

December 2006

Access to Medical Treatment in the California Workers' Compensation System, 2006

**Gerald F. Kominski
Nadereh Pourat
Dylan H. Roby
Meghan E. Cameron**

A Report to the California Department of Industrial Relations, Division of
Workers' Compensation, mandated by Labor Code § 5307.2.

EXECUTIVE SUMMARY

This report was produced by the UCLA Center for Health Policy Research (CHPR) under contract to the California Division of Workers' Compensation (DWC), Department of Industrial Relations. It was authorized pursuant to Labor Code (LC) § 5307.2, which was revised by Senate Bill (SB) 228 to require the Administrative Director (AD) of DWC to "contract with an independent consulting firm...to perform an annual study of access to medical treatment for injured workers." The primary goal of this annual survey is to "analyze whether there is adequate access to quality health care and products for injured workers and make recommendations to ensure continued access." Furthermore, if the AD determines based on this study "that there is insufficient access to quality health care or products for injured workers," the AD may make appropriate adjustments to medical and facilities fee schedules. Specifically, if the AD determines that "substantial access problems exist," he or she may revise fee schedules by adopting fees "in excess of 120 percent of the applicable Medicare payment system fee for the applicable services or products."

In response to the mandate for the study, the main objectives of this study were to:

1. Establish baseline information regarding the proportion of injured workers and physicians reporting access and/or quality problems in 2006;
2. Determine specific factors that promote or inhibit access to quality care;
3. Quantify the extent of such barriers;
4. Determine whether lack of access, if present, is substantial; and,
5. Recommend methods of ensuring continued access.

REFORM LEGISLATION: AB 749, SB 228, AND SB 899

From 1999 to 2003, workers' compensation (WC) aggregate premiums rose by more than 200 percent (from \$7.1 billion to more than \$25 billion), while premiums per \$100 of payroll increased from \$2.30 to slightly more than \$6.00.¹ During this same period, premiums declined slightly across the nation. In response to the crisis in WC premiums, the state legislature enacted several WC reforms in 2002, 2003, and 2004. Assembly Bill (AB) 749 was signed into law on February 15, 2002 and was effective starting January 1, 2003. In 2003, the legislature adopted two pieces of legislation – AB 227 and SB 228 – that were signed into law on September 30, 2003 and that went into effect on January 1, 2004. In 2004, SB 899 was enacted as an urgency bill and thus made effective immediately upon the Governor's signature on April 19, 2004.

Each of these bills implemented fundamental changes in California's WC system. AB 749 eliminated the treating physician's presumption of correctness, except where an employee had predesignated a personal physician or chiropractor for WC care. For injuries occurring on or after January 1, 2003, AB 749 stated that the presumption of correctness was rebuttable by a preponderance of medical evidence. By eliminating the physician's presumption of correctness, AB 749 set the stage for stricter review of utilization decisions made by physicians in the treatment of injured workers.

SB 228 represented a fundamental departure from the way medical treatment had been viewed under California's WC system.^a Prior to its enactment, medical care and treatment, with the exception of hospital inpatient care, was largely unlimited fee for service treatment based on the legal standard of "reasonable and necessary to cure or relieve" industrial injury.^b Treatment guidelines adopted by the Industrial Medical Council (IMC), which was comprised of physicians, were advisory only.^c

SB 228 abolished the IMC, eliminated its advisory guidelines, and transferred all its remaining responsibilities to the AD of DWC. It further directed the AD to adopt, after consultation with the Commission on Health and Safety and Workers' Compensation (CHSWC), a medical treatment utilization schedule that incorporates the "evidence-based, peer-reviewed, nationally recognized standards of care" recommended by CHSWC and that addresses the "frequency, duration, intensity, and appropriateness of all treatment procedures and modalities commonly performed in workers' compensation cases."^d SB 228 also:

- established that the medical treatment utilization schedule – to be adopted by the AD – was now presumed to be the correct course of treatment, and until then, treatment consistent with the American College of Occupational and Environmental Medicine (ACOEM) guidelines, or other evidence-based medical treatment guidelines for injuries not covered by the ACOEM guidelines, would constitute the correct treatment schedule;^e
- required all employers to adopt a utilization review (UR) system in which only a licensed physician in the appropriate scope of practice may deny, delay, or modify treatment recommended by the primary treating physician (PTP);^f
- placed a cap of 24 chiropractic visits and 24 physical therapy visits for injuries occurring on or after January 1, 2004 for the life of the claim, unless the employer authorized additional visits.^g

