insurance. For hospitalizations involving spine surgery, the average amount paid for a WC hospitalization was \$12,459, compared with \$8,280 for an inpatient case paid for under group health insurance, a difference of more than 50 percent. Compared with Medicare hospitalizations, WC inpatient cases cost on average 9 percent more (\$9,637 versus \$8,864) even though WC inpatient care involved fewer procedures per admission (1.95 versus 2.04) and a shorter average length of stay (5.04 versus 5.71 days).²⁴ This study suggests (unlike the study cited in the previous paragraph) that the higher WC costs for hospitalized care may be due to comparatively higher hospital reimbursement rates rather than to greater use of services. Additional research is needed to clarify the observed cost differences for inpatient care.

V. WC Medical Utilization Trends

IN CALIFORNIA, MOST WORKERS' COMPENSATION medical services are provided on an outpatient basis. Compared with general health care, there is a low level of inpatient hospitalization in WC.²⁵ In 2003, hospital costs accounted for 27.5 percent of WC expenditures and accounted for 30.7 percent of all medical expenditures nationally. Similarly, the use of pharmaceuticals in WC medical care has historically been lower than in general health care²⁶—although, since 2000, prescription drug costs and use have increased substantially in California's WC system. Because workers' compensation care is concerned with restoring vocational function and facilitating an injured worker's successful return to work, there is typically a wider range of rehabilitation and therapeutic services involved in WC care than in general care for non-injured populations. Also, there is often a need in WC medical care for medical providers to perform special assessments to estimate the extent of workers' physical impairments and functional capacities. These special aspects of WC medical care may contribute to the observed higher costs and greater use of care provided for injured workers under WC.

Service Volume

Interstate studies have shown that California exceeds other states both in the number of WC medical services provided per visit and the number of medical visits made per WC claim. A comparison of twelve states by WCRI, based on data from accident year 1999, found that the average number of medical visits per WC indemnity claim in California (with more than seven days lost time) was 59 percent higher than the average in eleven other states (29.7 versus 18.7 visits per claim). The study also found that California WC cases resulted in 12.5 percent more services provided on average per medical visit (3.6 versus 3.2), a considerably higher (75.2 percent) average number of services per claim (108.1 versus 61.7), about the same average medical payments per claim (\$5,667 versus \$5,814), and a 45 percent lower average price per service (\$57 versus \$104). Based on these data, the WCRI concluded that the number of visits per claim (and not the price per service) is principally responsible for driving medical costs in the California WC system.²⁷

According to the WCRI study, the average medical cost for all WC claims in California (\$1,733) was 14 percent higher than in the other states (\$1,520); even though the average medical cost for claims with more than seven days of lost time was 3 percent lower. The difference can be attributed to California's higher percentage of claims with more than seven days of lost time.

Another study, which compared WC medical services in nine states, found that California ranked substantially higher in pharmaceutical costs per claim; number of prescriptions per injured worker; number of office visits per claim; and the number of services provided per claim, including manipulations (chiropractic, osteopathic, etc.), physical medicine services, and electrophysiology tests (see Table 4). By contrast, California rated no higher than the other states with respect to the number of MRI scans provided per patient; it ranked

somewhat lower with respect to the percentage of patients with lower back injuries who received lumbar fusions and laminectomies.²⁸

In another study comparing the medical care for similar conditions provided under general health insurance, WC patients in California had on average 8.4 times more physician visits (11.8 versus 1.4), 3.6 times more chiropractor visits (13.0 versus 3.6), and 2.5 times more surgeries (.20 versus .08). In addition, WC patients received 25 percent more lab tests (.69 versus .55), and 76 percent more x-rays (1.76 versus 1.0) per injury; and were 2.5 times more likely to see more than one physician per injury (39 percent versus 15 percent).²⁹

Table 4. Comparison of Services Provided in California vs. an Eight-State Average (CO, FL, GA, KY, MN, NJ, OR, TX), 1997 Accident Year

	CALIFORNIA	OTHER STATES
Average WC Pharmaceutical Cost Per Claim	\$320	\$164
Average Number Per Injured Worker with Any of 10 Top WC Diagnoses:		
Prescriptions	8.0	5.1
Office Visits	7.6	5.1
Manipulations	23.7	12.7
Therapeutic Exercise Treatments	18.3	17.1
Physical Medicine Modalities	36.6	18.6
Injections	3.9	3.6
CT Scans	2.6	2.5
MRI Scans	1.8	1.9
Electrophysiology Tests	9.9	7.2
Those with Low Back Soft Tissue Injuries Who Received:		
Therapeutic Exercises	71.9%	43.5%
Manipulations	39.0%	29.4%
Lumbar Fusions	0.7%	1.0%
Laminectomies	2.1%	3.3%

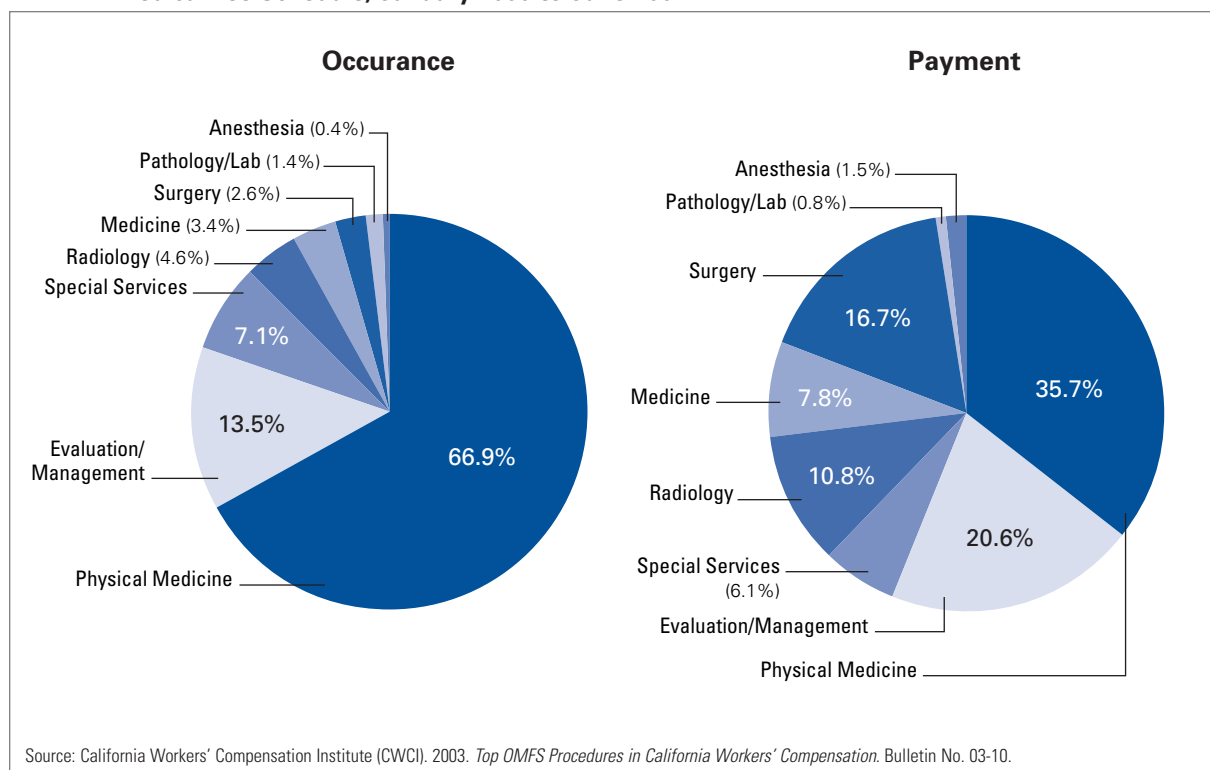
Source: Harris J, Bengle A, Makens P. 2001. *Striking the Balance: An Analysis of the Cost and Quality of Medical Care in the Texas Workers' Compensation System: A Report to the 77th Texas Legislature*. Austin, Texas: Texas Research and Oversight Council on Workers' Compensation (TROCCWC) and Med-FX, LLC.

Types of Procedures

In 2001, the California Official Medical Fee Schedule (OMFS) governed provider fees for more than 7,000 medical procedures. A CWCI analysis found that between January 2000 and June 2002, a small proportion of those treatments—the 150 most heavily used types—accounted for the majority (53.6 percent) of the total payments made for procedures covered by the OMFS.³⁰ Physical medicine treatments (e.g., electrical stimulation, therapeutic exercise, and chiropractic manipulation) were the most common type, accounting for two-thirds (66.9 percent) of all OMFS procedures (see Figure 8, Occurance). Other common types of procedures included radiology, surgery, and procedures required for evaluation and management of the patient’s condition. While the mean cost for all OMFS procedures was \$47.41, the mean cost for physical medicine procedures was only \$24.76. Therefore, physical medicine procedures accounted

for a disproportionately lower share (35.7 percent) of the total expenditures for OMFS procedures (see Figure 8, Payment). By contrast, surgical procedures made up only 2.6 percent of all OMFS procedures, but accounted for a disproportionately higher proportion of OMFS costs (16.7 percent). It should be noted that the CWCI analysis excluded procedures that were not covered by the OMFS during the study period, which collectively accounted for approximately 43 percent of all WC medical payments.