SB 899 created Medical Provider Networks (MPNs) that permit employers to control the medical treatment of an injured worker for the life of the claim if contracted with an MPN, but otherwise is not regulated by the state.^h Specifically, employers can now require an injured employee to seek all care within the MPN, although injured employees retain the right to select their own provider within the MPN after the first visit.ⁱ Previously, the employer controlled only the first 30 days of treatment^j or the first 90-180 days where the

^a Although AB 227 was passed as a companion bill to SB 228, the provisions of SB 228 were much broader in scope than those in AB 227.

^b California. Constitution, Article XIV, section 4; LC § 4600.

^c LC § 139.

^d LC § 5307.27.

^e LC § 4604.5.

^f LC § 4610.

^g LC § 4604.5(d).

^h LC § 4616; 4600(c).

ⁱ LC § 4616.3.

^j LC § 4600.

employer contracted with a DWC-approved Health Care Organization (HCO).^k SB 899 also imposed a cap of 24 visits on occupational therapy visits, unless the employer authorized additional visits, in addition to the 24-visit cap on chiropractic care and physical therapy imposed by SB 228.

The use of UR, evidence-based medical treatment guidelines, explicit caps on selected services, and MPNs are all intended to improve efficiency and reduce medical costs within California's WC system. But these mechanisms for limiting utilization may also have adverse consequences on access to quality care for injured workers and on provider satisfaction and willingness to participate in the WC system.

IDENTIFYING POTENTIAL BARRIERS TO QUALITY CARE: SURVEYING INJURED WORKERS, PHYSICIANS, AND PAYERS

The purpose of this study is to measure access to quality medical care for injured workers. To answer this question, we conducted surveys of injured workers, providers authorized to act as the PTPs for WC cases,^l and payers.

Injured Worker Survey

The survey of injured workers was a telephone-based interview conducted from May 2006 to October 2006. In this six-month time period, 1,001 surveys were completed, out of a random sample of 5,260 claims taken from the DWC's Workers' Compensation Information System (WCIS). The survey was offered in English and Spanish — 21% of surveys were conducted in Spanish. Of the 5,260 injured workers in the final sample, 2,855 were determined to be eligible for the study, while 2,124 we were unable to locate. The adjusted response rate for this survey was 35.1%.

Provider Survey

The survey of providers was primarily a telephone-based interview (with some mail and internet responses) conducted from April 2006 to October 2006 that produced 1,096 completed responses. The sample for the provider survey was constructed from MPN and HCO provider lists reported to DWC. We constructed a final list of 51,363 unique providers using the provider network directories of MPNs and HCOs, consisting of: 1,055 acupuncturists; 1,277 podiatrists; 2,570 clinical psychologists; 4,850 chiropractors; and 41,611 medical doctors and doctors of osteopathy (MD/DOs). To ensure adequate representation of non-MD/DO providers, we selected a stratified random sample of 6,743 providers. Of these 6,743 providers, 1,123 were determined to be ineligible for the study, and 1,142 we were unable to locate. The adjusted response rate for this survey was 24.5%.

^k LC § 4600.3.

^l Physicians and surgeons holding an M.D. or D.O. degree, psychologists, acupuncturists, optometrists, dentists, podiatrists, and chiropractic practitioners, as defined by LC § 3209.3.

Payer Survey

We surveyed three primary categories of payers: insurers, third-party administrators (TPAs), and self-insured, self-administered employers (SISAs). SISAs were then further sub-divided into three categories – Joint Powers Authority (JPA),^m public non-JPA, and private. We developed a convenience sampling frame designed to have some large, mid-size, and small payers in each of these categories (7 insurers, 7 TPAs, and 9 SISAs). We obtained a total of 20 respondents to this survey.

FINDINGS

Injured Workers

1. Overall, injured workers under California’s WC system do not appear to be facing substantial barriers to care. Some barriers to access are more prevalent among certain subgroups of injured workers.