Figure 8. Distribution of WC Medical Procedures and Payments for Procedures Regulated by the Official Medical Fee Schedule, January 2000 to June 2002



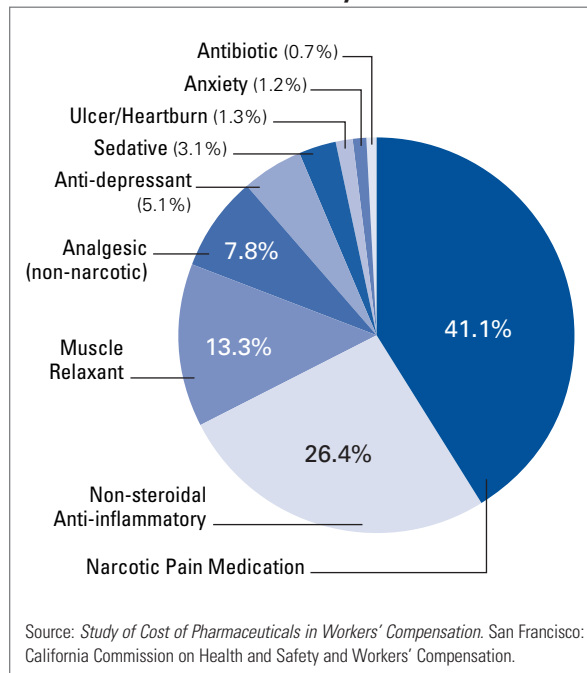
Prescription Drugs

There are approximately 3 million pharmacy transactions each year in California paid by workers' compensation.³¹ WC pharmacy costs increased from \$86.4 million in 1997 to \$569.4 million in 2003, a rise of 559 percent.³² The estimated cost of prescription drugs in the California WC system is now \$569 million annually.³³ Pharmaceuticals, as a share of all WC medical expenditures, has grown steadily, increasing from 3.8 percent in 1996 to 9.3 percent in 2003.³⁴ The most common types of prescription medications used in California's WC system are: pain medications, muscle relaxants, and anti-depressants (see Figure 9). About 90 percent of the prescriptions written in California's WC system are for the treatment of musculoskeletal conditions.³⁵

WC legislation, which took effect in 2003 (AB 749), required that dispensing pharmacists substitute a generic drug for the brand-name equivalent if one is available, and if the physician has not specifically countermanded that substitution. Additional

legislation (AB 227 and SB 228) taking effect in 2004 extended that mandate to all dispensers (hospitals, clinics, doctor's offices). Those statutes also changed the reimbursement rates within WC by establishing a pharmaceutical fee schedule that mirrored the one used in the Medi-Cal system. In general, the Medi-Cal rates were considerably lower than the prevailing OMFS pharmacy rates (an average of 35 percent). This change raised concerns about whether patients would have proper access to pharmaceutical care.³⁶ A survey of California pharmacists conducted in 2004 found that 50 percent of chain pharmacists and 58 percent of independent pharmacists said that they would "often" or "always" refuse to accept WC patients because of the reduction in allowable fees.

Figure 9. Distribution of WC Prescription Drug Usage (Number of Prescriptions), by Type, 1998–1999 Pharmacy Transaction Data



Providers of WC Care

In DWC surveys, 63 percent of injured workers reported that a licensed medical doctor (M.D.) provided most of the care for their injury; 15 percent said most of their care was provided by a physical therapist; 6.5 percent by a chiropractor; and 2 percent by a physician assistant.³⁷ WCRI data indicate that as of 1999, 90 percent of the primary treating providers for WC claimants were medical doctors, 5 percent were chiropractors, 1 percent were physical therapists, and 4 percent were other health care professionals.³⁸ The differences between the DWC and WCRI estimates are likely the result of the specific definitions used. WCRI distinguished primary providers from initial providers. Initial provider was defined as the first nonemergency clinician to see the injured worker; the primary provider was defined as a clinician who is not an initial provider but who made the major decisions about the care that the worker needed and either provided that care or directed the worker to a clinician who could provide the care. Thus, under the WCRI definitions, physical therapists would be unlikely to be identified as primary or initial providers, even if they provided the "most" care as reported by respondents to the DWC survey.

Figure 10. Distribution of Paid Medical Costs by Type of Charge, Calendar Year 2003

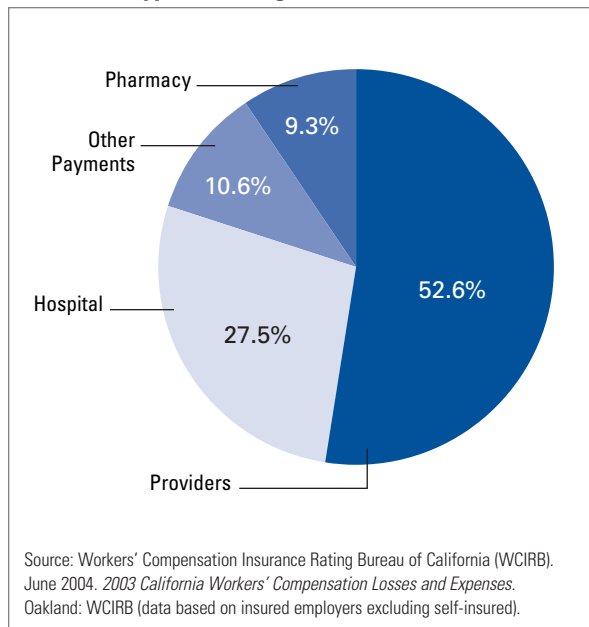
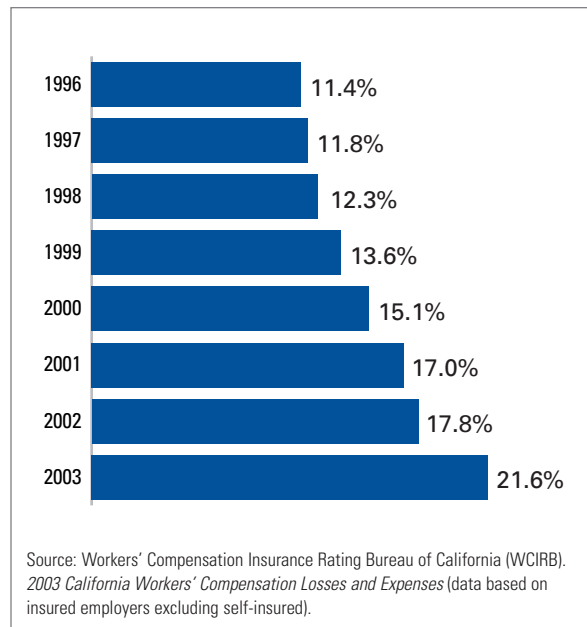


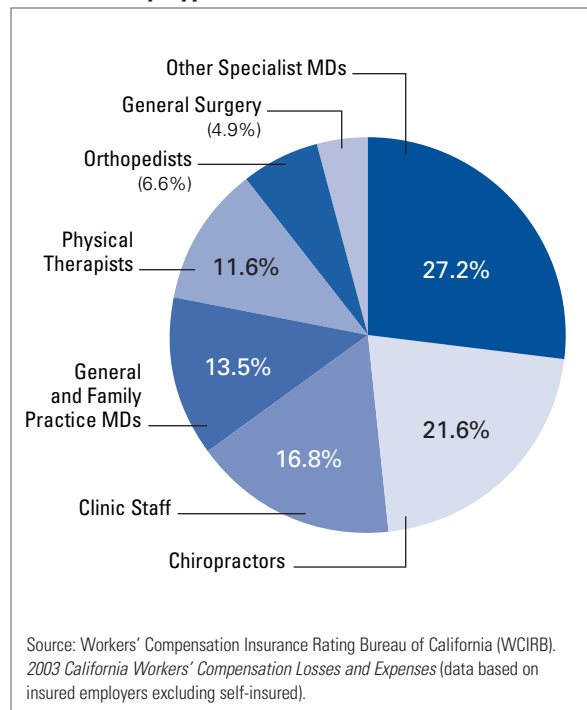
Figure 11. Chiropractors' Proportion of WC Medical Provider Costs, 1996–2003



More recent data suggest that chiropractors are playing an increasingly important role in providing care to WC claimants. The WCIRB reported that, as of 2003, the majority (52.6 percent) of WC medical payments were for individual medical care providers, 27.5 percent were for hospitals, and 9.3 percent for pharmacy services (see Figure 10). Chiropractors accounted for the largest share (21.6 percent) of WC medical provider costs, a significant increase from 11.4 percent in 1996 (see Figure 11). Other types of medical providers providing WC care included general and family practice physicians (accounting for 13.5 percent of medical provider costs in 2003), clinic staff (16.8 percent), physical therapists (11.8 percent), orthopedists (6.6 percent) and general surgeons (4.9 percent) (see Figure 12).³⁹

A 2003 study by the CWCI found that WC insurers' payments to chiropractors rose 153 percent between 1996 and 2001.⁴⁰ As of 2002, payments to chiropractors accounted for 17.8 percent of all WC medical expenditures, the largest share among medical specialty groups providing care within the California WC system. WCRI's 2003 interstate study of WC claims in 12 states found that

Figure 12. Distribution of WC Medical Payments, by Type of Provider, Calendar Year 2003



California physicians provided 49 percent more visits per WC claim (11.6) than physicians in the other states (7.8). WCRI researchers found similar trends among other types of clinicians. For example, California chiropractors provided more than twice the number of visits per WC claim as chiropractors in other states (34.1 versus 16.6); and physical and occupational therapists provided 39 percent more visits per WC claim than therapists in the other states (17.0 versus 12.2). (The WCRI study was based on 1999 to 2000 indemnity claims with more than seven days of lost time.⁴¹)

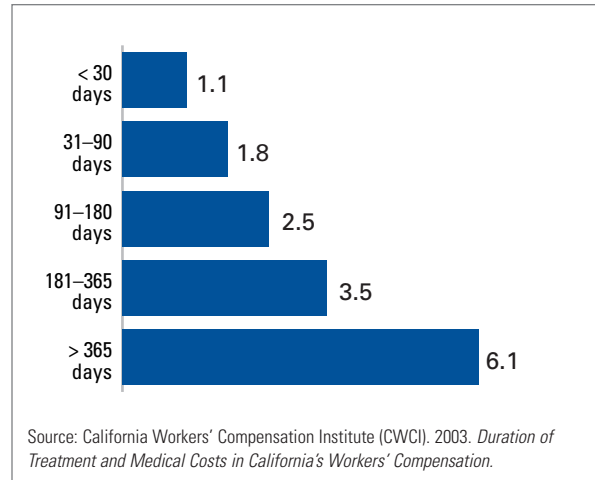
In 2004, with the enactment of AB 227 and SB 228 (see Table 1), California became one of seven states to limit the number of visits to chiropractors permitted under WC law. California now allows WC payment for a maximum of 24 chiropractor visits and a maximum of 24 physical therapy visits per injury claim. The new legislation is expected to moderate the use of these services within the WC system.

Number of Providers Per Claim

Many patients treated for work-related injuries and illnesses receive treatment from more than one medical provider. According to the WCRI, 14 percent of California workers see a single nonemergency provider, while 79 percent see more than one; the remaining 6 percent see an emergency provider only. The percentage of multiple providers in California is considerably higher than in the three other states examined by the WCRI (Texas, Massachusetts, and Pennsylvania), where the percentages ranged from 69 to 72 percent.⁴² These estimates are consistent with survey data from the DWC, which indicated that 80 percent of injured workers see more than one provider for treatment of their injury, and about 25 percent see five or more providers.⁴³ On average, California injured workers see 2.1 unique providers per WC claim. The number of medical providers per claim is greater for more serious cases. For example, the average number of providers treating claims with a duration of more than 180 days is 5.8 and 6.1 for claims

lasting more than one year (see Figure 13).⁴⁴ The recent introduction of medical provider networks may affect the number of unique providers seen by any particular WC patient.

Figure 13. Average Number of Medical Providers Per WC Claim, by Duration of Medical Treatment, 1993–1999 Claims



Managed Care in California WC

For many years, California workers' compensation insurers and health care systems have used a variety of managed care and cost containment techniques, including case management, utilization management, and bill review. However, the development of formal managed care organizations for the delivery of WC medical services has been relatively limited. The use of structured managed care organizations in California's WC system has lagged behind their use in general (nonoccupational) health care for several reasons, including regulatory constraints; statutory limitations on insurers and health plans' ability to control provider choice throughout the course of treatment; and difficulties in introducing new provider payment methods (e.g., capitation and case rates) as alternatives to conventional WC fee-for-service payment plans. Beginning in 2005, the introduction of medical provider networks, authorized by SB 899, could vastly increase the importance of managed care for the delivery of WC medical services in California.

Certified Health Care Organizations

Since 1993, California's WC law has permitted care to be provided within a certified workers' compensation health care organization (HCO). HCOs include health maintenance organizations (HMOs), hospital networks, preferred provider organizations (PPOs), and industrial medical clinic networks. Employers using HCOs have been allowed to control the selection of the employee's treating physician beyond the customary 30-day period; in some cases, for up to 180 days. From their inception in 1993 until 2003, enrollment in HCOs was relatively low, in part because employers and health plans found the regulatory requirements cumbersome. Legislation taking effect in 2003 (AB 749) simplified the certification rules by requiring, for example, an employer to offer its workforce only one (rather than two) HCOs and exempting certain HMOs (those licensed by the CDI as Knox-Keene Health Care Service Plans) from needing to apply for special certification by the DWC. As of 2004, about a half million California workers were covered by WC plans that provide managed health care services through an approved workers' compensation HCO.

Medical Provider Networks

Beginning in 2005, insurers and self-insured employers may set up a medical provider network (MPN) for delivery of WC medical services. The MPN is an entity or group of providers that can be a licensed HCO; a health care service plan, licensed according to the Knox-Keene Act; a preferred provider network; or other MCO. Insurers and self-insured employers desiring to set up an MPN must submit a detailed application to the DWC for review and approval. The application must indicate the MPN's plan to have a sufficient level and mix of providers, including providers who are competent to treat occupational injuries and illnesses along with providers who are primarily engaged in treatment of nonoccupational conditions.

Generally, employees will be required to obtain treatment from within the MPN throughout the course of their claim. The care provided by the

MPN must be consistent with the utilization schedule and treatment guidelines adopted by the DWC. MPNs must ensure that each covered employee has access to a primary care physician, and a hospital or emergency care facility, within 30 minutes or 15 miles of the employee's residence or workplace. The MPN must also ensure that appointments are available promptly upon request (within three business days of the request for nonemergency care) and that medical specialists can be seen when needed. The employer or insurer may select the initial treating physician from within the MPN. Employees can obtain a second and third opinion if there is a disagreement about the diagnosis or treatment with the primary treating provider. Additional regulations for MPNs have been established by the DWC pertaining to transfer and continuity of care.

Medical Cost Containment

In California, several techniques are used for WC medical cost containment (MCC) including medical and hospital bill review, utilization management, treatment guidelines, and case management, as well as medical provider networks and medical fee schedules. The WCRI estimates that 84 to 85 percent of WC indemnity claims (with more than seven days of lost time) have medical cost containment expenses.⁴⁵ The CWCI evaluated the expenses associated with medical cost containment in the California WC system and found that, overall, MCC expenses accounted for 8 percent of WC medical care costs in 1999, compared with 4.6 percent in 1993, an increase of 74 percent.⁴⁶ Studies have not been conducted to evaluate the impact of MCC on WC claims costs or patient outcomes.

Utilization Review

Effective, January 1, 2004, California adopted utilization review requirements for all WC insurers and self-insured employers. Insurers and self-insured employers must adhere to these standards when making decisions about what medical services to authorize. Participating HCOs and MPNs are required to describe their utilization review guidelines as part of the HCO certification process. The

utilization review plan must be based on the official utilization schedule adopted by the DWC, which will be derived from and be consistent with treatment guidelines that are evidence-based, peer-reviewed, and nationally recognized. Upon initial enactment of the utilization review requirements in 2004, DWC adopted the ACOEM Guidelines as the basis for utilization decisions, and they will remain in effect until the DWC either adopts or develops other guidelines. If there are conditions or injuries that are not covered by the ACOEM Guidelines, then the DWC regulations specify that utilization decisions are made in accordance with other evidence-based medical treatment guidelines that are generally recognized by the medical community. The utilization review decisions can be made prospectively (before care is rendered), concurrently (while care is administered) or retrospectively (after care is provided), depending on the criteria established within the utilization plan. Prospective or concurrent utilization decisions need to be made within five working days from the receipt of written request for authorization, unless the seriousness of the patient's conditions requires an expedited review process. Procedures have been established for patients to dispute utilization review decisions through the DWC adjudication process.

Treatment Guidelines

Prior to 2004, the Industrial Medical Council had adopted voluntary treatment guidelines for various common work-related conditions including asthma, dermatitis, post-traumatic stress syndrome; and injuries to the lower back, hand and wrist, knee, elbow, neck, and shoulder. Legislation taking effect in 2004 authorized the development of new treatment guidelines and utilization standards. The ACOEM Guidelines were initially adopted. Under the current California law, they are to be considered presumptively correct for use in adjudicating disputes about the extent and scope of medical treatment to be paid in WC cases.