- Most injuries were non-repetitive injuries (45%) or scrapes, cuts, rashes, bruises or swelling (22%). Most injuries (61%) required workers to miss 3 or fewer days of work, and were therefore medical-only claims that did not receive indemnity payments.
- About 1 in 8 injured workers (13%) did not receive care within three days of reporting their injury. Injured workers with 10 or more visits were twice as likely to report receiving their first visit after 3 days relative to other injured workers (20% versus 11%).
- About 1 in 4 injured workers (24%) reported being in treatment for over 6 months.
- About 1 in 5 injured workers (19%) reported that they chose their first provider.
- Time and distance to first and main providers were within requirements imposed on MPNs for the vast majority of injured workers. Most injured workers traveled 15 miles or less (86%) or 30 minutes or less (92%) to see their first provider. Most also traveled 15 miles or less (82%) or 30 minutes or less (89%) to see their main provider (i.e., the provider most involved in their care).
- Very few injured workers (3%) reported communication barriers due to language discordance with the main provider.

^m A JPA is a unit of government, authorized under the State Government Code, created to jointly administer a shared power, under the terms of a joint exercise of powers agreement adopted by the public agencies that constitute the JPA.

- Overall, almost 1 in 3 injured workers (31%) received a recommendation for specialty care. Among those receiving such a recommendation, 8% (or 2.4% of all injured workers) reported that they did not see a specialist because of authorization denials, scheduling problems, or other barriers. Given 780,000 workers compensation claims filed in 2005, 2.4% represents roughly 19,000 injured workers who may have encountered barriers to specialty care.
- Almost half (44%) of injured workers reported receiving a recommendation for physical or occupational therapy (PT/OT) as part of their care. Among those receiving such a recommendation, about 5% (2.3% of all injured workers, or approximately 18,000 injured workers in 2005) reported that they did not receive PT/OT because of authorization denials, scheduling problems, or other barriers. About 10% (4.6% of injured workers) reported that they had 25 or more PT/OT visits, despite the 24-visit cap.
- About two-thirds (65%) of injured workers reported receiving a prescription for their injury.

2. Overall, injured workers reported satisfaction with care received. However, further improvement in the quality of care is indicated.

- Most injured workers reported that their main provider was oriented to occupational medicine, in terms of understanding their job demands (83%) and discussing work restrictions (71%) and avoidance of reinjury (55%). MD/DOs and chiropractors were more likely to have an occupational medicine orientation than other providers.
- More than 9 in 10 injured workers reported that their main provider treated them with respect (93%) and explained their treatment and condition in an understandable way (90%), while about 6 in 7 rated their main providers highly and were satisfied or very satisfied (82%) with the care delivered by those providers.
- About 5 in 6 injured workers (83%) reported they were able to access quality care.
- About 4 in 5 injured workers (78%) reported being satisfied or very satisfied overall with the care they received for their injury.
- Among the 22% of injured workers who were dissatisfied or highly dissatisfied overall with their care, most cited their inability to get the care they needed (63%, equaling 13.5% of all injured workers) or the lack of improvement in their condition (41%, equaling 8.9% of all injured workers) as the main reasons for their dissatisfaction.
- About 1 in 10 injured workers (11%) reported changing providers during the course of their treatment because of their dissatisfaction with their care.

3. The health outcomes of injured workers need further improvement.

- More than half of injured workers (55%) have not fully recovered from their injury more than one year after their injury, including 10% who reported no improvement.
- About 4 in 5 injured workers (78%) were currently working more than one year after their injury, while 10% reported they are not currently working due to their injury.
- Injured workers not currently working due to injury were almost twice as likely to report that their employer did not make recommended modifications when they returned to work compared to those who are currently working and who returned to the same job they held prior to their injury (51% versus 26%).

4. Additional improvements are needed in the health and return-to-work outcomes of injured workers with high levels of utilization.

- More than 1 in 4 injured workers (28%) reported high levels of utilization, defined as 10 or more visits during the course of their treatment.
- Injured workers with 10 or more visits were more likely to be dissatisfied with their overall quality of care relative to other injured workers (30% versus 18%).
- Injured workers with 10 or more visits were more than 3 times more likely to report they had no improvement in their injury relative to other injured workers (19% versus 6%).
- Injured workers with 10 or more visits were almost 7 times more likely to report they were not currently working due to their injury relative to other injured workers (27% versus 4%).

5. Racial/ethnic differences in access to and satisfaction with care exist in the WC system in California.

- African-American injured workers are more likely to have 10 or more physician visits, see more providers, report not receiving quality care, change providers due to dissatisfaction, and report no improvement in their condition than whites, Latinos, and Asian-Americans.
- Latinos and Asian-Americans are also more likely to report that they did not receive quality care for their injury and had no improvement in their condition than whites.

Workers' Compensation Providers

1. Past and current providers differed according to specialty mix and payment rates.

- There were no significant differences in the mix of provider types who were no longer treating WC patients compared to those who currently are treating WC patients. Among MD/DO specialties, however, family practice/internal medicine (FP/IM) doctors were 32% of past providers compared to 25% of current providers, and other non-surgical specialists were 31% of past providers compared to 22% of current providers, suggesting that both these groups were more likely to have dropped out of the WC system. Orthopedic surgeons were 14% of past providers, but 28% of current providers, suggesting that they were less likely to have dropped out of the WC system.
- More past providers were paid at discounts of greater than 15% below the fee schedule than current providers (33% versus 24%). Past providers most frequently cited low payment levels (46%) as the reason for not participating in WC.
- The great majority of past providers (88%) are not likely to return to WC care.

2. For a large majority of providers, WC patients represented a small portion of their total practice (5 or fewer WC patients per week), and almost half of providers stated they did not belong to MPNs.

- Less than a third of current WC providers (31%) rendered care to a high volume of injured workers (defined as 6 or more WC patients per week). Among provider types, MD/DOs (35%) and chiropractors (26%) were more likely to be high-volume providers. Among MD/DO specialties, orthopedic surgeons (67%) and other non-surgical specialists (36%) were more likely to be high volume.
- More than half of providers (54%) stated they belonged to MPNs. Among provider types, chiropractors (74%) and podiatrists (60%) were more likely to have MPN contracts. Among MD/DO specialties, orthopedic surgeons (62%) and other non-surgical specialists (60%) were more likely to have such contracts.

3. The majority of providers believed injured workers did not have adequate access to quality care and even more believed that access had declined since 2004. These unfavorable perceptions were particularly prevalent among chiropractors and acupuncturists, compared to MD/DOs, podiatrists, and clinical psychologists. Among MD/DO specialties, orthopedic surgeons also perceived a lack of access to quality care and a decline in access since 2004.

- Less than half (45%) strongly agreed or agreed that injured workers have adequate access to quality WC care. While almost two-thirds of MD/DOs (62%) and podiatrists (65%) reported high levels of agreement, chiropractors (8%) and acupuncturists (20%) reported low levels of agreement. Among MD/DO specialties,

other surgical specialists (79%) and FP/IM doctors (66%) reported high levels of agreement, while orthopedic surgeons (44%) and other non-surgical specialists (58%) reported lower levels of agreement.

- About two-thirds (65%) believed access to care of injured workers has declined since 2004. This belief was particularly strong among chiropractors (96%) and acupuncturists (90%), and among orthopedic surgeons (75%).

4. The majority of providers reported declines in their volume of WC patients since 2004, most frequently citing new regulations and authorization/UR issues. These reported declines were most prevalent among chiropractors and acupuncturists, compared to MD/DOs, podiatrists, and clinical psychologists. However, among MD/DO specialties, orthopedic surgeons reported declines in WC volume since 2004 more often than other specialties.

- Over one half of current providers (52%) experienced a decline in the volume of their WC patients since 2004. Chiropractors (90%), acupuncturists (87%), and orthopedic surgeons (55%) were most likely to report declines. Providers reported that their declines in WC volume were most often the result of new regulations (31%) and authorization/UR issues (30%).
- Providers paid 1% to 15% below the Official Medical Fee Schedule (OMFS) (65%) or more than 15% below the OMFS (66%) were more likely to report declines in WC volume since 2004 than those paid at or above the OMFS (49%).
- More than one-third of providers report they plan to quit WC entirely (14%) or to reduce their WC volume in the future (21%). Providers most often reported that improvements in the authorization/UR process (25%) and in the fee schedule (24%) would help them to continue treating WC patients.

5. Providers reported a high level of orientation towards occupational medicine.

- The great majority of providers report understanding the injured workers' job demands (84%) and discussing work status and ability to return to work (92%) always or most of the time.
- Most providers (72%) contact employers about the availability of modified work at least half the time. However, most providers (87%) report not being compensated for contacting the employer.
- Thirty-nine percent of current WC providers conduct medical-legal evaluations. Chiropractors have the highest rate of performing such evaluations (47%), followed by podiatrists (40%), MD/DOs (39%), clinical psychologists (38%), and acupuncturists (19%). Among MD/DO specialties, orthopedic surgeons (56%) had the highest rate of conducting such evaluations.