The ACOEM Guidelines contain a description of principles of professionally accepted occupational

medicine practice, including approaches for determining whether a condition is work-related, disability prevention and management, conduct of independent medical examinations, pain management, and restoration of function. The guidelines also summarize accepted clinical practices for diagnosing and treating (including surgical considerations) several categories of injuries and illnesses including: musculoskeletal complaints of the neck, upper back, shoulder, elbow, wrist, forearm, hand, low back, knee, ankle, and foot; stress-related conditions; and eye disorders. In November 2004, The RAND Institute for Civil Justice and RAND Health released a report (commissioned by the DWC and CHSWC) evaluating the ACOEM Guidelines and 72 other widely used treatment guidelines with respect to their adequacy and suitability for use in the California's WC utilization schedule.⁴⁷ The RAND report concluded that no single set of guidelines, including ACOEM's, was comprehensive and valid for all clinical conditions commonly treated in California's WC system, and thus the state may eventually need to adopt a coherent guideline set that draws from multiple existing guidelines. The report further recommended that the DWC clarify issues regarding the application of guidelines and the evidential criteria needed for authorizing a deviation from the guidelines.

Twenty-Four-Hour Care

Twenty-four-hour care plans attempt to coordinate or combine the medical care provided to patients receiving care for work-related injuries and illnesses more closely with general health care for nonoccupational conditions. In a fully integrated version of twenty-four-hour care, medical services for both work-related and nonwork-related conditions could be given by the same providers (or health system) paid for under a single health insurance policy. Other versions of twenty-four-hour care would merely coordinate the administration, pricing, and marketing of the two types of medical benefits, while preserving separate workers' compensation and general health insurance policies. Proponents of

twenty-four-hour care plans point to potential administrative savings, efficiencies in care delivery, and possible reductions in legal disputes involving occupational causation. Some labor advocates have seen twenty-four-hour care as a way of promoting more widespread health coverage for workers who do not currently have employer-based health insurance. Opponents cite legal and regulatory barriers, institutional resistance among employers and health systems, and the complexity of awarding indemnity benefits under a merged twenty-four-hour care system. After a flurry of activity in the early and mid 1990s to pass enabling legislation and create a twenty-four-hour pilot program in several states, interest in twenty-four-hour care plans waned. By the late 1990s, WC premiums had moderated and several initial pilot programs experienced technical problems and had lower-than-expected enrollment. Then, in the early 2000s, there was a resurgence of interest in twenty-four-hour care, owing to the rapid rise in costs for WC medical care and growing concerns about the decline in general health insurance coverage among employed individuals.

From 1994 to 1997, the California Division of Workers' Compensation conducted a pilot program to test the concept of twenty-four-hour health care coverage. Under the pilot program, workers could choose to receive twenty-four-hour care through one of several participating health care organizations. About 65 employers in four counties enrolled in the program, covering about 8,000 employees. The stated goal of the twenty-four-hour pilot program was to streamline the delivery of care, achieve administrative efficiencies, and reduce disputes concerning whether injuries were work related.

Evaluation of California's Pilot Twenty-Four-Hour Program

An evaluation of the twenty-four-hour pilot program commissioned by the DWC found that after adjusting for age, sex, marital status, education, occupation, injury type, and other factors, there were no statistical differences in satisfaction or patient-reported functional or emotional outcomes

between patients participating in the twenty-four-hour program and injured workers receiving care through conventional WC medical care plans.⁴⁸ No significant differences in cost were found between care provided through the pilot program and care received through conventional WC plans.

Surveys of injured workers enrolled in California's twenty-four-hour pilot program found that 76.5 percent of respondents were satisfied with the medical care provided for their workplace injury or illness. Seventy-two percent were satisfied with their choice of provider, 59.3 percent were satisfied with the doctor-provider relationship, and 39.7 percent with the occupational medicine skills of the treating provider.⁴⁹

The DWC evaluation also found that that nearly all employers participating in the twenty-four-hour pilot program were generally satisfied with the program; they believed that it worked well and should be extended. Employers cited the reduction of costs, improved communication with medical providers, and expanded duration of control over medical care to their employees as positive features of the program.⁵⁰ Although the official pilot program ended in 1997, some California insurers and employers have continued to experiment with versions of twenty-four hour care, albeit on a limited scale. Rate deregulation and falling premiums during the mid and late 1990s reduced employers' motivation to test twenty-four-hour plans. However, sharply escalating WC costs since 2000 are expected to spark renewed interest in twenty-four-hour care arrangements.

In 2003, at the request of the California legislature, the CHSWC commissioned the RAND Institute for Civil Justice to conduct an independent study of the potential for twenty-four-hour care programs in California's WC system.⁵¹ The RAND study, published in 2004, concluded that the most feasible twenty-four-hour care options are those that only attempt to integrate (or coordinate) the delivery of medical care services through a common service

delivery arrangement, or plans which subsume both kinds of medical care under a common health insurance program, as might happen under a universal health insurance system. The study was less optimistic about attempts to combine the indemnity benefits available under WC with the income replacement benefits available through other disability insurance programs. RAND also indicated that substantial technical and legal challenges would be faced in designing and implementing an effective twenty-four-hour medical care program on a statewide basis. The study recommended that California policymakers use small-scale pilots to test the twenty-four-hour care model, placing an emphasis on effective design, implementation, and evaluation. Reform legislation passed in 2004 (SB 899) authorized twenty-four-hour integrated medical and benefit delivery programs to be part of any collective bargaining WC carve-out agreement established in the construction industry.

VI. Outcomes and the Quality of Care

Evaluating WC Medical Care

Assessing the outcomes and quality of medical care for injured workers is in many ways more complicated than evaluating outcomes in customary health care provided to the general population. It involves assessing the patients' ability to successfully resume work activities, their risk of suffering reinjury at work, and their experiences with employers and the WC system, in addition to considering the alleviation of symptoms and other conventional indicators of clinical effectiveness. California has been a national leader in designing and conducting surveys of injured workers to assess their satisfaction with care. However, neither California state agencies nor purchasers currently have in place a system for regularly collecting medical care data by which to periodically monitor and evaluate the quality of care, patients' care experience, or the effectiveness of the WC care delivery system.

Most outcomes studies of workers' compensation medical care have focused narrowly on measuring direct medical and indemnity costs, time required for return to work, and patient satisfaction with care. Many authorities have advocated a broader approach to outcomes and quality assessment for workers' compensation systems that would encompass other related concerns, such as the appropriateness of care and its conformity with recognized guidelines; timely and convenient access to care; vocational function upon resuming work; long-term economic consequences for the worker and employer; and social impacts on affected workers and their families.⁵²

With financial support from the Robert Wood Johnson Foundation's Workers' Compensation Health Initiative, the California Department of Industrial Relations has conducted initial planning and feasibility studies for the creation of the "California Work Injury Resource Center." Activities of the proposed center would include dissemination of quality-of-care information; educational programs for providers and insurers concerning quality of care; data collection and analysis to measure the quality of WC medical care in the state; and technical assistance to health systems, employers, providers, and workers regarding techniques for enhancing the quality of care received by injured workers.⁵³

Quality-of-Care and Performance Measures

Based in part on pilot testing performed at California health care organizations, the American Accreditation HealthCare Commission (URAC) disseminated a set of standardized quality and performance measures for WC medical care. The URAC set contains 46 specific measures grouped into ten domains: access to care, coordination of care, communication, work-related outcomes, health-related outcomes, patient satisfaction, prevention, appropriateness of care, cost of care, and utilization of services (see Table 5).⁵⁴ A similar set of quality indicators had previously been published by the medical director of the California Division of Workers' Compensation in 1996.⁵⁵ Proposals have been made to adopt a standardized quality measurement process in California, but none have been adopted.