6. The majority of providers perceived a decline in quality of WC care since 2004 and these perceptions were closely associated with authorization/UR processes, although it differed by provider type and specialty.

- The majority of providers (56%) believed that the quality of WC care has declined since 2004. Chiropractors (93%), acupuncturists (80%), and orthopedic surgeons (63%) were most likely to report this belief.
- Providers most frequently cited authorization/UR issues (47%) (specifically, denials and UR requirements) as barriers to provision of quality care. Orthopedic surgeons (74%) were most likely to cite these reasons.

7. Despite some increases in the number of WC patients among high-volume providers, they reported perceived declines in access to and quality of care for injured workers more frequently than low-volume providers.

- More high-volume providers believed that access to care for injured workers has declined since 2004 than low-volume providers (75% versus 61%).
- High-volume providers reported more often that the volume of their WC patients had increased compared to low-volume providers (19% versus 9%). High-volume providers also planned further increases more often than low-volume providers (23% versus 18%).
- High-volume providers more often perceived a decline in quality of WC care since 2004 compared to low-volume providers (65% versus 52%).
- High-volume providers more often perceived authorization/UR issues as barriers to providing quality care than low-volume providers (62% versus 41%).

8. The majority of WC providers are located in the three most populous areas of the state: Los Angeles County, the Bay Area, and all other Southern California counties.

- Most WC providers (91%) were located in urban areas.
- The providers with the largest representation in rural areas were FP/IM doctors — 17% of these providers reported being located in rural areas.

9. Paying providers less than the OMFS seems to have affected the current volume of WC patients treated by physicians, as well as their intentions to reduce WC volume or leave the WC system entirely in the future.

- High-volume providers were more likely to be paid at the fee schedule or be paid at a discount of 1% to 15% below the fee schedule (82%) than low-volume providers (73%).

- The majority of providers (54%) who reported being paid more than 15% below the fee schedule reported they are planning to decrease their WC volume or quit WC care entirely. In comparison, only 29% of providers paid at the fee schedule and 37% of providers paid from 1% to 15% below the fee schedule had similar plans to decrease volume or to quit the system.
- The most frequently cited reason for stopping participation in WC was payment or fee schedule issues (46%).
- Providers paid 1% to 15% below the fee schedule (65%) or more than 15% below the fee schedule (66%) were more likely to report declines in WC volume since 2004 than those paid at or above the fee schedule (49%). When asked about the reasons for planned decreases, providers most frequently cited payment or fee schedule issues (47%).
- Providers most often reported that improvements in the authorization/UR process (25%) and in the fee schedule (24%) would help them to continue treating WC patients.

Workers' Compensation Payers

1. MPNs are common, but payers report difficulties contracting with certain provider types and specialists, and with providers in some regions of the state.

- All responding insurers and TPAs have one or more MPN products, and one third of SISAs have MPN products.
- Payers report the most difficulty contracting with dentists, psychologists, psychiatrists, dermatologists, orthopedic surgeons, and neurosurgeons.
- The regions where payers have the most difficulty contracting with physicians for WC care were the North Coast/North Inland/Sierras, the San Joaquin Valley, and the Central Coast. Reasons physicians give to payers for not wanting to contract include inadequate payment, paperwork and reporting requirements, UR/ACOEM guidelines, and administrative hassles.
- No respondent pays any physician type or specialty above the fee schedule. The physician types most often paid below the fee schedule include chiropractors, occupational medicine providers, physical medicine and rehabilitation providers, and radiologists

2. Payers report that some providers they contract with are more likely to refuse to treat WC patients.

- The specialties most likely to refuse WC patients were psychologists, allergists and immunologists, dermatologists, and urologists.
- The regions where payers reported physicians were most likely to refuse WC patients were the North Coast/North Inland/Sierras, the Greater San Francisco Bay Area, the Central Coast, and the San Joaquin Valley. Reasons for refusing to treat WC patients, as reported by payers, include inadequate payment, UR, paperwork and reporting, business reasons, and patient-related issues.

3. Payers report their perceptions that overall access for injured workers has remained the same since 2004.

- Most respondents expressed their belief that injured workers' access to PTPs and specialists is the same now as it was before 2004. Furthermore, 17 of the 20 respondents reported that overall access to quality medical care in the WC system is the same now as before 2004.
- Most respondents have time and distance standards for their PTPs and specialists as part of their MPNs. Among respondents with non-MPN products, the majority of respondents had a standard for days to first appointment with a PTP, but few had any other standards.