California WC Medical Outcomes Studies

The Workers' Compensation Research Institute evaluated outcomes in California and three other states (Texas, Massachusetts, and Pennsylvania)

based on telephone surveys and insurers' claims data. The study found that injured workers in California and Texas generally had worse outcomes than in Massachusetts and Pennsylvania with respect to perceived post-injury physical health and functioning, and ability to return to work (see Table 6). The average time needed for California injured workers to return to work was longer than in all the other states, with a median time for the first return to work after the injury in California of eight weeks compared to a median of six weeks in each of the three other states. Workers' self-reported perceptions of the severity of their injuries in California were about the same as workers' perceptions of severity in the other states. The WCRI observed that California workers had worse outcomes in all categories compared to injured workers in Pennsylvania and Massachusetts despite receiving, on average, substantially more medical services per claim and incurring significantly higher average medical costs per claim (California average costs per claim were 113 percent higher than Massachusetts and 32 percent higher than Pennsylvania).⁵⁶

Table 5. American Accreditation HealthCare Commission/URAC Workers' Compensation Medical Care Performance Measures (AAHCC)

<u>MEASUREMENT DOMAIN</u>	<u>EXAMPLES OF PERFORMANCE INDICATORS</u>
Access to Care	<ul style="list-style-type: none"> • Getting needed care • Wait time to get care
Appropriateness of Care	<ul style="list-style-type: none"> • Work history taken • Job capabilities assessed
Work-related Outcomes	<ul style="list-style-type: none"> • Time needed to return to work • Ability to perform job after return
Utilization of Services	<ul style="list-style-type: none"> • Utilization of medical services • Appropriate services provided for specific conditions
Medical Costs	<ul style="list-style-type: none"> • Medical costs compared to benchmarks • Disability costs compared to benchmarks
Patient Satisfaction	<ul style="list-style-type: none"> • Satisfaction with overall care • Satisfaction with choice of provider
Coordination of Services	<ul style="list-style-type: none"> • Timely referral • Advice given on return to work
Communications	<ul style="list-style-type: none"> • Provider communicates well • Provider treats worker with respect
Prevention	<ul style="list-style-type: none"> • Injury prevention counseling

Source: American Accreditation HealthCare Commission/URAC (AAHCC/URAC). 2001. *Measuring Quality in Workers' Compensation Managed Care Organizations: Technical Manual of Performance Measures*. Washington, D.C.: AAHCC/URAC.

Table 6. WCRI Survey*: Selected Outcomes of WC Care in Four States

OUTCOME	CA	TX	MA	PA
Change in perceived health status from...				
before injury to the time of interview [†]	-12	-13	-6	-8
before injury to directly postinjury (indicator of perceived injury severity) [†]	-29	-27	-30	-29
directly postinjury to the time of interview (indicator of perceived recovery) [†]	18	14	24	21
Time from injury to the first return to work (median weeks)	8	6	6	6
Those with first return-to-work >1 year postinjury	8%	8%	5%	4%
Those reporting they returned too soon after injury	38%	40%	36%	31%
Those not returning to work due to the injury	15%	10%	8%	6%

*Survey conducted in 2003 (Texas) and 2002 (other states) for injuries that occurred in 1998 (Texas) and 1999 (other states).

[†]Change in SF-12 scores (positive numbers mean the patient improved, negative numbers mean the patient got worse).

Source: Victor R, Barth P, Liu T. 2003. Workers' Compensation Research Institute (WCRI). 2004. *Outcomes for Injured Workers in California, Massachusetts, Pennsylvania, and Texas*. Cambridge, MA: WCRI. December, 2003.

The WCRI findings are consistent with other studies that have not found evidence of a clear relationship between the volume or duration of medical care services provided to injured workers and the outcomes of care, as measured, for instance, by indemnity costs and the length of work disability.⁵⁷

California workers surveyed an average of eight months after being injured at work reported a significant level of lingering effects from their injuries. About one-third of the workers (32.9 percent) indicated that their overall health was worse than before the injury; and nearly a quarter (23.6 percent) said the injury still exerted a negative effect on their lives (see Table 7). Only 30 percent reported that they had fully recovered.⁵⁸

Table 7. Self-Reported Health Status After a Work Injury (Survey of 809 Injured California Workers, Average Eight Months After Injury)

ITEM	PERCENT RESPONDING
Health now vs. before injury	
Much worse	10.5%
A little worse	22.4%
About the same	48.8%
A little better	10.2%
Much better	8.0%
How much does the injury affect your life today?	
Big effect	23.6%
Some effect	34.0%
Very little effect	21.5%
No effect	21.0%
Degree of recovery	
No improvement	10.6%
Still room for improvement	59.0%
Fully recovered	30.4%

Source: Rudolph L, Dervin K, Cheadle A, Maizlish N, Wickizer T. 2002. "What do injured workers think about their medical care and outcomes after work injury?" *Journal of Occupational and Environmental Medicine* 44: 425-434.

VII. Worker Experiences and Satisfaction with Care

Concerns of California Injured Workers

Evidence suggests that the California WC system generally has been successful in meeting workers' needs to secure appropriate medical care for workplace injuries and illnesses and to provide income protection and other benefits to mitigate the financial consequences of job-related injuries. At the same time, some workers find the California WC system complicated and difficult to navigate. Relationships and communication among workers, employers, insurers, and health care providers are often strained and adversarial. The system is plagued by extensive litigation and distrust among groups is common. California workers report that the delivery of medical care is frequently compromised or delayed as a result. Minority, non-English speaking, and low-wage workers have been the most likely to experience these type of problems.

Communications and Inadequate Information

Surveys of injured California workers have consistently found that many workers are not well informed about the medical benefits available under WC, or how to obtain appropriate WC medical care. A significant proportion of injured workers experience delays in accessing care, barriers to care related to claims processing by employers and insurers, and disputes concerning their care.⁵⁹ About one-third of the respondents to a 1998 DWC injured worker survey indicated they had little or no involvement in making decisions about their medical care. Roughly 30 to 40 percent of survey respondents reported that physicians rarely obtained job descriptions, talked about return to work, or discussed ways of preventing reinjury.⁶⁰

Most of the injured workers participating in a recent series of California focus groups reported receiving inadequate information from their employers about how to obtain medical care for their work injuries. A sizable proportion of the workers expressed feelings of distrust and suspicion surrounding their care or believed that their doctors were oriented "against" injured workers. Several focus group participants commented that the treating physician caused further injury to them, did not know how to treat their particular injuries, or failed to understand the nature of their jobs.⁶¹

Confidentiality of WC claims information is a key concern among many workers. Workers' compensation insurers and third-party administrators in California are generally prohibited from disclosing medical information about an employee who files for workers' compensation, except when such information is needed for medical treatment or is necessary for an employer to modify the worker's job duties.⁶² Recent attempts to create a new statewide WC data collection system have sparked renewed fears about potential improper release and use of employee WC medical records.⁶³

Satisfaction with Care

Surveys of injured California workers conducted by the Division of Workers' Compensation found that 76.5 percent of workers were either "very satisfied" or "somewhat satisfied" with the medical care received for their job-related injury (see Table 8). Most of the surveyed workers were also very or somewhat satisfied with their choice of provider (72.5 percent); and felt that the provider listened well (77.8 percent); showed them courtesy and respect (73.5 percent); explained care understandably (70.3 percent); made a thorough and careful examination (63.7 percent); and developed an appropriate diagnosis and treatment (64.9 percent). Approximately 25 percent of respondents expressed dissatisfaction with overall care and with the choice of provider. Respondents who were younger, Spanish-speaking, non-white, and of lower income or education were more likely to be dissatisfied with care.⁶⁴

Table 8. Overall Satisfaction with Care and Choice of Physicians (Survey of 809 Injured California Workers)

	SATISFACTION WITH	
	CARE	CHOICE
Very Satisfied	41.9%	38.6%
Somewhat Satisfied	34.6%	33.9%
Somewhat Dissatisfied	14.2%	16.6%
Very Dissatisfied	9.3%	10.9%

Source: Rudolph L, Dervin K, Cheadle A, Maizlish N, Wickizer T. 2002. "What do injured workers think about their medical care and outcomes after work injury?" *Journal of Occupational and Environmental Medicine* 44: 425–434.

WCRI outcomes studies compared injured workers' satisfaction with WC medical care in California to satisfaction with WC care in Texas, Pennsylvania, and Massachusetts. Satisfaction was measured along eight dimensions including satisfaction with overall care, satisfaction with the initial provider and the primary treatment provider, and the desire of patients to change providers because of dissatisfaction with care (see Table 9). On all measures, California workers were generally satisfied with the care received—80 percent reported that they were "somewhat or very" satisfied with care (consistent with the DWC findings mentioned above), 68 percent were satisfied with the initial nonemergency provider, and 84 percent were satisfied with the primary treating provider. However, on six of the eight measures reported by WCRI, California had the lowest satisfaction ratings of all four states.⁶⁵

Table 9: Comparison of Workers' Satisfaction with Care in California vs. Three-State Average (TX, MA, PA)

	CALIFORNIA	OTHER STATES
Satisfied (somewhat or very) with their overall care	80%	83%
Very dissatisfied with their overall care	10%	9%
Satisfied (somewhat or very) with their initial provider	68%	80%
Very dissatisfied with their initial provider	19%	12%
Satisfied (somewhat or very) with their primary (noninitial) provider	84%	87%
Very dissatisfied with their primary (noninitial) provider	10%	8%
Ever wanting to change their initial provider due to dissatisfaction	33%	23%
Ever wanting to change their primary (noninitial) provider due to dissatisfaction	18%	18%

Note: Survey conducted in 2003 (Texas) and 2002 (other states) for injuries that occurred in 1998 (Texas) and 1999 (other states).

Source: Victor R, Barth P, Liu T. 2003. Workers' Compensation Research Institute (WCRI). 2004. *Outcomes for Injured Workers in California, Massachusetts, Pennsylvania, and Texas*. Cambridge, MA: WCRI. December, 2003.