CONCLUSIONS/RECOMMENDATIONS

The injured worker, provider, and payer surveys conducted as part of this study were all fielded during 2006, two years after the reforms of 2003-2004. For the most part, it was impossible to obtain data related to access and quality prior to the implementation of WC reform. In the provider and payer surveys, it was only possible to obtain impressions about how WC access and quality have changed since 2004. However, this was not possible for the injured worker survey. Therefore, our results are most useful in establishing firm baseline data for determining the current state of California's WC system from the perspective of three major stakeholders (Study Objective 1). These baseline data are valuable for comparing California's current experience with previous WC studies, including those in California and in other states. These data should also prove valuable for monitoring changes in California's WC system over time. The findings presented in Sections VI, VII, and VIII of this report identify specific factors that promote or inhibit access to quality care and quantify the extent of such barriers (Objectives 2 and 3). Finally, our results suggest several important conclusions about whether access problems are substantial as well as other recommendations for maintaining access (Objectives 4 and 5), which are presented and discussed below.

1. The vast majority of injured workers reported they received care within 3 days of reporting their injury and had access to care within 15 miles or 30 minutes. The proportion of injured workers reporting other access problems was small. Based on these measures, access does not appear to be a major problem for the vast majority of injured workers.

The vast majority of injured workers (87%) reported they received initial treatment within 3 days of their injury. Time and distance to first and main providers were within requirements imposed on MPNs for the vast majority of injured workers. Most injured workers traveled 15 miles or less (86%) or 30 minutes or less (92%) to see their first provider. Most also traveled 15 miles or less (82%) or 30 minutes or less (89%) to see their main provider (i.e., the provider most involved in their care). High proportions of injured workers received recommendations for specialty care (31%), physical/occupational therapy (44%), and prescription drugs (65%). Finally, most injured workers reported they were able to access quality care for their injuries (82%). This percentage is slightly higher than the findings from a previous 1998 DWC study in which 77% of injured workers reported no trouble accessing care for their injuries.²

The proportion of injured workers reporting access problems was small. Only 3% report communication barriers with their main provider due to language discordance; while 2.4% did not see a specialist, 2.3% did not receive occupational/physical therapy, and 0.7% did not receive a prescription when recommended because of authorization, transportation, or scheduling barriers. No comparable data exists from previous studies.

2. Most injured workers are satisfied overall with their care.

Our results show that 22% of injured workers were dissatisfied or highly dissatisfied overall with their care. Results from Pennsylvania's WC system, which has been collecting similar satisfaction data from injured workers annually since 2001, indicates a similar level of dissatisfaction (16.7% in 2004).³ Because our study did not collect data on injured workers prior to the implementation of reforms, we cannot directly evaluate changes in satisfaction between the pre- and post-reform periods. However, two large-scale studies of injured workers in California prior to the 2003-2004 reforms found that virtually the same percentage of injured workers (23.5%² and 20%⁴) were dissatisfied with their overall care. Therefore, we conclude that the satisfaction of injured workers has not changed as a result of recent reforms. Although there are many efforts to assess patient satisfaction among the general health population, comparisons of the satisfaction of injured workers and the general health population are difficult to perform, because most individuals in the general health population are not injured and patient satisfaction surveys generally do not provide data on satisfaction levels for injured and non-injured individuals separately.

3. The health outcomes of injured workers need further improvement.

Overall, 55% of injured workers have not fully recovered from their injury after one year, including 10% who report no improvement. Previous research by DWC on injured

workers in California² showed a similar percentage of injured workers reporting no improvement, but a lower percentage reporting they were fully recovered (30% versus 45% in this study). Similarly, results from Washington state showed a lower rate of full recovery (28.1%).⁵ Both of these previous studies were conducted within a shorter time period after the original dates of injury — 8 months and 5 months, respectively — versus an average of about 15 months in this study. Therefore, a direct comparison of rates of full recovery is not possible. Nevertheless, a majority of injured workers are not fully recovered after one year, suggesting that health outcomes can be further improved.