The evidence indicates that patient satisfaction with WC medical care in California is generally quite similar to reported satisfaction levels for patients receiving care for nonwork-related conditions. For example, 83.6 percent of adult patients receiving care through Medi-Cal managed care plans in the San Diego area reported positive ratings for their personal doctor or nurse and 76.4 percent rated their overall health care positively (a positive score by Medi-Cal was considered 7 or higher on a 10-point scale).⁶⁶ Most patients (88 percent) receiving care at California managed care organizations rated their care positively (at least 6 on a 10-point scale on which 0 is the worst health care possible and 10 is the best health care possible).⁶⁷

Access to Care

About 13 percent of injured workers responding to the DWC survey indicated they had experienced “some or a lot of trouble getting medical care” when they were first injured; 77 percent reported having no trouble at all in accessing care.⁶⁸ Injured workers participating in DWC focus groups identified several barriers to accessing appropriate and timely WC care including: lack of a sufficient number of physicians or specialists in some regions of the state who are willing to accept WC patients; delays in obtaining insurer authorization for treatment; and problems in obtaining referrals to specialists.⁶⁹ However, there is little solid information available about the actual extent or distribution of these problems within the state.

A survey of injured workers in four states (California, Texas, Massachusetts, and Pennsylvania) conducted by the WCRI found that only a small proportion of injured California workers (14 percent) reported problems in getting medical services for their job injuries. However, compared to the other three states, the California workers were slightly more likely to report problems accessing initial medical care and expressed lower satisfaction with their initial visits (see Table 10).⁷⁰

Table 10. Comparison of Injured Workers’ Survey* Responses Regarding Access to Care: California vs. Three-State Average (TX, MA, and PA)

	<u>CALIFORNIA</u>	<u>OTHER STATES</u>
Reporting problems getting medical services	14%	11%
Reporting problems getting providers they request	13%	11%
Satisfied with timeliness of initial provider visit	84%	85%
Satisfied with initial visit to subsequent (noninitial) provider	67%	76%

*Survey conducted in 2003 (Texas) and 2002 (other states) for injuries that occurred in 1998 (Texas) and 1999 (other states).

Source: Victor R, Barth P, Liu T. 2003. Workers’ Compensation Research Institute (WCRI). 2004. *Outcomes for Injured Workers in California, Massachusetts, Pennsylvania, and Texas*. Cambridge, MA: WCRI. December, 2003.

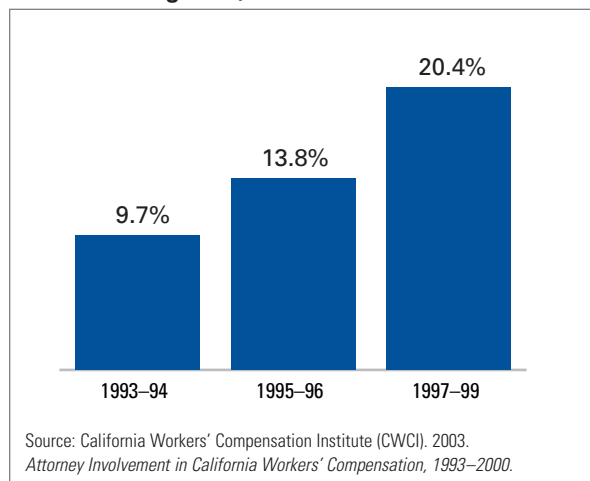
Although WC is supposed to pay the full cost of necessary medical care for job-related conditions, many injured workers report incurring significant out-of-pocket expenditures. For example, it may be necessary to pay for prescription drugs with cash before getting reimbursement from the WC insurer. In other cases, out-of-pocket medical expenses are incurred because employees are afraid to file claims or because claims have been denied. In one study, 16 percent of injured workers indicated they had to make out-of-pocket payments, and 2 percent of workers reported paying in excess of \$500 for their medical care.⁷¹ The need to make out-of-pocket payments may dissuade some injured workers from obtaining needed care.

Disputes and Litigation

Disputes and litigation concerning WC claims have been common in California. About 20 percent of WC claims are contested and more than 14 percent involve at least one attorney. CWCI data show that the amount of WC claims involving litigation grew substantially between 1993 and 1999 (see Figure 14).⁷² Attorneys’ fees are set by the Workers’ Compensation Appeals Board and are usually 12 to 15 percent of the award or settlement. Litigation costs for insured WC claims in 2002 were estimated by the CWCI to be \$646 million,

or about 8 percent of total benefit payments. Employee attorneys received nearly \$400 million during 2000–2001, and employer attorneys were paid about \$588 million during that two-year period.⁷³

Figure 14. Percentage of California WC Cases with Litigation, 1993–1999



A multi-state study by the WCRI found that between 1996 and 1999, litigation and claims-adjustment expenses accounted for 6.9 percent of total California WC claim costs, more than twice the average (3.2 percent) in other states. Defense attorney fees represented 2.3 percent of total WC claims costs in California compared to about 1.5 percent in other states.⁷⁴ Overall, administrative costs in the California WC system constituted 12 percent of total WC costs, 50 percent higher than the average (8 percent) in other states examined by the WCRI.⁷⁵

Non-Reporting of WC Claims

Among a group of immigrant workers interviewed by the UCLA Labor Occupational Safety and Health Program, the majority (57 percent) had experienced a work-related injury or illness, but only 63 percent of those workers had reported these injuries and illnesses to their employer.⁷⁶ Many chose not to report the injury owing to fear of employer reprisal. Workers' generally must report the condition and file a WC claim to be eligible for WC medical care benefits.

In a survey of garment workers interviewed at a community clinic in Northern California, nearly one-third of those with previous work-related musculoskeletal injuries had not received medical care for their injury, and only 3 percent had filed a workers' compensation claim for their work injury. Although only 22 percent had employer-paid health insurance, almost all the interviewed workers were unaware of the option to file a WC claim to receive care for their injuries. The most frequently cited barrier to accessing care was language (46 percent), followed closely by concerns about the cost of care (40 percent). Fear of job loss or reprisal was reported by about 10 percent of these workers.⁷⁷

VIII. Prevention and Management of Work Disability

Providers' Role in Facilitating Return-to-Work

Medical care providers have a potentially important role to play in helping workers prevent workplace injuries and illnesses, reducing the risk of reinjury upon return to work, and facilitating a smooth transition back to full vocational function. The American College of Occupational and Environmental Medicine highlighted the need for “active linkages between injury and illness [medical] care services, prevention strategies, and disability reduction programs” in its 1998 position statement, which lists the eight best ideas for workers’ compensation reform.⁷⁸

During 2000, the DWC and the CHSWC conducted a series of focus group studies involving injured workers, employers, health care providers, nurse case managers, claims adjusters, applicants’ attorneys, WC administrative judges, union representatives, and WC information assistance representatives. Focus group participants generally agreed that services aimed at restoring vocational function and facilitating the patients’ return to work ought to be important components of the medical care provided to injured workers. Numerous obstacles hindering successful and sustained return-to-work were identified, including: medical providers not being informed about the injured worker’s job or about alternative jobs that could be safely performed by recovering workers; clinicians not knowing how to write useful medical reports and formulate clear and specific work restrictions; and no requirement for medical providers to take proactive steps to offer specific services to facilitate the worker’s successful return to work.⁷⁹

The California Low Back Pain Claimant Cohort study of 433 workers with low back injuries found that between 60 to 70 percent of providers talked with injured workers about their job requirements, avoiding reinjury, job changes that might facilitate return to work, and the workers’ readiness to resume work (see Table 11 on the following page). Cases in which medical providers initiated such conversations with the worker during the first 30 days after injury had, on average, a 20 to 36 percent shorter duration of disability than cases in which the provider did not initiate such conversations.⁸⁰

Table 11. Primary Treating Physicians' Communication with California Injured Workers About Return-to-Work; California Low Back Pain Claimant Cohort

<u>DID THE PHYSICIAN...</u>	<u>AFFIRMATIVE</u>
Discuss your job requirements?	60.6%*
Understand what you did on the job?	69.1%†
Tell you how to avoid reinjury?	64.9%‡
Suggest changes in your job to help you heal?	60.0%‡
Specify what restrictions could help you return?	67.3%‡
Tell you that you were ready to go back to work?	64.5%‡

* "a lot" or "some"

† "very well" or "fairly well"

‡ "yes"

Source: Dasinger L, Krause N, Deegan L, Brand R, Rudolph L. 2001. "Doctor proactive communications, return to work recommendations, and duration of disability after a compensated low back injury." *Journal of Occupational and Environmental Medicine* 43 (6), 515-525. Survey conducted in 1997 for claims occurring in 1994-1996.