- 4. Injured workers with 10 or more visits for their injury represent slightly more than one quarter of injured workers and are more likely to report delays in time to first visit, dissatisfaction with their overall care, lack of improvement in their condition, and being out of work due to their injury. Because of the high level of resources associated with these injured workers, additional case management efforts may be needed to improve satisfaction, health and return-to-work outcomes for these workers.**

Injured workers with 10 or more visits — who represent 28% of injured workers — are three times more likely to report no improvement compared to those with less than 10 visits (19% versus 6%). They are also more likely to report other poor outcomes. These findings suggest that additional effort to manage the care of these more complicated cases may produce both lower utilization and improved outcomes, including return-to-work and overall satisfaction with care.

- 5. Important racial/ethnic differences in satisfaction and outcomes exist and need to be further investigated.**

Our results suggest that important differences in satisfaction and outcomes exist between racial/ethnic groups in California, with African-Americans experiencing worse outcomes relative to all other groups. Our findings do not adjust for possible differences in the mix of occupations, which may account for some of the differences observed in the data presented in this report. Nevertheless, the magnitude and statistical significance of the findings on disparities presented in this report suggest that further investigation of the underlying reasons for these disparities is clearly warranted.

- 6. Despite physician dissatisfaction with elements of WC reform, there do not appear to be access problems for most injured workers in the state, and physicians have not limited or given up their WC practices in large numbers.**

The majority of providers (55%) reported that they disagreed with the statement that injured workers have adequate access to quality care, and 65% reported that access has declined since the 2003-2004 reforms. Furthermore, 56% of providers reported that quality of care had declined since the reforms, and 35% report that they are likely to quit WC entirely or to reduce their WC case loads. Chiropractors, acupuncturists, and orthopedic surgeons were particularly dissatisfied with the current system. The high level of dissatisfaction among acupuncturists and chiropractors is understandable in light

of the implementation of the ACOEM guidelines and caps on visits, respectively, which most directly affect these provider groups. The dissatisfaction among orthopedic surgeons was primarily due to authorization/UR issues. Nevertheless, despite the reported intention of providers to quit treating WC patients altogether, our results suggest that a number of providers have increased their WC case loads. As a result, we do not find compelling evidence of access problems due to providers limiting or abandoning their WC case loads. In contrast, many of the comments reported primarily by acupuncturists and chiropractors in the open-ended portion of our survey suggested that they were dissatisfied that they were unable to get more WC cases referred to them.

7. Streamlining the authorization/UR process to improve access to care for injured workers seems warranted.

Providers most frequently reported that new regulations (31%) and authorization/UR issues (30%) were the most common reasons for the decline in their WC volume of cases. Furthermore, they most frequently reported authorization/UR issues (47%) as barriers to the provision of quality care. Therefore, mechanisms for improving the authorization/UR processes should be explored. Although only a small percentage of injured workers reported not receiving care because of authorization/UR denials or barriers, the high level of provider dissatisfaction with these processes may be a relatively easy way to improve provider satisfaction and reduce the probability of providers leaving the WC system.

8. Providers frequently reported dissatisfaction with the OMFS, and those who were paid at the largest discounts below the fee schedule reported the largest declines in the volume of WC patients they treat. Increases in the fee schedule, or limits on the discounts insurers can pay below the fee schedule, may be warranted to ensure continued broad provider participation in the WC system.

The most frequently cited reason for stopping participation in WC was payment or the fee schedule (46%). Providers paid 1% to 15% below the OMFS (65%) or more than 15% below the OMFS (66%) were more likely to report declines in WC volume since 2004 than those paid at or above the fee schedule (49%). When asked about the reasons for planned decreases, providers most frequently cited payment or fee schedule issues (47%). Comparing future plans for decreased volume of WC patients by provider payment levels showed that those who were paid more than 15% below the fee schedule were significantly more likely to report planned decreases or quitting the system entirely relative to providers who were paid at the fee schedule or higher (54% vs. 29%). Providers most often reported that improvements in the authorization/utilization review process (25%) and in the fee schedule (24%) would help them to continue treating WC patients. Furthermore, a recent study by the Workers' Compensation Research Institute (WCRI) shows that California on average pays about 21% above the Medicare fee schedule for physician services, whereas the median value across all states is 55%.⁶ For evaluation and management services (i.e., visits), California WC physicians receive on average 13% below the Medicare fee schedule.⁶ Therefore, increases in the fee schedule, at least for some services, or limits on the discounts insurers can pay below the fee

schedule, may be warranted to ensure continued broad provider participation in the WC system.