Medical Reports and Disability Evaluation

The primary treating provider is required to send medical reports to the claims administrator. The report details the worker's injury and renders an opinion on all medical issues necessary to determine eligibility for compensation, including the extent of recovery, temporary and permanent disability, required medical treatment, and readiness to resume work. If there are disagreements about the treating provider's report, additional medical evaluations may be conducted by a qualified medical evaluator (QME) or an agreed medical evaluator (AME).

Evidence suggests that the ability of providers to perform such evaluations varies widely. A CHSWC study concluded that reports written by the primary treating provider are of substantially poorer quality than reports submitted by either a QME or an AME—who are specially trained in performing disability evaluations.⁸¹ The study found that only 25 percent of reports written by providers who are not certified as medical evaluators contained sufficient information from which to derive a valid disability rating compared to 67 to 84 percent of reports from QMEs or AMEs.

Disability ratings vary considerably, depending on whether the medical-legal evaluation was performed by a medical provider selected by the employee or the insurer. A study conducted by the RAND Institute for Civil Justice found that the average disability rating made by an employee-selected provider was 36 percent (out of 100 percent total disability), and the average rating made by a provider selected by the employer was 26.8 percent for cases in which the same injured worker received medical-legal evaluations from both kinds of evaluators. Additionally, the variance in disability ratings between the two types of providers differed by region, ranging from 12 percent in Southern California to 3 percent in Northern California. These variations have made some commentators question the objectivity and fairness of the current disability evaluation system.⁸²

IX. WC Medical Care: Building a System for the 21st Century

CALIFORNIA HAS CREATED A SYSTEM FOR DELIVERING needed medical care services to more than a half-million workers each year who suffer workplace injuries and illnesses. Despite the complexities and problems of the system, the evidence shows that the overwhelming majority of injured California workers are able to obtain appropriate medical services and are satisfied with the care they receive. The system has evolved by balancing the sometimes competing interests of patients, employers, clinicians, insurers, and state officials. Through these efforts, clinicians are usually able to supply essential medical care services and provide credible medical information necessary for delivering income protection benefits.

The system also has its problems. High system costs threaten the financial health of California employers and insurers, and may jeopardize employees' jobs and wages.⁸³ Administrative processes are perceived as burdensome by many providers, employers, and injured workers. The system frequently pits workers and their attorneys against employers and their insurers with medical providers, too often, caught in the middle of disputes. The delivery of WC medical services is inadequately coordinated with a worker's routine health care. Some workers experience barriers to reporting WC claims or to obtaining timely and appropriate care. Immigrants, minorities, and low-wage workers are at greatest risk of encountering such problems.

Recent legislative reforms hold the potential for lowering costs by tightening controls over service use, reducing allowable provider and hospital fees, and restricting care to delivery networks that employ techniques to manage care. But careful monitoring will be needed to ensure that the reforms do not deny or delay patients' access to needed services, inappropriately restrict their ability to see qualified providers, or discourage providers from accepting WC cases.

As summarized in this publication, a great deal of information is currently available about the California workers' compensation medical care system. However, this report also highlights the significant gaps in knowledge about medical care services for injured workers in California. For example, there is more to learn

about the effectiveness and cost of various medical treatments and their impacts on costs, recovery, and return to work. Also, little is known about providers' conformity with treatment guidelines and the effect of their compliance on patient outcomes. There have not yet been systematic, statewide attempts to measure the quality of care or to devise an ongoing process for collecting basic data about the experience of patients and the care they receive. The ultimate effects of fee schedules, utilization review, managed care, and twenty-four-hour plans on California workers' compensation are still unknown.

As California continues to examine and improve its workers' compensation system, it will be critical to base decisions on solid information about medical care practices and results. Processes will need to be put into place to monitor and evaluate the types of services provided and to measure the outcomes of care. Performance standards and quality-assessment criteria will need to be established to provide a common vocabulary and set of attainable goals for system participants. Credible information about system performance and practical techniques for optimizing care must be communicated clearly throughout the state.

This will not be possible without a collaborative effort involving workers and labor groups, employers and business organizations, WC and general health insurers, medical professionals and health care delivery systems, attorneys, researchers, and state government officials, legislators, and regulators. Community-based coalitions hold promise of being able to bring together the perspectives of diverse groups and foster cooperative approaches to overcoming system problems. Ideally, workers will be able participate more fully in the design and selection of WC health care delivery arrangements. Alternative dispute resolution processes may need to be expanded to reduce the need for litigation about medical issues. Systems to encourage communications between providers, insurers, workers, and employers — possibly adopting Internet technology — might be helpful in bridging the existing communications gaps.

Additional planning and study will be required to determine how best to expand the use of managed care approaches in California's WC system, and how most effectively to structure managed care plans in a way that will enhance the quality of care while containing costs. Quality assurance systems used in general health care may have potential application in the workers' compensation setting. Additional measures to ensure that high-quality care is provided to injured workers may be needed, using both regulatory approaches (i.e., mandatory certification standards) and nonregulatory approaches (e.g., voluntary health system accreditation) to ensure quality. Employers will need to understand the economic advantages of demanding high-quality medical care in their contracts with WC insurers and medical provider networks.⁸⁴

Renewed interest in better coordinating care for occupational disorders with general non-WC medical care may prompt a re-examination of the potential for twenty-four-hour care plans. Policy makers will undoubtedly be looking closely into the possibility of integrating these systems of care and exploring whether that could help expand workers' access to group health care coverage without raising businesses' overall employee benefits costs. Enhanced training of primary care clinicians in the assessment of occupational disorders, work capability, and disability evaluation might help to facilitate the formation of effective twenty-four-hour integrated plans.

California's system for providing workers' compensation medical care to injured workers has been growing and evolving for nearly 100 years. As it moves into the 21st century, success will depend on viewing the WC system within the larger context of employment, health care, and disability management. In that respect, it will be important to consider specific system enhancements while keeping broader social goals in mind, most especially the need to ensure access to quality health care, appropriate disability benefits, and protection from known hazards for all Californians, both on and off the job.

Appendix A. Glossary

Accident Year (or Policy Year): Generally refers to WC claims for work-related injuries and illnesses that have occurred in a specific 12-month period.

ACOEM Guidelines: The American College of Occupational and Environmental Medicine Occupational Medicine Practice Guidelines. A set of treatment guidelines pertaining to various types of work-related injuries and illnesses.

Agreed Medical Evaluator (AME): A medical provider selected through agreement between the claims administrator and the worker's attorney to perform a WC medical-legal evaluation.

AMA Guidelines: The American Medical Association's Guides to the Evaluation of Permanent Impairment, Fifth Edition, 2000. This book contains specific protocols for medical providers to use in determining the extent of a patient's permanent physical impairments. Some states, including California, have adopted these procedures as a basis for determining disability awards under state WC law.

Apportionment: A process of determining the amount of permanent disability caused by a particular work-related injury or illness.

Case Management: A managed care technique in which a qualified individual (e.g., case manager) or organization coordinates and facilitates a patient's care to ensure that appropriate and necessary medical and rehabilitative services are provided to the patient in a cost-effective manner.

Health Care Organization (HCO): A health care system licensed under California Labor Code section 4600.5 that contracts with an employer or insurer to provide managed medical care within the WC system.

Incurred Cost: An estimate made at a particular point in time of the expected total indemnity and medical benefits payments over the life of a WC claim. The estimate includes benefit payments already paid out as well as future payments (for which reserves have been established).

Indemnity Benefits: Cash benefits paid to injured workers under WC as compensation for temporary disability, salary continuation to cover lost wages and income, permanent disability benefits, and death benefits.

Indemnity Claim: A WC claim in which payment of indemnity benefits are made. An indemnity claim may or may not also involve payment of medical benefits.

Independent Medical Review (IMR): A medical evaluation conducted by an independent physician appointed by the DWC, based on the state-adopted utilization schedule and treatment guidelines. Employees receiving care in an MPN can request an IMR after receiving a third opinion from a network provider. As a result of the IMR, the DWC may decide that the employee can receive care outside of the MPN.

Litigation Costs: Attorney fees, payments for WC medical-legal examinations, and legal administrative expenses for depositions, court reporting, photocopying, etc.

Managed Care: (1) The use of various cost-containment and care management techniques such as case management, utilization management, bill review, and treatment guidelines. (2) Care provided within an organized delivery system that typically features restricted provider choice and some form of discounted fees or negotiated payments to participating providers, along with the use of certain cost control and quality assurance approaches.

Managed Care Organization (MCO): A business entity that finances and delivers health care using a specific provider network and that aims to manage care and costs through the use of guidelines, case management, utilization review, bill review, credentialing requirements, and other techniques.

Medical Cost Containment (MCC): Managed care techniques used for minimizing the costs of medical care including medical and hospital bill review, utilization review and management, case management, and use of provider networks accepting discounted fees.

Medical-Legal Evaluation: A medical assessment providing evidence for proving or disproving medical issues in a contested WC claim. It is generally performed by an evaluating physician other than the primary treating physician, and results in the writing of a medical-legal report that is admissible as evidence in legal proceedings.

Medical-Only Claim: A WC claim involving payment of medical care benefits but no indemnity benefits.

Medical Provider Network (MPN): A medical care delivery system that is set up by WC insurers and self-insured employers and that generally limits employees to receiving care from network providers (enacted by SB 899 beginning January 1, 2005).

Official Medical Fee Schedule (OMFS): The rates or fees authorized by the DWC that may be charged to hospitals and clinicians providing WC medical care services.

Paid Cost: The medical and indemnity benefits actually paid out for a WC claim at a particular point in time. Paid costs can also be considered over a period of time (for example, annual paid costs) or for particular groups of claims (for example, paid costs for claims involving injuries and illnesses occurring in a particular calendar year).

Predesignation: The process that allows employees to choose their personal physician as a care provider prior to a WC claim. Predesignation is allowed only if the employer provides nonoccupational group health coverage and if the physician is the employee's primary care doctor who has previously directed the employee's medical care and agrees to be predesignated.

Presumption of Correctness: An opinion or position that is considered to be correct and enforceable in legal proceedings within the workers' compensation system. Prior to the passage of AB 749 and SB 228, the opinion of the employee's primary treating physician carried a presumption of correctness. As of 2005, the medical treatment guidelines adopted by the DWC will be considered to be presumptively correct on issues regarding the scope and extent of medical treatment, and they can only be rebutted by a preponderance of the medical evidence.

Primary Treating Provider or Primary Treating Physician (PTP): The medical provider who has overall responsibility for treatment of a WC claimant's injury or illness.

Qualified Medical Evaluator (QME): An independent medical provider certified by the state DWC to perform WC medical-legal evaluations.

Self-Insurance: An insurance method by which an employer sets aside money to cover possible losses rather than by purchasing a conventional WC

insurance policy from a commercial insurance carrier. Self-insured employers typically use in-house staff or a commercial third-party administrator to pay claims and otherwise manage their WC self-insurance programs.

Third-Party Administrator (TPA): A commercial insurance services organization that administers claims and manages an employer's self-insurance program.

Treatment Guideline: A systematically developed statement that is intended to assist medical practitioners and patients in reaching decisions about appropriate health care for specific clinical circumstances and conditions. Evidence-based guidelines are those developed based on a systematic review of available studies published in medical journals.

Twenty-Four-Hour Care: Twenty-four hour care plans attempt to coordinate or combine the medical care provided for patients receiving care for work-related injuries and illnesses more closely with general health care for nonoccupational conditions.

Utilization Review (or "Utilization Management"): The system used to review and authorize patient care through case-by-case assessments of the medical reasonableness or medical necessity of the frequency, duration, level and appropriateness of medical care and services, based upon professionally recognized standards of care. Utilization review may include prospective, concurrent, and retrospective review of a request for authorization of medical treatment.

Utilization Schedule: A statement of policies and procedures adopted by the DWC indicating the extent and types of services that are considered to be appropriate for specific types of medical circumstances and conditions, based on nationally recognized, evidence-based, peer-reviewed treatment guidelines.

WC Carve-Out: An agreement that is developed through employer-union collective bargaining providing an alternative to the dispute resolution procedures in the state workers' compensation system. California law allows employers in the construction industry to develop carve-out agreements with any benefit-delivery system for injured workers, including twenty-four hour care plans, so long as employees are eligible for group health benefits and nonoccupational disability benefits through the employer.

Appendix B. Abbreviations

AB	Assembly Bill
AME	Agreed Medical Evaluator
AMA	American Medical Association
CHSWC	Commission on Health and Safety and Workers' Compensation
CWCI	California Workers' Compensation Institute
CDI	California Department of Insurance
DIR	California Department of Industrial Relations
DWC	California Division of Workers Compensation
HCO	Health Care Organization
HMO	Health Maintenance Organization
IMR	Independent Medical Review
MPN	Medical Provider Networks
OMFS	Official Medical Fee Schedule
QME	Qualified Medical Evaluator
PTP	Primary Treating Physician
RWJF	Robert Wood Johnson Foundation
SB	Senate Bill
SCIF	State Compensation Insurance Fund
TPA	Third-party Administrator
URAC	American Accreditation HealthCare Commission
WC	Workers' Compensation
WCAB	Workers' Compensation Appeals Board
WCIRB	Workers' Compensation Insurance Rating Bureau of California
WCRI	Workers' Compensation Research Institute
WLDI	Work Loss Data Institute

Appendix C. Understanding Workers' Compensation Costs

Example: The ABC Company

Company Info: Manufacturer, 100 employees, buys commercial WC insurance (not self insured)

Policy Year: January 1, 2004 to December 31, 2004 (same as calendar year)

WC Annual Premium: \$100,000 (the amount ABC Company pays for its 2004 WC policy)

Claims History (assume during 2004 there were three WC claims):

Claim A:	Injury date: 2/1/04, 10 lost work days, 2 medical visits Return-to-work (RTW) date: 2/15/04	
	Loss (medical & indemnity benefits) paid in 2004 (so-called <i>paid loss</i>):	\$ 3,000
Claim B:	Injury date: 12/1/04, 120 lost work days, 6 medical visits Return-to-work (RTW) date: 4/1/05	
	Loss (medical & indemnity benefits) paid in 2004:	\$ 5,000
	Loss (medical & indemnity benefits) paid in 2005:	\$ 15,000
Claim C:	Injury date: 2/1/04, numerous medical visits, still out of work (It is estimated that the worker will be out as long as three years.) Estimated return-to-work (RTW) date: 12/31/06	
	Loss (medical & indemnity benefits) paid in 2004:	\$ 50,000
	Loss (medical & indemnity benefits) paid to date in 2005:	20,000
	Reserves for estimated future losses in calendar year 2005:	30,000
	Reserves for estimated future losses in calendar year 2006:	<u>50,000</u>
	Total <i>incurred loss</i> for claim, valued as of 6/1/05:	\$150,000

ABC Company Perspective:

2004 Premium:	\$100,000
2004 Paid Losses (medical & indemnity) (3K+5K+50K):	\$ 58,000
2004 Incurred Losses (paid and reserved, valued as of 6/1/05) (58K+15K+20K+30K+50K):	\$173,000

Insurance Company's or State's Perspective:

2004 Benefit Payments:	\$ 58,000
2004 Related Administrative Expenses*:	<u>\$ 12,000</u>
2004 Total Calendar Year Paid Losses:	\$ 70,000
2004 Incurred Losses:	\$173,000
2004 Eventual Total Related Administrative Expenses*:	<u>\$ 37,000</u>
2004 Total Ultimate Losses:	\$210,000

*Assuming about 20% for administrative expenses including legal, claims adjustment, cost containment services (utilization review vendors, bill review vendors), etc.

Bottom Line:

2004 Premium:	\$100,000
2004 Paid Benefits:	\$ 58,000
2004 Incurred Loss:	\$173,000
2004 Total "System" Paid Benefits:	\$ 70,000
2004 Total Ultimate System Costs:	\$210,000

Endnotes

1. For injuries on or after January 1, 2004, vocational rehabilitation benefits were replaced by a Supplemental Job Displacement Benefit in the form of a voucher for education-related retraining and skill enhancement.
2. Workers' Compensation Insurance Rating Bureau of California (WCIRB). 2004. 2003 *California Workers' Compensation Losses and Expenses*. Oakland: WCIRB.
3. Workers' Compensation Insurance Rating Bureau of California (WCIRB). 2003. *Proposed January 1, 2004 Pure Premium Rates*. Oakland: WCIRB.
4. Victor R, Barth P, Liu T. 2003. Workers' Compensation Research Institute (WCRI). 2004. *Outcomes for Injured Workers in California, Massachusetts, Pennsylvania, and Texas*. Cambridge, MA: WCRI. December, 2003; California Commission on Health and Safety and Workers' Compensation (CHSWC). 2004. 2002–2003 Annual Report. San Francisco: CHSWC.
5. Workers' Compensation Insurance Rating Bureau of California (WCIRB). 2003. *Report on Q1 Insurer Experience*. Oakland: WCIRB. Available at: wcirbonline.org/wcirb_wire/2003/2003_22.asp.
6. Ibid.
7. Workers' Compensation Insurance Rating Bureau of California (WCIRB). 2003. *WCIRB Bulletin No. 2003–24. Summary of June 30, 2003 Experience*. Oakland: WCIRB.
8. California Department of Insurance (DOI). 2003. Testimony delivered by insurance commissioner John Garamendi to the Workers' Compensation Conference Committee, September 5, 2003, San Francisco: DOI. Available at: www.insurance.ca.gov/docs/WC_Testimony090503.htm.
9. Workers' Compensation Insurance Rating Bureau of California (WCIRB). 2003. 2002 *California Workers' Compensation Losses and Expenses*. Oakland: WCIRB.
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